The Confrontation of Old and New Media

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Contents

Presentation 5
Florian Sauvageau

List of Seminar Participants 11

PART 1

New User Practices and Corporate Strategies

The Merger of Traditional Media and New Technologies: Toward the Emergence of Interactive Media 17
Pierre C. Bélanger

Broadcasting in a Sea of Change: Technology, Consumers and Corporate Strategies 49
Yves Rabeau

El Dorado is not just around the corner 75
Comments by Arash Amel, André H. Caron, Vincent Crosbie, Kenneth J. Goldstein, Robert Picard and David Targy

PART 2

Regulation of Old and New Media

Points of View on Governance and Media Regulation in the Context of Digitalization 95
Pierre Trudel

Should We Regulate and If So How? Summary of the Discussion 147
Éric Labbé

APPENDICES

A Few Statistics on the Canadian Situation

List of Tables 171

Appendix A
Penetration and Use of Devices and Services 173

Appendix B
Radio Listening, Television Viewing and Internet Use 181

Appendix C
Financial Data 189

Presentation

The hype surrounding the new media is nothing new. It no doubt peaked at the turn of the century with the technology bubble whose bursting temporarily put a damper on the exuberance. But only temporarily. The euphoric rhetoric quickly resumed. Yesterday, we were celebrating "convergence" in the form of AOL and Vivendi. Today's champions are called Google, YouTube and Blackberry.

According to the most enthusiastic proponents, the distribution of information and entertainment content on the proliferating platforms (from the Internet to cellular phones to Apple's brand-new iPhone, whose promise is apparently unlimited) is the harbinger of a new era, as it increases audience fragmentation and accelerates the decline of mass media.

At the same time, consumer habits are changing, especially those of young people, who are turning to the Internet in ever-greater numbers to exchange content they themselves have created or have cobbled together from existing products. This phenomenon is called Web 2.0. Young people, who take precious little interest in the traditional media, are reshaping our culture, shaking up the legal concept of 'rights' and turning the old business models upside down.[1]

1. See T. Zeller (2005). "The Lives of Teenagers Now: Open Blogs, Not Locked Diaries", *The New York Times*, November 3, C-1.

But one man's euphoria is another man's anguish. From one year to the next, from one forward-looking forum to another, old-media executives, a slightly masochistic group, frequently listen to the same prophets, who unfailingly predict the Apocalypse if they do not adapt to the new context. The passive audience is a thing of the past; the future belongs to interactive media, search tools, blogs and other "social networks". Yesterday MySpace had the wind in its sails. Today the soothsayers seem partial to Facebook. The universe of new technologies is shifting. Innovations are numerous but often short-lived – like the new companies, which are sometimes acquired at high (perhaps excessively high) prices by large groups as soon as they show signs of success.

The changes may be overhyped but they are real and, for the old media, they raise questions that require pressing answers. Glenn O'Farrell, President and Chief Executive Officer of the Canadian Association of Broadcasters, summed up the issues several months ago: "The road ahead will require both an entrepreneurial response and a regulatory response. New business models will require strong policies to support them."[2]

This book reports on a seminar on Broadcasting and New Media, held in November 2006. It covers the same two indivisible sub-themes: business models and regulation. It is difficult to consider the one without the other. We can impose regulatory obligations only on those companies that have the financial resources to assume them. That is the spirit of the unwritten agreement between the CRTC and the broadcasters on which Canada's regulatory apparatus is based. Former CRTC Chairman Keith Spicer called it the "big bargain". In return for revenues protected by the CRTC, broadcasters agree to produce original Canadian content and local content (news) and to meet various expectations as required by the *Broadcasting Act*.

But the deal doesn't seem to be holding up. With their revenues threatened by fragmentation and competition from new, unregulated media, the traditional broadcasters are seeking

2. G. O'Farrell, "Facing the Future Head On", speech to Canadian Club of Winnipeg. November 2, 2005. <http://www.cab-acr.ca/english/media/speeches/2005/nov_0205.pdf>, page consulted in August 2007.

more flexible regulation and requirements, decrying the "asymmetry" of the current situation. As Glenn O'Farrell put it, "Imagine : One morning you suddenly have to run your business against a growing field of new competitors who have fixed costs that are 30 % to 50 % less than yours because your competitors are not required to comply with government regulation."[3]

The CRTC's new Chairman, Konrad von Finckenstein, seems to have similar concerns. As he explained in an address to the convention of the Association des producteurs de films et de télévision du Québec in May 2007, the new media "could undermine existing business models and regulatory structures. What can we do in the face of this reality to preserve and fulfill our mandate as defined in the *Broadcasting Act*? This is the main challenge confronting the regulatory agency."[4] At the end of June 2007, Mr. von Finckenstein announced a "searching inquiry into new media to assess their impact on the objectives of the *Broadcasting Act*".[5]

Others, such as Toronto lawyer Peter S. Grant, one of the participants in the seminar that this book reports on, believes that the threat is exaggerated and that the new media don't have the competitive muscle that the consensus often ascribes to them. According to Grant, in practice the new media have in no way undermined the strength of the Canadian broadcasting system, and it is becoming clear that the Internet will serve more to complement rather than to replace the traditional media. He supports his argument with a quotation from the CRTC, in March 2007, before the Standing Committee on Canadian Heritage : "While the consumption of new technologies is growing, we observed that it is having a minimal impact on the regulated

3. G. O'Farrell, "Canada's Private Broadcasters Help Build Strong Communities", Notes for an Address to the Vancouver Board of Trade, November 2, 2006. <http://www.cab-acr.ca/english/media/speeches/2006/nov0206.pdf>, page consulted in August 2007.
4. K. von Finckenstein, Address to the 2007 Convention of the Association des producteurs de films et de télévision du Québec, May 3, 2007. <http://www.crtc.gc.ca/eng /NEWS/SPEECHES/2007/s070503.htm>, page consulted in August 2007.
5. K. von Finckenstein, Address to the 2007 Broadcasting Invitational Summit, June 26, 2007, <http://www.crtc.gc.ca/eng /NEWS/SPEECHES/2007/s070626.htm>, page consulted in August 2007.

system. Canadians still consume the vast majority of programming through regulated broadcasting undertakings and new technologies have played a complementary role up to now."[6]

Still others, especially creators, are not asking for more flexible arrangements for the old media, unlike broadcasters, but instead would like to see regulation imposed on the new media. For example, the ADISQ, which represents workers in Québec's music industry, believes it is necessary to review the regulatory exemption, enjoyed since 1999, by media that offer Internet broadcast services and to ensure that these new media also respect the objectives of broadcasting policy and offer content that reflects Canadian culture.[7] But despite the euphoric rhetoric surrounding the new media, with rare exceptions they are still looking for a business model that will ensure their profitability. How can you impose costly regulatory obligations on companies that aren't profitable?

This book is therefore devoted to the economics of the media, both old and new, and their regulation. Which business models, if any, will enable the new media to live up to the hopes invested in them? Who will pay the bill? Users? Advertisers? How? What is the real impact of the arrival of the new media on the financial health of traditional broadcasters? Must we, can we, regulate these new media and, in particular, impose on them the requirements of the existing *Broadcasting Act*? Are the foundations or the reasons for State intervention the same for the old and the new media? Does the active role that consumers/content pro-

6. S. Hutton (Acting Associate Executive Director of Broadcasting, CRTC), Address to the Standing Committee on Canadian Heritage, March 20,2007, < http://www.crtc.gc.ca/eng/NEWS/SPEECHES/2007/s070320.htm> cited by Peter S. Grant in "Canadian Cultural Product and the Long Tail: The New Economics of Production and Distribution in Canada", Contribution to Law Society of Upper Canada Entertainment, Advertising and Media Symposium, April 2007. <http://www.mccarthy.ca/presentation-detail.aspx?id=37067>, page consulted in August 2007..

7. Association québécoise de l'industrie du disque, du spectacle et de la vidéo, *Appel aux observations sur une demande de la gouverneure en conseil, en vertu de l'article 15 de la Loi sur la radiodiffusion, de faire rapport sur le milieu où le système canadien de radiodiffuion est appelé à évoluer (avis public de radiodiffusion CRTC 2006-72)*, p. 28.

ducers play change anything? And what is the extent of user participation in the new media?

Three colleagues who for many years have been interested in new information and communication technologies and new media agreed to answer these questions. The texts they prepared were commented on during the seminar by researchers from far and wide (the list of participants follows). The new technologies, by making a mockery of borders, are creating the same problems everywhere. Although the solutions vary from one country to another and depend on demographics, economics and national traditions and cultures, we at the Centre d'études sur les médias have always believed that an analysis of what is happening elsewhere can only advance the discussion.

The first part of the book (and the seminar it reports on) covers new user behaviours and business models. Pierre Bélanger, of the University of Ottawa, paints a portrait of the interactive nature of Web 2.0, of the bidirectional aspect that "seems to be an integral part of the media experience of the coming generation," of the increasing popularity of what he calls "collaborative technologies." He believes that the challenge for large companies is to find a way to bring these activities into the fold and to monetize the full value they represent in the eyes of advertisers.

Yves Rabeau, of the Université du Québec à Montréal, is interested in business strategies and the three pillars on which the new business models and the new broadcast logic will have to be based: mobility, interactivity and programming on demand. He concludes by proposing that broadcasting regulation be completely overhauled. In his opinion, complex regulation of content to favour the Canadian media is rather inappropriate for the emerging environment. "If the phenomenon which sees users define themselves the sound and visual content they want to consume, distribute or exchange continues to expand, the regulation of contents becomes less and less effective."

That brings us to the second part of the book and the theme of regulation. A text by Pierre Trudel, of the Université de Montréal, on governance and media regulation in the context of digitalization serves as the starting point for the discussion. An exhaustive review of the abundant literature leads him to conclude that some analysts have perhaps been "a little hasty in

proclaiming the death of media regulation." Generally speaking, as he explains, analysts think many of the rationalities on which regulation is based are undergoing radical change but will not disappear. And he adds: "As soon as there are reasons to limit some activities, the real question is 'how?'"

In this respect, we have our work cut out for us. As Éric Labbé concludes in his compelling synthesis of the discussions that followed the presentation by Pierre Trudel: "The diversity of perspectives on the real impact of the new media as well as divergences regarding the appropriate regulatory means and strategies illustrate the degree to which a consensus is not imminent." This divergence of opinion concerns him. He believes it is essential that research in this area and public discussions between industry actors, experts and regulatory authorities continue.

We can therefore only applaud the inquiry into the new media and their impact on the *Broadcasting Act* announced by the CRTC's Chairman, and the precise schedule accompanying it, which is to culminate in March 2009 in the submission of a report proposing new policies. It was high time that the CRTC got down to work, since its approach to the new media could so far be described if not as fence-sitting then at the very least as one of restraint. Rather than feeling our way in the dark, we need to stop and examine whether the rhetoric that often surrounds the new media is exaggerating a threat that may be more distant than some think. We hope the seminar's discussions provide food for thought.

Florian Sauvageau
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August 2007

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PART 1

New User Practices and Corporate Strategies

The Merger of Traditional Media and New Technologies: Toward the Emergence of Interactive Media

Pierre C. Bélanger*

Contextualization

The hearing on radio held by the Canadian Radio-Television and Telecommunications Commission (CRTC) in May 2006 and the hearing on television in the fall of that year speak for themselves. The traditional media are faced with a new wave of profound change that is disrupting the way they produce, broadcast and earn a profit on their content within Canada's existing regulatory framework. It is no secret that time spent listening to radio and watching television has reached a plateau, as young

* Full Professor, Department of Communication and Institute of Canadian Studies, University of Ottawa. Mr. Bélanger thanks Hubert Lalande and Véronique Desjardins of the Department of Communication at the University of Ottawa for their assistance with the research phase of this text. Piere Bélanger's contribution was updated in July 2007.

people turn increasingly toward the new media. The circulation of large newspapers is also dropping. In contrast, time spent surfing the Web and using mobile devices is constantly rising. In recent years, the rapid proliferation of new devices for accessing news and entertainment content has given rise to a set of consumer practices that are shaking the economics underlying the business models of the main media groups in Canada and elsewhere.

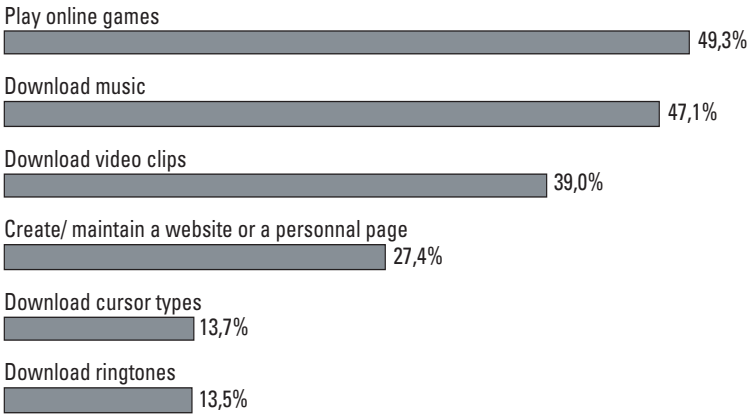
According to the specialized press, the commotion in the world's main media industries is to a large extent due to "millennials", or "digital natives", namely that segment of the population, aged nine to 28, whose relationship with media products differs radically from the consumption patterns of their elders.

Millennials are the multi-tasking generation. These "homo zappiens" of the digital era have developed the ability to use several media and platforms at once. This skill means that each day these users manage to consume the equivalent of 20 hours of media products, which are allocated in real time over a seven-hour period (Consoli, 2006). This shows the degree to which the concept of linear media has become obsolete for this generation ! Moreover, not only have millennials developed a highly utilitarian, fragmented and ephemeral relationship with media content, but they have also appropriated it and exchange it with complete disregard for copyright. Since the members of this generation grew up in the era of Napster and blatant file sharing, it comes as no surprise that they have little respect for intellectual property or that they have spawned the vast "my media" phenomenon, with sites such as MySpace and YouTube being the prime examples.

These "über-taskers" (Burst Media, 2006) have learned how to use various media technologies and categories complementarily, thus producing a more influential overall impact than the traditional media consumed individually could have had on them. More than a third of the respondents (37.4 %) who took part in a study by Burst Media spend more than three hours a day on the Internet (eMarketer, 2006a). Almost two out of three young people (61.4 %) have visited a social-networking site and 61 % of them have registered and created a profile. The follow-

ing table shows the type of activity that young Americans take part in when they go on line.

Online activities of U.S. teen Internet users, 2006
(% of respondents)



Note : n = 1,863 ; ages = 13-17
Source : www.eMarketer.com

In the pages that follow, we propose to examine the extent to which the emergence of new technologies is leading to applications that change not only the content available but also the means whereby they are consumed, in the traditional sense of the term. In the new all-digital universe, where the Internet is becoming a megastore where almost as much is produced as is disseminated, control of the flow is gradually shifting from the producer to the consumer. The rapid evolution of sites that are based on the associative principle of social networking or offer user-generated content confirms the scope of the changes.

Whereas the Web's first incarnation was characterized by a gigantic increase in the volume of content offered, its latest iteration, called Web 2.0, represents a fundamental change in the user-content relationship, with users changing from consumers into actors/producers. For the traditional media, this change is fraught with consequences : as a medium that is almost exclusively "read", the Internet is inexorably becoming a place where

users can also "produce" content. The ability to broadcast is now being extended to the masses. And, what is worse, the brand image so coveted by broadcasters is turning into a good whose possession is also associated with those who use it and even incorporate it into their own productions. Whereas with the traditional media we speak essentially of "pushing" content toward a public that receives it, the new media are increasingly soliciting a "pulling" relationship, with users frequently gathering and structuring the content they want to be exposed to.

This report examines the social impacts of emerging technologies on the traditional media, from the standpoint of three phenomena whose conditions for operationalization are substantially changing the relationship between users and the news and entertainment products they consume : the advent of online video ; the explosion of collaborative and associative sites ; and the popularity of mobile broadcast platforms.

Web 2.0 : disruptive innovation

Although the expression Web 2.0 was introduced in 2004 by Dale Dougherty (Fillipone, 2006), it did not take off until 2006, with the acquisition that summer of MySpace by News Corporation for US$580 million. Business deals involving traditional media groups, Internet giants and startups are proliferating, to the point where Web 2.0 has become the new El Dorado for expanding audiences and generating new advertising revenues. Is a second Internet bubble in the making ? We could cite a plethora of acquisition examples : the NBC group is spending $600 million to buy iVillage, a major women's portal, and another $50 million for Tribe, a social-networking site ; Yahoo is paying $35 million to get its hands on the Flickr photo-sharing site ; eBay has purchased the Skype Internet telephone site ; Google has announced it will give $900 million to MySpace over the next four years to lock up the exclusive right to provide search and advertising ; and of course the high point of the year 2006 was Google's acquisition of YouTube in mid-October for $1.65 billion. The enthusiasm generated by Web 2.0 is reminiscent of the euphoria of the first Internet bubble in the late 1990s. As Alix and Mauriac point out (2006), startups are no longer seeking access to major

media to disseminate their content; instead, the opposite is now true. The equation definitely seems to have been reversed.

Most of the Internet startups coveted by the major groups have a business model based on content that is produced by users and then deployed according to a non-monetary economic logic; in other words, contributions are placed at the disposal of an interested community with no expectation of financial reward. This is the most convincing manifestation of Web 2.0: production tools, whether they are used to add to a personal blog or to share video files, are entirely democratized. Producers of this content are generally amateurs who collectively represent a workforce and a source of creative synergy that are unequalled.

These new practices aren't merely providing fodder for page one of the business section. According to July 2006 data from Neilsen/NetRatings, sites with user-generated content, blogs, and photo- and video-sharing sites represent five of the 10 brands with the strongest growth rate on the Web. Topping the list is MySpace, whose subscriber base grew by 183 % from July 2005 to July 2006, rising from 16.2 million to 40 million. The Neilsen/NetRatings data for the period from June 2006 to June 2007 indicate that MySpace is the leading social-networking site with 59.7 million subscribers (Knight 2007). During the same period, its traffic was up 30 %, a figure that pales beside that of the current star, Facebook, which grew 110 % over the past 12 months with 10,000 new registrations a day, for a total of 14.4 subscribers (Vara, 2007). It should be noted that social-networking sites are part of the daily routine not just of young people, but also of adults. An Ipsos study shows that 32 % of the U.S. population over the age of 25 uses social-networking sites, 24 % of them on a regular basis (Worthen 2007). Statistics like these indicate that the Web may have become, or is on the verge of becoming, a true mass medium. These profound changes are not lost on advertisers, who are gradually shifting their advertising budgets to the new digital platforms.

YouTube: the new digital atrium for youth

YouTube, launched in December 2005, is rivalled only by MySpace as the preferred home base for young people on the Internet. Imagine the scope of the phenomenon: more than 100 million video files downloaded and about 65,000 new contributions each day. Rarely have we seen such a powerful polarizing force. It's no surprise that this site boasts on its home page that it is "…empowering [people] to become the broadcasters of tomorrow". Users, who were previously mere consumers, now have the option of producing content and distributing it as they see fit to the members of their community. Gone is the tyranny of the program schedule: they can watch and listen whenever they want and as often as they want.

The overturning of the old order is anything but innocuous. Whereas until only recently the Internet was perceived as another way for the media to increase the visibility of their content, the deployment of Web 2.0 has ensured that a portion of the power now resides with the public, which in turn is acting as producer and distributor of all kinds of content. Chad Hurley, one of YouTube's co-founders, could barely contain his enthusiasm when he declared his company was building a new platform to serve the media of the world (*Le Devoir*, 2006b). It's hard to be modest when YouTube, with a market share of 60 % of the videos viewed on the Internet, is so far ahead of Yahoo!, MSN, Google and AOL (*Le Devoir*, 2006b). It is clear, however, that the Internet giants are preparing to strike back. The YouTube formula is not unique, and clones have already started appearing.

If conclusive, trials now being conducted by projects such as Joost, Babelgum, Veoh TV and BitTorrent, which distribute their content via a network of interconnected computers, may significantly change the logic whereby creators, producers and content distributors have operated thus far. In the industry, this type of initiative is referred to as over-the-top TV, illustrating the impact that this model will have on traditional business models.

Very few media companies can afford the luxury of remaining indifferent to the resounding success of the flagship sites that MySpace and YouTube have rapidly become. The advertising

value of audiences in the tens of millions may to a great extent offset the slowdown being experienced by many traditional media companies.

In France, which accounts for 39 % of Europe's new blogs, the Skyblog platform is the engine. As Skyrock radio's Web window for users aged 13 to 24, Skyblog now has more than five million blogs. Skyblog's impressive financial results have sparked the curiosity of certain Quebec media groups, which see it as a proven formula to federate audiences and ensure their loyalty while updating the brand image of a medium that is suffering a great deal from the indifference of young people. Since early in 2007, initiatives such as radioactif.tv and espace.canoe.ca have allowed Internet users to create their personal page and blog, as well as to share their videos and photos.

Apart from Skyblog, other initiatives took advantage of the 2006 back-to-school season to get established on the Net and to francize cyberspace. The most ambitious are those of the M6 television network, which has created three sites : Yootribe, clearly inspired by MySpace ; Wideo, a video-sharing site that aspires to be the French equivalent of YouTube ; and ovni Skaaz, a futuristic site based on a Korean concept that lets the user create a personal space and design an intelligent avatar that he endows with knowledge so that it can interact with the other members of the community even when the user is not on line.

This handful of examples drawn from dozens around the world illustrates the enthusiasm that associative sites are generating on the part of the traditional media. These media, much against their will, are gradually seeing advertising budgets shift to the Internet and are being forced to invest in it quickly if they want to establish a high profile and meet their financial goals.

In multiplatform broadcasting of audiovisual content, BBC is still one of the uncontested leaders. With the announcement in April 2007 that it would digitize more than a million hours of radio and television content, the BBC is proclaiming loud and clear that it intends to open its vaults to as many people as possible to meet the increasing demand for quality Internet content. In late July 2007, BBC launched its iPlayer reader, which allows British Internet users to access the full week's schedule and download programs of their choice, which will be accessible on

their computers for 30 days. Moreover, BBC is also in talks with a wide range of potential partners to increase the reach of its content on digital platforms. The list of partners it has approached shows the degree to which the mindset has changed in recent years regarding the broadcast of audiovisual properties: MSN, telegraph.co.uk, AOL, Tiscall, Yahoo!, MySpace, Blinkx, Bebo, YouTube and Virgin Media are all potential access ramps to the BBC's content.

In the circles concerned, questions are being raised about the BBC's intention, like that of many other content suppliers, to give users the opportunity to manipulate original material placed at their disposal. This true Web 2.0 activity, known as "mashup", enables users to extract and combine content freely, as well as to integrate and "mutualize" applications to create original content.[1] This practice is clearly the harbinger of hybrid websites or even mutant websites, in which the mashup function is transposed to digital devices.

Business considerations of networking sites

A number of recent announcements suggest that the main social-networking sites have entered a new stage of their development: paid transactions. With their imposing critical mass of subscribers, the major names have taken turns in recent months announcing mechanisms whereby Web surfers can "purchase" specialized content.

In the spring of 2007, Warner Music Group and Snocap, the online music company created by the inventor of Napster, announced they had concluded an agreement that will enable Warner to sell its music on MySpace. Under the agreement, the artists in the Warner Music Group (including Buckcherry, Danity Kane, Lupe Fiasco, Nickelback and TI) will be able to offer their music for sale directly on their MySpace page. Their fans and friends will be able to use the module provided to publicize and

1. In this regard, see the impressive production that a 19 year old submitted to a Sony contest. This new type of advertising is called V-CAM, or "viewer-created advertising messages". <http://www.makevisual.com/movies/sonystyle1.html>.

sell the works of their favourite artists on MySpace or elsewhere.

In the summer of 2007, music fans were still waiting for the start of SpiralFrog. This new online music-distribution platform has concluded agreements with EMI Music Publishing and Universal Music Group, a subsidiary of the Vivendi group, to enable users to download the complete catalogues of these two music giants, free of charge. Unlike the formula adopted by Apple and the one announced by MySpace, SpiralFrog is breaking new ground with a model based entirely on advertising. SpiralFrog defends its strategy by arguing that young people clearly prefer to be exposed to a brief advertisement if they can download music free of charge, rather than spending a dollar for each song, as is now the case on iTunes and PureTracks and the Québec sites Palmares.ca and zik.ca. In a context in which unbridled music piracy is threatening the entire industry, this merger of downloading and advertising aspires to get music lovers back on a track that is financially sound for creators. The advent of free, legal downloading, as proposed by SpiralFrog and its competitor Otrax, may be one of the highlights of 2007 on the major digital circuits.

A word of caution about self-generated websites

Although we readily acknowledge the impressive volume of content and traffic on sites based on the co-operative model, we also note that their popularity seems to be limited to people under the age of 30. In the spirit of openness and democratization that Web 2.0 advocates, anyone can produce and post content without consideration for basic criteria of taste, esthetics or artistic creativity. As a result, most of the content on this type of site is of no interest to anyone who is not part of the creators' immediate network of contacts.

Digg.com founder Jason Calacanis (2006), who sold his social-networking site to AOL for $25 million, believes that most participation and content on Digg.com comes from only 1 % of its users. Calacanis estimates that most of the traffic on networking sites is innocuous and involves only junk videos. He has thrown a large spanner into the works of those who hope to convert this

traffic flow into gold. We would add that it is very risky to alter the "associative" spirit of these sites by strewing them with advertisements or television promos that are imposed on users. Networking sites were created precisely because they offer an alternative to the large media groups and because users see them as the opportunity to personalize both their consumption and their content production. The "Broadcast Yourself" slogan that YouTube features at the top of its homepage is, in the eyes of purists, a declaration of independence from the large media groups. In this respect, it will be interesting to see how the members of the YouTube community react to their site's being placed in the Google fold.

Downloading television programs

It isn't so much the existence of this phenomenon that is surprising as its scope. After the major disruptions caused by music piracy, it's now the turn of television networks to grapple with unauthorized posting of their property on digital networks.

In a press release issued on September 2006, the research firm Ipsos (2006) examined the increasing popularity of video files generated by users as well as experiments with online film distribution. For the United States alone, Ipsos estimated that 10 million users aged 12 or over had downloaded television programs from the Internet, including seven million in the 30 days preceding the survey. The Ipsos study has no reassuring words for broadcasters: the forecasts indicate a constant increase in "non-traditional" viewing of video products.

And which age group is leading the charge? Young people, of course. In the 18-to-24 age group, 14% say they have downloaded a television program from the Internet, and the figure is 7% for the 25-to-34 age group. These percentages are about double those of 2005. The study's other results show:

- Almost one American aged 12 or over out of five (18%) has watched a streaming music video on the Internet;
- Downloading of films still appears to be very limited, with barely 3% of Americans adopting this practice;

- 27 % of MP3 players can play video documents, a percentage that has been constantly rising over the past year ; 5 % of people who have an MP3 player say they have paid to download television programs from the Internet ;
- One young American in 10 aged 12 or over has downloaded music videos or film promotions.

Although the results of the Ipsos study are far from surprising, they confirm that online distribution of digital entertainment content now significantly exceeds the music sector and is gradually becoming a common means of consumption. According to Todd Board, Senior Vice-President of Ipsos' Insight Technology and Communication Practice : "Today, many consumers utilize the digital channel to access more 'disposable' video : content that is brief in nature and takes up little bandwidth, so it's very easily consumed. This emerging genre of video is being driven by its growing availability on sites such as YouTube and MySpace, but also perpetuated by the 'two-foot' user interface of the PC, which is less than ideal for the larger, more engaging genres such as the full-length movies dominant on the 'ten-foot' interface in consumers' living rooms" (Ipsos, 2006).

Certain signs indicate that the television- and film-content downloading industry is about to take off. In terms of technology, the selection of mobile devices equipped with video readers is only increasing (iPod, iPhone, Zune, Motorola's RAZR, Nokia's N93 cell phone, Blackberry Pearl, etc.). Moreover, recent announcements made by the main U.S. content aggregators, such as AOL, Google, Yahoo !, MSN and Apple, indicate an encouraging business outlook for those who choose to invest in this new wave.

An In-Stat report titled *Online Content Aggregators – AOL, Google, Yahoo !, MSN, Apple – Slowly Defining The Future of Television* (In-Stat, 2006), published in August 2006, addresses the personalization strategies of the main content providers, whether they come from the Internet, traditional broadcast media or specialized chains. The increase in the adoption rate of high-speed connections, which should double by 2010, going from 194 million households to 413 million worldwide, is creating a highly favourable environment for the explosion of online video services. According to Gerry Kaufhold, a Senior Analyst at In-Stat, the

future of television "is slowly being defined online, where the big Internet portals are finding ways to blend professional video with their high-touch services that follow consumers from screen to screen during the course of a typical day" (in In-Stat, 2006). Many experiments are already under way. The next section presents some of the most promising.

Emergence of video content on the Web

Confirming that Web 2.0 is taking root in user practices as well as in business strategies of large media companies, the concept of the "audience of one"[2] is gradually becoming one of the leading changes in the television sector. A multitude of initiatives is being developed around the "produce once, distribute many times" formula, with the objective being to disseminate the same content over the largest possible number of platforms while deriving maximum earnings from the function specific to each broadcast technology.

The presence of television content on the Web has given rise to the neologism IPTV. As a result of Internet protocol (IP) technology, it is relatively easy to remove content from its original time slot to allow consumption based on individual preferences and inclinations. This "time shifting" of television consumption has already manifested itself in recent years with devices such as Apple's video iPod, Sling Media's Slingbox, Sony Corporation's LocationFree TV, the TiVO system as well as software such as Orb. All these devices contribute to the explosion of personalized relationships with content traditionally associated with scheduled television.

The arrival of the big guns in IP television is indicative of major changes in the way television is consumed. Late in the summer of 2006, no fewer than 300 pilot projects involving IP television for the general public were under way around the world (Dawley, 2006). In Canada, after Alliant and a deal between MTS, Sasktel and Telus, it was Bell Canada's turn in late 2006 to

2. This concept refers to the fragmentation of traditional mass audiences into an infinity of niche markets that, when taken to the extreme, could potentially lead to audiences consisting of a single fan of a given genre.

launch an IP venture with a range of interactive services that no longer require connection to a satellite dish, including video on demand, electronic messaging and contests. The recent co-operative agreement between CTV in Canada and Comedy Central, owned by the Viacom Group in the United States, enables CTV to distribute Comedy Channel content on several platforms, including traditional TV, video on demand, the Internet and cellular telephones. Canadian Internet users who want to explore Comedy Channel content will be directed to the CTV site.

Telecom operators are expected to leap at the opportunity offered by IP television and speed up their marketing of the coveted "quadruple play", which offers subscribers a package of services on one invoice: 1) fixed-line telephony; 2) cellular telephony; 3) high-speed Internet access; and 4) cable or satellite television. We expect controversy over such concentrated distribution, which is likely to favour large groups that already own the extensive infrastructure required for this type of service.

At present, online video is dominated by four major types of player: 1) large Web portals such as Yahoo and AOL; 2) holders of rights, notably film studios and production houses such as Disney and Time Warner; 3) major television networks such as ABC and NBC; and 4) startups such as YouTube and MySpace, with the lion's share of their catalogues coming from user-generated content. Although it is still too early to assess the impact of this new way of consuming audiovisual content, the fact remains that, for cable companies, direct delivery of content to users via the Web has worrisome financial implications. Add to this threat the strategies announced by telecom operators and you have a set of factors that is likely to significantly change the conditions of use and the economic models underlying them.

But the real shakeup for the traditional media is still to come. The impact of the launch of Joost, Veoh TV, Babelgum and BitTorrent referred to earlier, do not merely put added pressure on the advertising revenues of traditional broadcasters. The broadcasters have good reason to be concerned about the decision by L'Oréal, Wrigley, Hewlett-Packard, Nike, Coca-Cola and about 30 companies thought to be buying advertising on Joost, but the announced broadcast agreements are likely to hurt the

most. Joost's content partners include CBS, Viacom, Sony, CNN and Warner Bros. Television, as well as Paramount Pictures for feature films.

Joost, Veoh TV, Babelgum and BitTorrent, like Apple and Amazon, are still exempt from the conditions imposed on licence holders governed by the CRTC. What is even more significant, these services enable Internet users to create their own networks with content aggregates they themselves have chosen. We are seeing the creation of a broadcasting system that is parallel – some would say alternative – to the large traditional networks, offering niche content that is not compatible with prime-time broadcasting schedules and serving audiences that are smaller but coveted nevertheless.

The Web: a new TV guide with no scheduling constraints

In Canada, high-speed initiatives are gradually taking hold. In June 2006, the CTV network, owned by the CTVglobemedia group, announced four new broadband television channels featuring episodes of prime-time programs, news, Discovery Channel documentaries and celebrity themes. For CTV management, this initiative represents the first phase of the CTV Broadband Network, promoted as Canada's first multi-channel, on-demand broadband service (Kuzmik, 2006). Intended initially for users with a Canadian IP address, the service will be financed by advertising and will include a free premium broadband video player. Moreover, in line with the current trend in projects of this type, CTV plans to use its Web window to offer previews of certain prime-time programs before they are broadcast on its television network. As we will see in the paragraphs that follow, this promotion strategy is gaining ascendancy on the Web.

For those who want a foretaste of the new shows that will be presented on the major U.S. television networks, it appears that access to a television set has become entirely optional. Indeed, almost the entire television industry has decided to tame the Web by using it not only as a marketing tool but also as complementary distribution channel. The networks are sparing no effort to get a foothold in the place that their viewers, especially the

youngest ones, have migrated to: flagship programs will now be broadcast continuously, with or without advertising, on the broadcaster's site or on affiliated sites. If any of the many initiatives taken in 2006 and early in 2007 pan out, they could be the harbingers of a new relationship between users and the conditions for consuming television content offered to them.

In the months leading up to the official broadcast of a new season of *Battlestar Galactica*, the specialized U.S. Sci Fi Channel deployed 10 exclusive episodes on the Web to spark interest in the series. In an eloquent illustration of the new dogma "produce content once, distribute it many times", which has become emblematic of the all-digital universe, the promotions were also available on iTunes, YouTube.com, Yahoo.com and United Air Lines flights and, to round out the circle, at the Universal Studios amusement parks. There can be no doubt that NBC Universal intends to ensure its content is played on the widest possible spectrum of platforms and to capitalize on the time-shifting capacities of the new digital devices.

Whether it's News Corporation, CBS or ABC, every major network is using corporate filiation to increase the visibility of its programs. But it is the NBC initiative, NBCFirstLook.com, that was attracting the most attention in the fall of 2006. Here, as with its rivals, the objective is clear: to broadcast new programs on the Web first, in the hope of repatriating the largest possible audience to the traditional airwaves. For example, *Friday Night Lights* and *30 Rock* were available on the Web a full week before their broadcast began on network television. The range of programs taking advantage of these advance showings isn't limited to new series: engines such as the *Law & Order* family and *My Name Is Earl* also feature prominently at NBCFirstLook.com. The strategy also involves showing prime-time programs on AOL and Yahoo – clear evidence of the extent to which the major networks have decided to take steps to reach young audiences in the spaces they have migrated to.

The home video club

U.S. movie studios estimate at $6.1 billion their losses as a result of unauthorized copying, of which $2.3 billion is attributable to

film sharing on the Internet, with BitTorrent providing the key to the vault. As with television programs, the deployment of broadband connections is altering the established order in film distribution.

Websites such as iTunes, Movielink, CinemaNow and Akimbo enable anyone endowed with patience to download films directly onto an office computer for later screening. The ability to burn a downloaded film onto a DVD and later watch it on a DVD player is considered the missing link in the chain that will cause this type of consumption to skyrocket. For the time being, certain signs are encouraging, however: in an industry first, the MovieLink site announced last summer that the film *Brokeback Mountain* would be available for downloading the same day it was released on DVD. In mid-January 2007, Netflix introduced a new service that allows subscribers to stream movies and television shows on their PCs. With films, as with music and television, the proliferation of distribution windows is the flavour of the month, especially if they are Web-linked. Sites that until now were known as portals are equipping themselves with properties and functionalities that make them similar to online broadcasters in several regards.

Amazon has no intention of remaining on the sidelines and missing out on what is likely to become a vital means of distribution in the next few years. The online retail giant announced in late summer 2006 that it was moving into entertainment-product downloading (Hansell, 2006). The Amazon Unbox service can be used to download films for $8 to $15 and most television programs for $2. Films can also be rented for 24 hours for $4.

As for Google, it is currently evaluating the extent to which advertising can offset the costs related to dissemination of video entertainment products. For the time being, the films it offers free of charge are limited to Charlie Chaplin classics, certain episodes of Mr. Magoo and wrestling. In exchange for free content, users agree to be exposed to advertisements that appear above the screening window as well as to brief commercials at the end of documents. It should be noted, however, that most of the recent or popular videos still have to be purchased on the Google Video site.

Television channels produced by users

Over the past year, we have seen a proliferation of experiments whose objective is to solicit not only users' participation in the consumption of televised products but also their flair for producing content. In line with the trend toward user-generated content, most of the initiatives developed by the major networks aim to capitalize on the fan base that many programs already have. Television programs give rise to behaviour that goes far beyond simple consumption of them during their broadcast slot. For many people, television shows also constitute starting points for discussion of characters and expression of various types of commitment to the themes presented. As predicted by James Duff, creator and executive producer of *The Closer* on the TNT network: "The Internet is going to turn TV into the equivalent of AM radio. People will be talking about their shows and watching their shows in the same place" (Aspan, 2006). Several of the projects in progress seemed to confirm his prediction.

It's no surprise that here, as with many initiatives related to Web 2.0, the target clientele is the millennials. And who is better positioned than MTV to exploit this group's strong propensity toward interactive applications? In the summer of 2006, MTV2 launched *All That Rocks,* a dual-media program that asks viewers to select online video clips, performers, games and other content elements that are then broadcast. The innovative aspect of this program is that users are encouraged to submit brief video clips. With each program, MTV2 dips into all this content and broadcasts what are deemed the most creative videos. This concept marks the emergence of a television program in which viewer involvement essentially occurs on line. Virgin Mobile subscribers can even vote for their favourite videos on their cell phones. In this context, we can see the degree to which television is trying to remain a medium perceived as cool by young people, while establishing symbiotic connections with the communication objects that are currently central to their entertainment and social universe. In this respect, the launch of the Dave.TV service is indicative of this new configuration whereby content moves between distribution networks and users.

Dave.TV is an acronym that means "distributed audio video entertainment TV". As the ultimate illustration of the prevalence of the trend to associative practices on the Web, Dave.TV bills itself as a social broadcast network (SBN) and invites users to upload and broadcast their video productions. Better still, the members of the Dave.TV network can create their own television network (MyChannel) and program their own material, material borrowed from sites belonging to other members of the SBN community and material sponsored by various partners that supply content to the site. The model adopted by the designers of Dave.TV is a tangible indication of the type of transformation that could revolutionize distribution, as we depart from the traditional "one-to-many" formula and move toward a configuration based more on "a large number to an even larger number", with users free to explore an impressive quantity of content as well as to produce content by borrowing freely from the members of their community.

In the summer of 2006, TF1 in France launched its WAT (We Are Talented) platform on the Internet for amateur directors. For the time being www.wat.tv is the place where cyber denizens post their videos, musical compositions, photos, texts, etc. and is limited to Web and mobile media. Ultimately, however, TF1 plans to create a television channel with a significant portion of the content drawn from material submitted to WAT. TF1 senses the rise of the associative Internet, and the group's executives have clearly expressed their goal of becoming a major player in a sector whose popularity is growing rapidly, especially with young people.

Two studies published in 2006 offer fundamentally different takes on the imminent risks that the Internet represents for the future of broadcasting. According to the IBM analysis *The end of TV as we know it: A future industry perspective* (IBM, 2006), new technologies are fragmenting the television audience into two segments: the first, which will maintain an essentially passive attitude toward television content, and the second, which is keen on new technologies and will bring about radical change in the traditional media industries in its incessant quest for anytime, anywhere content on an armada of distribution channels. The scope of the changes predicted by IBM is so great that columnist John Eggerton of *Broadcasting & Cable* magazine wryly com-

mented that the report could have been better titled *The Beginning of Television As We Will Come to Know It*, since the very foundations of the industry are likely to be shaken.

The assessment presented by the Nordicity Group in its study *The Future of Television in Canada* (2006) paints a far more moderate picture of the changes that the industry will undergo, mainly because of the costly bandwidth required by many Web 2.0 initiatives. Nordicity acknowledges that the rise of television on demand and user expectations of a more interactive experience will certainly alter the ways video is consumed. Nordicity distances itself from the IBM predictions essentially as regards the strength and rate of the changes.

Newspapers in search of digital reincarnation

The venerable British magazine *The Economist* (2006) caused shockwaves in late August 2006 when it splashed the painful question "Who Killed the Newspaper?" on its cover. Philip Meyer, a journalist turned academic, bluntly predicted that the newspaper would be dead in North America by the first half of 2043. The statistics on the industry are far from encouraging. According to a recent study by the Pew Research Center for People and the Press, one American out of three (31%) obtains news on the Internet, essentially the same proportion as two years ago, whereas 10 years ago only one person in 50 (2%) had adopted this practice. It's not surprising that people over the age of 40 are the most loyal newspaper readers (Pew, 2006).

Paradoxically, reader migration to online information has given daily newspapers the opportunity to reinvent themselves by adapting their product to the new practices. *The Washington Post* is a fine example. It was one of the first newspapers to try out the Web in the mid-1990s and to incorporate blogs into its website early on, and its *Wa Po2.0* (*Washington Post 2.0*) initiative is recognized as having played an instrumental role in the 36% leap in the site's revenues over the past year. Essentially, *The Washington Post* decided to go with the flow by offering a range of functionalities, such as a feature that enables users to determine who is blogging at any time; the addition of a comment section at the end of most articles; the creation of personal pages

where users can see all the comments they have submitted to the newspaper's website; and inclusion of a search engine that enables users to extend their search to sites other than Wa Po, making the newspaper a popular starting point and ultimately the homepage from which users seek information.

With printed matter as with other traditional media, social networking seems to represent a preferred method for increasing content relevance and vitality. This can be seen in the strategies adopted by the Associated Press and CNN, which in the first half of 2006 added a space on their sites where users are encouraged to round out coverage by submitting their own videos and photos (Burns, 2006). Such openness on the part of major information media to user contributions that add depth to a story or express diverging points of view has given rise to the concept of "citizen journalism".

In addition to the encouraging outlook created by newspapers' openness to reader contributions, a number of large newspaper groups are exploring mobile devices as a new niche to meet subscriber expectations. In the United States, the *USA Today*, the *Chicago Tribune* and the *Los Angeles Times* are only a few of the newspapers that offer content designed specifically to be downloaded onto mobile devices, including in certain cases short messaging system (SMS) alerts. The *New York Times* is definitely the most enthusiastic promoter of mobile applications. It recently announced that the complete version of its website was accessible from cellular devices or personalized digital assistants (PDAs) equipped with navigation software. Although free of charge, the content offered in mobile form is accompanied by advertisements.

In Canada, almost all the major print names are present on mobile devices. The French-language newspapers include *La Presse*, *Le Soleil* and *Le Quotidien*, *La Tribune* and *Le Devoir*, while the English-language *Globe and Mail*, *National Post* and *Toronto Star* are also accessible on mobile platforms. But the *Toronto Star* has taken the lead in digital initiatives with the launch of an electronic afternoon edition, *Star PM*, which is fully downloadable in PDF format. *StarPM*, the first project of its kind in North America, comes in an "8.5-by-11" format and contains eight pages of news as well as a four-page section covering sports and articles

on lifestyles, subjects of interest to young adults and celebrities in the news[3]. The *Star* is following in the footsteps of several European newspapers that have an international readership and last year initiated a PDF afternoon edition, of which *FT P.M.*, published by the *Financial Times* of London, is the example cited most often. Clearly, the will to ensure content is flexible and adapted to the various devices on the market forms the inevitable basis of the action strategies of every media group in the industrialized countries.

Online and mobile radio service

A recent report posted on digitalmusicnews.com (*Digital Music News*, 2006) suggests that traditional radio seems to have become the place where people go to sample music they will later find on line and download, at least in the case of young people. Although radio is still part of young people's listening and discovery universe, the situation is worrisome in terms of radio's importance relative to the other platforms. There is no need to dwell on the damage done to the music and radio industries by the proliferation of sites where music files are shared illegally. According to data provided by the International Federation of Phonographic Industries (Chaffin, Van Duyn, 2006), for every legal music transfer, 40 illegal transfers apparently take place.

No matter how extensive or detrimental to the financial health of the radio industries, downloading of music files places a distant second to streaming Internet radio when it comes to listening practices outside traditional radio. The proliferation of radio stations that broadcast exclusively on the Web is expanding the landscape considerably; even more significant, it is distributing audiences to a larger number of stations with the expected impact on advertising rates. In a U.S. study made public in the summer of 2006, the President of the audio entertainment strategy company Hear 2.0 disclosed the importance of streaming Internet radio, with 43% of respondents saying they had tried this type of radio (Vasquez, 2006). The body blow to the

3. Editor's note: The *Toronto Star* ended this experiment in mid-October 2007. The newspaper would instead like to develop its mobile services.

traditional radio industry is that 60 % of people aged 12 to 17 and 50 % of people aged 18 to 24 say they listen to radio available exclusively on the Internet. When we talk about the current challenge facing radio, these figures speak for themselves. And this is happening before high-speed wireless networks such as WiFi, WiMax and Wi Bro have become truly established.

Of course all the main radio stations have websites that they operate with various degrees of sophistication. Some of them, however, are investing heavily in the colonization of Web radio by redefining the very meaning of a radio station (Bélanger, 2005). This is the case of the largest group of U.S. stations, Clear Channel, which has decided to take steps to exploit the potential of the Internet in meeting user expectations. Making the Internet a new fully fledged broadcast platform, Clear Channel has incorporated video- and music-on-demand functions into its sites. Moreover, with a series of exclusive studio concerts available on its site, Clear Channel can also boast that it offers radio that is decidedly visual (http://www.clearchannelmusic.com/).

Although transaction functions are common on most radio station sites and enable users to purchase music from the catalogues on offer, associative applications are now central to the considerations of many executives. In this area, all eyes are on the British Broadcasting Corporation (BBC), which announced in the summer of 2006 that it would enable its millions of listeners to create their own virtual radio station. The project, which is being developed under the code name MyBBC Radio, is exploding most of the characteristics that now define Web 2.0 by allowing users to make up their own programming from the wide spectrum of content produced by the BBC. With 4.5 million podcasts downloaded in May and 20 million hours of archived documents that have been available for online consultation since last March, the BBC definitely has reason to believe that the new Web-enabled devices can only increase the reach of material already appreciated by its audience while confirming the relevance of the services offered by Britain's' public broadcaster.

Audio podcasting, although still modest in terms of listening transfers, succeeds each year in reaching almost 7 % (6.6 %) of U.S. Internet users, while the percentage is 4 % for video podcasts, available since the fall of 2005 (eMarketer, 2006b). For

comparison purposes, these percentages for podcasting users are almost equivalent to those for bloggers (4.8% of Internet users). As the statistics in the following table show, aficionados of audio and video podcasts tend to be in the younger age groups.

Composition index* of audio and video podcasters in the U.S., by age group, 2006

	Audio podcast	Video podcast
18-24	172	147
25-34	155	164
35-44	117	115
45-54	85	92
55-64	53	49
65 et +	29	31

Note : Active population (U.S.) aged 18 or over, with Internet access at home or at work
* The average composition of the index is 100. Any figure above 100 indicates the over-representation of a demographic group
Source : www.eMarketer.com.

Very few radio broadcasters are as successful with podcasts as the Canadian Broadcasting Corporation (CBC). The Internet has the potential to fragment local radio audiences by making tens of thousands of stations available from everywhere in the world, but the opposite is also true : programs offered in podcast mode are outstanding windows for reaching audiences far beyond the usual areas served. CBC radio provides a vivid illustration. In the podcast section of the iTunes service, some of CBC's most prominent shows, such as *The Hour*, *The Best of Ideas*, *Quirks and Quarks* and *Radio 3* regularly place on the list of programs downloaded most often. These results give new meaning to the concept of accompaniment radio, since the user clearly decides when and where to tune in.

Regarded by many observers as central to the next wave of new services, mobility sees radio as an ideal partner. For several years, major telecom companies, such as Sprint, Verizon, Cin-

gular, Vonage and Orange, have been offering, for a monthly fee, radio stations available on cellular devices. In addition to access to a range of specialized stations, subscribers can also order songs on demand, obtain the titles and the names of the artists for the last 10 pieces played, send in special requests, receive text messages informing them their request will be broadcast shortly and listen to celebrity podcasts. In Canada, Telus has pulled off the latest coup: under an agreement with XM Canada, one of two Canadian satellite radio services, Telus offers about 20 stations to Telus Mobility subscribers in the first partnership between satellite radio and a Canadian wireless provider.

The highly regarded British newspaper the *Guardian*, speaking through its technology columnist Victor Keegan, recently took a stance on the mobile development outlook by urging its readers: "Dump your iPod, the mobile's taking over" (Keegan, 2006). Citing data that show iPod sales have fallen steadily over the past year while sales of mobile devices capable of storing up to a gigabyte of music files have skyrocketed, Keegan predicts that users will increasingly opt for devices that let them listen to music and take photos. In another confirmation of this trend, statistics provided by the International Federation of the Phonographic Industry show that half of the digital music sold in 2005 was downloaded directly onto wireless devices. Sales of Walkman telephones by Sony Ericsson, RAZR by Motorola and Chocolate by LG are all on the upswing. Despite being the latecomer to this sector, Nokia alone intends to deliver more than 80 million wireless devices with an MP3 player during the current year, a figure that represents more than double the number of iPods sold last year. It is forecast that 60% of the wireless devices delivered in the United States in 2010 by all manufacturers will have music players. In Canada, Rogers Wireless launched a major promotional campaign in late September 2006, claiming to be the first in the country to offer a wireless MP3 device capable of storing up to 280 songs, a number that compares favourably with low-end iPods.

Some recognize that the success of mobile services is closely related to consumer response to all the music and video products already available or in development. Although the availability of devices with audio-video functions is vital to the industry's

progress, the main service providers have their work cut out in determining what reflect current preferences and expectations and in developing attractive marketing campaigns. Most of the music transactions carried out today on cellular phones involve ringtones and downloading of "over-the-air" music, such as Fido's #DJ service, but games and video clips will occupy ever more space in the range of future services.

Wireless television

When the British speak affectionately about television, they call it the telly. In these days of rapid expansion of mobile services, the name telly is finding a new vocation by serving as the prefix for a range of new products offered by the main wireless providers. In the United Kingdom, Virgin Mobile has the honour of being the first to introduce the "Tellyphone" after a trial period that most of the major networks took part in. These tests have confirmed the importance to users of access to brand-name networks that offer programming they are familiar with.

In Canada, wireless television has also begun to appear. In the summer of 2006, the country's three main suppliers of mobile services, Bell Mobility, Rogers Wireless and Telus Mobility, offered a selection of 22 stations on 16 models of wireless devices. As an example of the confidence with which certain broadcasters are establishing their position on the mobility market, the strategy adopted by the Corus group is worthy of note. Corus announced in June 2006 that it would be the first broadcaster in the country to launch a new program for preschoolers, *This is Emily Yeung*, on wireless, followed one week later on the Web and finally, after another week's interval, on the Treehouse specialty television channel. The strategy of using wireless to publicize the program before it was available on the Internet or on television is a clear attempt to reach parents so that they can discover the educational nature of the program and include it in the content they would like their children to be exposed to.

Incidentally, even broadcasters with modest operating budgets, such as TFO, the French-language channel of Ontario's educational television network, is getting on the mobility bandwagon. Since the summer of 2006, mobisodes from the program

Volt have been available on the networks of Bell, Rogers and Telus. *Volt* is the first Canadian comedy series offered in French on a mobile device.

The new ecology of digital broadcast platforms

If the arrival of the Internet sparked curiosity on the part of traditional media, which were quick to take advantage of its tremendous potential for archiving, promoting and broadcasting content, the advent of Web 2.0 is causing the large media groups to scrutinize the relationship that users of new technologies want to create with the news and entertainment products they consume.

For those in the media sectors, the immediate issue undoubtedly centres on development of initiatives that use the inter-influence between the social-networking media and the traditional media. But one thing is clear: given the current technological exuberance, the idea of disseminating content exclusively in the linear mode of television, radio, newspapers or magazines appears to be incompatible with the dominant practices, especially those of young people. Have the mass media industries discovered the Holy Grail of interactivity? They may find their way out, or perhaps it would be more accurate to say their path to survival, at the confluence of: a) what they produce; b) what is available on associative production sites; and c) the fragmentation and mashing up of all this content with which an ever-larger portion of the public is creating personalized listening/watching grids. But it's hard to say so with any certainty. Still, the Internet has been in most Canadian homes for more than 10 years, and its impact on the way we consume the traditional media and, above all, on the way they offer us their content, no longer leaves any doubt.

The bidirectional aspect of social networking seems to be an integral part of the media experience of the coming generation. "Conversations" with, between, around and in parallel to the content disseminated represent the cornerstone of these large social networks. The challenge for the major media companies is to identify how to bring these flows back into the corporate

fold and to monetize the full value that they represent in the eyes of advertisers.

The prevalence of Web 2.0-type activities on all digital media has taught the traditional media two lessons. The first lesson is that trying to prevent content migration to the Web is a battle that has already been lost. As we have seen, rather than launching lawsuits against YouTube and MySpace over copyright, the major television and radio networks as well as the major music companies are recognizing the rise of networking sites by going so far as to compete to offer, free of charge, content to which they hold the rights. And the second lesson is that the media cannot merely export television and radio content to the Internet for it to find favour with cyber denizens. Content has to be adapted to the properties of this universe. In this respect, interactional, on-demand and personalization features are vital.

Despite the euphoria engendered by the success of social-networking sites, it is important to bear in mind that not everyone is inclined to actively select, interact with and manipulate news and entertainment content; for the time being, this practice is confined to a very small segment of the population. Is it legitimate to think that the empowerment practices being expressed today by young Internet users and wireless aficionados may switch onto a more linear path as they get older? Or are we witnessing the emergence of behaviour that will indelibly shape the way the audiences of tomorrow consume media content?

One thing seems clear: the proliferation of high-speed services on the Web as well as on mobile platforms is establishing itself as an alternative not only to the traditional media as content suppliers but also to cable distribution as a broadcast means. Given the substantial fees that cable companies pay specialized television networks for the right to transmit their signals, the impact that certain successful Web initiatives may have on the balance sheets of linear services could be considerable.

The outlook offered by the new digital environment appears to be closely subordinated to the ability of media institutions to respond promptly to the new behaviours adopted by users of the various media products. If we have to derive a single lesson from what has developed over the past year, most certainly it is that the business plans of the major media are being severely

tested by innovations that come up from the bottom and in mere months become properties whose acquisition costs run into the hundreds of millions of dollars. Clearly, the media cannot afford the luxury of ignoring the growing popularity of collaborative technologies, hoping they will pass by without leaving too much destruction in their wake. The trend is irreversible. The value of the products offered to users, independent of the medium, is now tied to the quality of the experience and the user commitment they allow. With such a configuration, users have never played such an influential role in determining the media products that make up their news and entertainment universe.

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Broadcasting in a Sea of Change: Technology, Consumers and Corporate Strategies

Yves Rabeau*

The new competitive and technological context in the media world

> *"Forecasting is something very difficult, particularly when it deals with the future"* **(Yogi Berra)**[1]

The digitization of information, the opening of competition in the telecom and cable industries, the arrival of Internet and the progress of digital technologies have produced results that are evolving differently than what was anticipated in the 1990s. Telecommunication companies, new or incumbent, wired

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1. Yogi Berra, born in 1925, was a U.S. baseball star who became one of the most widely quoted public personalities. Many of his pithy comments, called "Yogi-isms," are famous. http://en.wikipedia.org/wiki/Yogiisms#Examples.

or wireless, or cable companies have built high-capacity information transport networks for what was going to be another communication or distribution vehicle of media-originated content. Media companies were historical partners of information carriers and would thus be able to reach their customers more easily and sell them richer and more complex content than before.

Hence, we saw a meteoric surge in the stock of telecommunication firms that deployed their networks and a dazzling rise in the demand for Internet services. As competition became more intense, the companies involved developed new business models or made acquisitions to diminish the uncertainties of competition. The mergers of media and telecommunication companies were to produce synergies that did not always materialize. The acquisitions counted on the network effects that are a basic characteristic of an industry that operates from costly infrastructures. The battle of networks resulted in many casualties, including companies that were considered telecommunication icons, and we now find ourselves with a highly consolidated industry. The battle of Web sites also depended on network effects with the result that a limited number of sites among the many that appeared on the Web managed to emerge, often to achieve a worldwide presence.

The formation of numerous communities of interest on the Internet was one of the ways that marked the beginning of Internet content appropriation by users. The development of knowledge instruments like encyclopaedic sites and the improvement of search engines, the publication of personal journals – blogs – and the lightning increase of sites whose contents are largely determined by users bring us to a market situation where information carriers and the media see an increasing part of Internet content slip out of their control.

Competition fed by technological change and worldwide Internet appropriation by persons, communities, corporations and public institutions make it increasingly difficult to identify profitable business models in many industries that revolve

around communications: "Each of the firms has a different strategy for the Internet"[2]

To show how difficult it is to design profitable business models in this new context, here are some of the main components of this competition:

- Faced with the huge increase in Internet traffic, telecoms look for business models enabling them to capture more value from the content being carried on their networks. In addition, new competitors, including Internet Pure Plays like Google or e-Bay that offer Internet telephony, make of information transport a commodity business in which distance and time spent on-line are no longer sources of income. With the advent of voice over IP (VoIP), the regulator in accordance with its mandate tends to foster conditions that encourage competition between market players,[3] which intensifies the pressure on former monopolies to look for new sources of income. A strategy to meet this strong competition is to pursue consolidation to obtain network, scale and scope economies.[4] Thus, after acquiring AT&T, SBC Communications has just been authorized to purchase Bell South for $67 billion. Verizon has absorbed MCI (including World Com) to become the second telephone giant. Verizon pursues an ambitious program of investments that takes fibre optics to the consumers and offers them broadband services, including digital television.
- Cable operators, who have entered the VoIP market and forged alliances with mobile phone operators, are in a position to offer "fixed and mobile phone/broadband Internet access/television" packages. They compete more and more aggressively with phone companies and develop strategies to offer content to their customers. Canada's Videotron, owned by Québécor which produces print,

2. "Big media and the Internet: Net dreams," *The Economist*, March 18, 2006.
3. The CRTC, for example, favours competition between phone companies and cable operators as it did for long distance.
4. K.Hart, "In Phone Business, Big Is Big Again," *The Washington Post*, October 9, 2006, page D01.

audio and visual content, provides a very good example of the convergence strategy in the offer of information transport and content distribution services. It has become one of the main competitors of Bell Canada, which also offers information transport and content distribution services.

- Components manufacturers also consolidate their operations. Lucent and Alcatel have merged while Nokia and Siemens have combined their production of networking equipment. Cisco has entered the television market through the purchase of Scientific Atlanta, which makes television modems. Manufacturers offer more and more high-performance electronic instruments, notably phones using fixed lines or mobile networks for the reception, exchange and distribution of content. Apple, in particular, has created a new wave of innovations with its I-Pod. As these companies are now stand-alone and no longer part of large telecom companies, keener competition in this industry has speeded up the pace of innovation and contributed to the transformation of the media.
- The mobile phone and more sophisticated tools like RIM's Blackberry have made it possible for a while to surf the Internet, access private or public information, exchange e-mails and distribute advertising to users. The cellular phone can also be used to make commercial transactions. While Japan and Europe, for historical reasons having to do with the economy of telephony or for cultural reasons, have pioneered the development of these wireless services, these uses of the cell phone are in full growth in America. Lately, the developments of wireless technology have made it possible to use the cell phone to listen to the radio, watch television, take pictures and distribute them instantly on the Internet. This technology increases competition between content providers and between the latter and **users themselves**, who become potential competitors through the distribution of information in the form of text or pictures on Internet. This is an example of a brand new trend where the of information distribution networks create their own content and exchange it with other users.

- With the convergence of information transport on wired or wireless IP platforms, there is no more distinction between voice, data and image. There are only byte packets that circulate on the Internet so that, for technological as well as competitive reasons, we can from now on speak of "**information carriers**" or the information transport industry. It mainly includes old and new phone companies, cable operators, wireless and satellite network operators, but also a great many other companies like ISP, computer firms and others. This is a way of seeing the communication industry that exemplifies at once the strong competition between companies and the fluidity of networks made possible by technology and the opening of competition as a result of political decisions relayed to the regulators.
- Broadcasters face new competitive conditions that are no longer in harmony with the regulation they are subjected to. Internet radio, digital radio, satellite and cable radio, podcasting and cell phone radio have vastly changed the competitive environment in this industry. There is in fact a competitive asymmetry since conventional broadcasters are subject to various regulatory constraints, including in particular the composition of the content they offer, while companies that use new means of distribution of comparable content like Internet are not subject to such constraints. Furthermore, users can also appropriate the available content and distribute it personally or create their own video or audio content on various Web sites for general distribution or for an exchange with specific correspondents on Internet. Content producers, therefore, face a brand new form of competition without historical precedent and will have to find ways of adapting to it and developing new business models to ensure their economic survival.
- The print media need to adjust to minimize the impact of new advertising vehicles. A mere replica of the written content on a Web site is no longer sufficient to maintain

an audience and advertising revenue.[5] Newspapers must confront Blog sites on current affairs and other on-line news sites and then develop new approaches to communicate with their on-line clientele. For example, the possibility to do on-line transactions is a strategy used by some newspapers to broaden their on-line audience. Newspaper readership is low among the digital generation.[6] In addition, journalism awards are given to those who do reports for the Internet, mobile phones or other digital supports. The loss of a customer for the printed version will require major on-line gains to offset the loss of advertising income since Internet advertising is believed to be less effective than printed advertising and, therefore, clearly less profitable. As has always been the case with the conventional media, the battle for network effects is linked to the ability to get advertising income. The Googles and other competitors are more and more skilful at increasing the effectiveness of on-line advertising and, therefore, getting this income. These developments are a result of both technological change – Google being a leader in the development of new Web navigators – and network effects fed by the visit of a limited number of Web sites. In this regard, recent studies indicate that within a few years, up to 25 % of print advertising will move to digital media.[7] Classified ads account for 35.5 % of the newspapers' overall advertising income.[8]

- With Apple as technological vehicle and Amazon as commercial site, on-line cinema could soon enjoy a new boom. Other sites will follow for specialized movies. The release of films or series, which otherwise would be presented on television, made available on DVD and downloadable from Internet for a price, by combining high-speed and home

5. *The Economist*, Special Report, The Newspaper Industry, "More media less news," August 26, 2006.
6. *The Economist*, Special Report, The Newspaper Industry, op.cit.
7. *The Economist*, Special Report, The Newspaper Industry, op.cit.
8. Currently, classifieds, which account for 35 % of the newspapers' advertising income, is the most affected: close to 10 % of real estate, car and want ads are now on-line, and we anticipate an acceleration of this trend. See: "Traditional Media in the Digital Age," D. Ahlers and J. Hessen, *Nieman Reports*, Fall 2005.

movie technology, is about to revolutionize the cinema industry. In particular, cinema owners, cable operators (pay-per-view), broadcasters, and telecoms that plan to offer pay-per-view on fibre optics will see their market disrupted.

- Created originally not for profit and purported to belong to users turned creators, the site MySpace comprising music, blogs, news, events, games, etc., has spread like lightning and now boasts 100 million users. Rupert Murdoch, from the world of conventional media, has understood the network effect power of such a site and NewsCorp has acquired it. The commercial strategy is beginning to take shape: with the help of Google, they want to launch text advertising on the site; they also want to develop a trade mark for the music under the name of MySpace Records, offer IP voice services to enable users to talk to each other, open sites at the international level to multiply the network effects and distribute the content of NewsCorp. The strategy is to make the site safe for advertisers who would not want to be associated with content created by users who offend them. Even though some users mistrust this commercial evolution of their site, the network effects will continue to play out so that conventional content players, broadband providers, other media stakeholders and, finally, other major Web sites like Yahoo will have to adjust to this new form of activity and competition.
- A site like YouTube, whose users produce, edit and exchange video content, is another Web appropriation. But some videos have begun to include film or TV program clips so that content producers see their intellectual property threatened by this activity. Faced with this new form of competition, some major content producers like NBC will become allies of those sites rather than launch costly and uncertain legal battles.[9] It's a very recent phenomenon and we do not know what configuration of competition this trend will lead to, but the stakes for content producers

9. See: G Robertson, "Networks playing nice with Web foes," *The Globe and Mail*, August 17, 2006.

are important. The acquisition of YouTube by Google[10] will instil a new dynamic to this site and to the posting of user-created on-line videos. Google will apply itself to finding ways of making the site profitable, in particular through its techniques of on-line advertising: "… it is unclear how the business will mature. Most agree that there is plenty of money to be made from YouTube, **but no one is quite sure how."**[11] (Our emphasis) Google's presence will encourage video content producers to be present on this site and, therefore, to negotiate agreements similar to NBC's.

This rapid transformation of the communication and media market radically changes the conditions of competition as occurs, it should be noted, **in all other industrial sectors**. The increasing and increasingly international competition forces firms to innovate and review their business models for the general benefit of their customers. For example, all companies must review their way of advertising and communicating with their customers. **But for want of historical precedents, we cannot say what business models will prevail in the various industries, all the more since incremental innovations keep altering the markets' modus operandi.**

This introduction gives us the general context of this study. It is essential to examine the broad outline of this new technological and competitive environment since the various media industries are more and more interrelated and competing for a fluid, fragmented, and rapidly-changing audience. In this document, we will deal more specifically with broadcasting and its various components in this new environment.

What new media business models in the digital economy?

The digital economy has radically changed conventional industries, and particularly the world of broadcasting. The conventional media are increasingly threatened by the new providers of

10. M.Liedtke, "Google takes a lead in the on-line video revolution," Globeinvestor.com, October 9, 2006.
11. "Google's young partner", *The Economist*, Global Agenda, October 10, 2006.

digital content, whose offers are more varied, more personalized, and cheaper.

Five factors have contributed to the emergence and development of new business models in the broadcasting industry:

- *Digitization of data, voice and images*: The growing digital compression of data, voice and images has the advantage of distributing an increasing amount of good-quality information and sound (radio) flows through a limited percentage of space (frequency band) on a given telephone line. With a 56-kbp analogue modem, it is now possible to distribute on Internet stereo sound of excellent quality.
- *Possibility to download technological standards for free:* Internet offers consumers all radio and audiovisual programs within click reach. All one needs to receive any station on one's computer is to download a small stream technology program. The best known stream technology software are Real Networks (first publisher of the radio software RealPlayer in 1995 with a 75 % market share), Microsoft (Windows Media Player), and Quicktime. Virtually all this software can be downloaded for free.
- *Interactive programming* that we analyze in more detail in section concerning programming on demand following.
- *New audio advertisement insertion technology*: Radio stations distributing their daily programming on Internet know how to take advantage of a major asset derived from a specific characteristic of the streaming technique. In fact, the flow of audio sequences is not truly in real time: the technique called "streaming audio advertisement insertion" produces a short time-lag of about 3 minutes. These minutes are all the more precious since they make it possible to insert targeted audio advertisement content, thus to create advertising space in addition to the advertisement already contained in the station's regular programming.
- *Opening of world borders:* Internet has freed radio from the limits of wavelength and transmission power. Internet radio is indeed a way of expanding the zone of audience and commercial activity and going beyond the geographic borders imposed by the world of short, medium and long waves of conventional hertzian radio.

The new opportunities created by those five factors may threaten the conventional media if they fail to adapt to this new competitive environment. According to many researchers,[12] broadcasters need to move on to high definition (HD), digital and Web radio to keep their listeners who are no longer just receivers of content, but also active suppliers.

This new reality is at the heart of the new business models or strategic systems of media companies. By business models, we mean the different mechanisms of production, marketing and strategic relations with partners enabling a firm through a value proposition to customers to create added value to customers and its shareholders or owners. An examination of new value propositions and underlying mechanisms shows the existence of a new dynamic in the value chain that transforms the premises of traditional logic. In the media world, there is no longer a reference business model, but there are new business models established ad hoc according to the platform considered (mobile or not) or the access instrument (phone, pager, I Pod, computer, etc.).

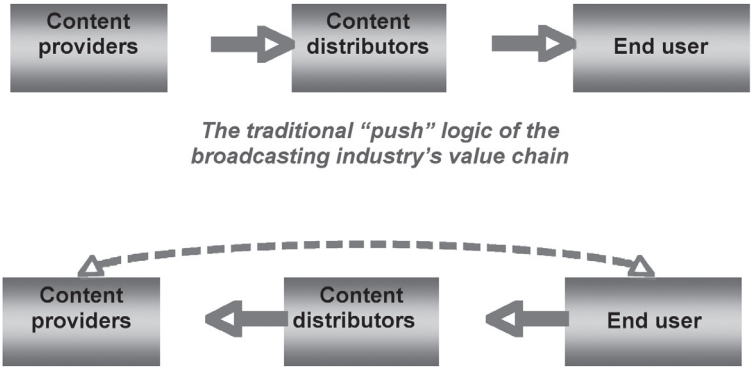
Increasingly well-informed customers equipped with more and more multifunctional and complex technological tools have developed three types of needs that are but a reflection of today's polychronic life : mobility, interactivity and content personalization (pay-per-view programming). The conventional media had no other choice than to meet the requirements of a variety of platforms. Indeed, worldwide infatuation for the distribution of audiovisual content on other types of platforms does not proceed from an economic rationality but from a strategic rationality faced with multiple technological changes. It's the bubbling demand for content on various mobile and interactive media that forced content suppliers and distributors to adopt new business models where economic profitability is not yet clearly defined. Multiplatform choice requires new strategic relations with various related industries and a very different customer approach than what it was until recently.

12. Radio Asia Conference, 2006, Singapore.

The traditional logic of music, sport, educational and entertainment content distribution is no longer the broadcasters' undisputed monopoly (figure 1). Broadcasters unilaterally decided on the variety and schedule of programming on their channels while listeners were mere passive receivers of content, besides often interrupted by commercial breaks. With the advent of Internet and satellite radio and podcasting, the "push" logic of content imposition makes way for a much more interactive "pull" logic. Indeed, the new logic of content distribution not only enables consumers to choose when, where and how they will listen to or see their selection of music, video, information and any audiovisual program through downloading, but also to become suppliers of content by publishing their own choice of music and content of all categories on the Web (figure 1).

Today consumers, and particularly teenagers, demand audiovisual content that suits their taste and interest of the moment, using their preferred technological tools, which have radically changed the traditional "push" logic of broadcasting.

Figure 1
The old versus the new value chain of the broadcasting industry

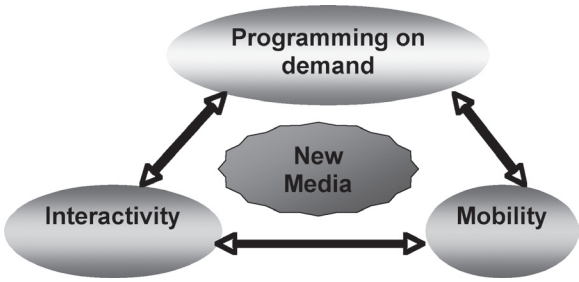


The three pillars of the new business models:

As the new pull logic of the broadcasting industry's value chain shows, the business models have also been increasingly centred on customers. This approach overall is not new since we have been speaking of CRM and customer strategy for some time. The broadcasting industry's current business models that translate into a delegation of power and action to the customer have headed in this direction. The customer is even behind the distribution of many contents, either directly introducing them and making them accessible to the community or ordering or recommending them on blogs, forums and downloading sites. This revolution in the dynamics of power diminishes the active role of the various content providers and leads them to adapt to consumer behaviour.

Internet has become a social media and the simplest and cheapest means to find, publish or download content that is transferable to walkman, cell phone, pager or pocket computer. Thanks to these new media, the consumer has more freedom. The three pillars of the expansion of podcasting besides are mobility, interactivity and programming on demand (figure 2).

Figure 2
The three pillars of the expansion of the new broadcasting logic



Mobility

The practical aspect and friendliness of the new communication tools have encouraged the development of mobile entertainment. Intelligent phones, pocket computers and walkmans have more and more functionalities that used to be exclusive to computers, TV or radio receivers. This technological advance combined with the worldwide progress of satellite and wireless communications have led to the growth of the need for mobility. The consumption of audio or video content anywhere has become an advantage much sought after by customers. They want to do what they like with their time and consume audiovisual content according to their availability and preference. Spatio-temporal constraints to follow the desired programming live from the conventional media are now overtaken by the new technological platforms. Customers henceforth enjoy the advantages of mobile entertainment. There are currently about 30,000 conventional radio stations in the world against 47,500 radio station podcasts.[13]

Interactivity

Interactivity is the second major dimension that explains the expansion and popularity of the new content distribution platforms. Consumers enjoy an active role in the on-lining and publication of music, video, reports, etc., making it possible to broaden the sphere of programming beyond conventional suppliers. Program authors publish audio files that may be similar to a conventional radio program. Listeners create their own playlist through different subscriptions. The downloading of programs originating from the many sources they have chosen is then automatic.

By adding the technologies needed for the automatic downloading of audio and video files, podcasting has been popularized by blogs (personal Web journals) as well as the sites of some

13. http://72.14.203.104/search?q=cache:eSiwaSZt0AUJ:portal.unesco.org/ci/fr/ev.php-URL_ID%3D22443%26URL_DO%3DDO_TOPIC%26URL_SECTION%3D201.html+baladodiffusion%2Brevenus&hl=fr&gl=ca&ct=clnk&cd=75.

conventional broadcasters. Today a new blog is created about every second[14] and some become experts in their hyper niche.

Personal Web sites (blogs) propose to authors an easy way of publishing their own selections of podcasts. Thanks to the RSS (Really Simply Syndication) format, consumers can summarize or list content freshly added to the site. Site authors also used the RSS flow to add content originating from third sites. The new variants of print, therefore, are audio and video files and the automatic downloading of these files into personal computers and walkmans able to read them.

Beside the audio advertisement space, hertzian radio stations will be able to access interactivity and, therefore, a broadened income strategy through the net. The Internet enables on-line radios to reach their audience through discussion forums, interactive advertising, e-commerce as well as the personalization of all or part of radio programming (offer to the radionaut true "pick and pay consumption" of information and/or musical content).

Programming on demand

Programming on demand is the third key dimension of the new broadcasting media's success. Indeed, the new media enable consumers to choose only the programs they want without having to be subjected to content that does not interest them or the frequent commercial breaks of conventional media. Thus, satellite and Internet radio have the advantage of serving very particular niche markets like sports, education, minority languages, specialized music, etc.

New media challenges: The case of the CBC

The latest **CBC decompartmentalization strategy**[15] shows the impact of the new media's popularity in Canada, which has forced a synergy strategy between the Web, radio and television.

14. « Le web de la génération Y», J.F Renaud, *Adviso Conseil*, December 16, 2005.
15. Announced in August 2006.

CBC contents were already available on a variety of sets, from cell phones through to pocket computers, pagers and portable multimedia players. The consumer's new role (figure 3) has pressed content distributors to introduce innovative platforms and democratize their products on the new media. What is even more forward-looking on the part of the Crown corporation is the decision to maximize the use and sharing of its resources through the different media. This repositioning is aimed at better exploiting the hitherto distinct areas of competence of radio, TV and the Web to develop richer contents. The CBC's strategy is detailed in Table 1 next page.

Tableau 1
The various media on which one can get CBC contents[1]

Cell phone (Internet mobile 2.5G)	Pocket computers: (AvantGo.com)	Pagers	Wireless modems
Technology makes it possible to post content pages on a cellular phone. One site presents much simpler pages than Web pages because phones have smaller memories and screens than computers. Most recent cell phone models include Internet access and text messaging (SMS). Consumers can now read headlines, cultural and sport news, and CBC radio and TV schedules at wap.src.ca using the cell phone browser. The official servers are Bell Mobility, Fido, Rogers Wireless, and TELUS.	Users of pocket computers like Palm, Visor, PocketPC or Windows CE (with or without modem) can download CBC news for free from the Web site AvantGo.com (English site). AvantGo is an interactive subscription service to news on-line. When registering, internauts are asked to specify the type of computer they use and the information they want to receive. Users of modem-equipped Palms or Visors and Pumatech's Browse-it (English site) can consult the wireless live content at Ici.Radio-Canada.ca.	The wireless Web service of Rogers Wireless gives access to the news of Radio-Canada.ca to users of Blackberry-type pagers	Users of modem-equipped Palms or Visors and Intellisync's (formerly Pumatech) Browse-it can consult the wireless live content at Ici. Radio-Canada.ca. Users of a cellular modem card using Bell's 1X network or with access to a wi-fi network (Ethernet) can also access the site by entering http ://www. radio-canada.ca.

1. Source : CBC Web, October 2007.

Discussion

(***"The future ain't what it used to be."*** **Yogi Berra**)[16]

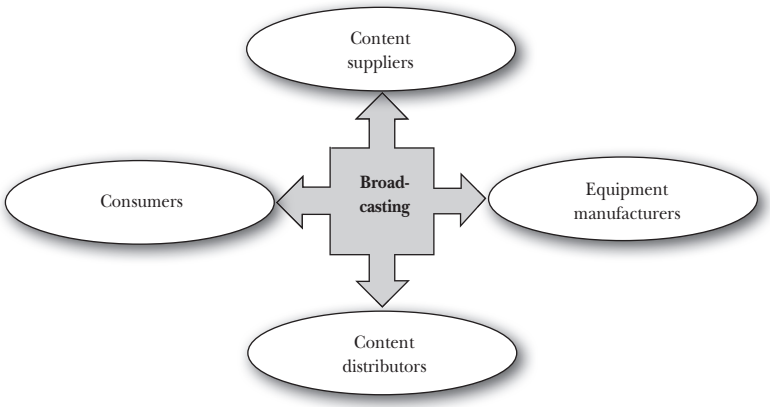
The transformation of the media world, which gradually began with the advent of Internet, is now unfolding rapidly. However, we note that in this environment, it is difficult to isolate a specific sector of the media. Technological change, the intensification of competition and changes in consumer demand lead us rather toward a true convergence of the various media on similar platforms. The power of attraction of IP technology dominates more and more the media world. In fact, at the technological level, the electronic transport and distribution of every form of information from voice to films will take place on an IP platform. This attraction has led some major conventional media firms to deploy very bold strategies. These involve major investments particularly in the form of acquisition of new media whose paradigms are pretty different from the conventional modes of content delivery to consumers. The takeover of contents by users and their mobility are among **these new paradigms whose long-term implications for success and economic profitability are unknown**. In this very competitive world dominated by a continuous flow of incremental technological innovations, traditional regulation like the CRTC's appears both increasingly archaic and less and less effective. It creates a competitive asymmetry that puts conventional broadcasting firms at a disadvantage.

Thus, the world of broadcasting is no longer a linear value chain with, at its extremities, a passive end user and a content supplier disposing of a certain monopoly power. This world is now made up of four main actors in dynamic interaction, that is, the consumer, content suppliers, equipment manufacturers, and content carriers and distributors (figure 3). The technological innovations affecting mobile accessories, convergence and interactivity, content personalization and consumer mobility needs have reshaped the audiovisual material production and consumption logic. We are virtually seeing the disappearance of the borders between the various media industries. Up until

16. http://en.wikipedia.org/wiki/Yogiisms#Examples.

recently, the mobile phone market was far from competing with the computer market, which was itself different from the radio or television markets. Technological convergence has led to the convergence of products and industries.

Figure 3
The four stakeholders in the broadcasting dynamic chain



As shown in figures 1 and 2 , the new business models that follow a pull logic merely answer the needs of interactivity, mobility and programming on request, which are the three key factors explaining the new consumer behaviour patterns. Ad hoc business patterns will therefore be created according to the media and platform. The shifts in partnerships and alliances to offer the same contents on different platforms with various accessories will then proliferate and take advantage of the synergies of convergence and interoperability.

Out of this analysis, certain trends emerge from this turbulent environment. But in a rapidly changing world, yet unpredictable outcomes may crop up and set research off in another direction.

The demand for information transport capacity

The new content distribution channels translate into **a growing demand for broadband and a call for the improvement of digital compression technologies**. Information transport firms (wired or wireless), which have been historical partners of media firms, see the added value of the communication industry move toward users. Because of the strong competition between them, the search for economies of network and scale has led to the pursuit of the wave of consolidation begun in the 1990s. With the difference, however, that these transactions are carried out on a much more realistic basis and looming on the horizon are better defined business models for customer services.

While carriers invest to increase the offer of broadband networks, they dread the economic logic of the IP technology and competition that pulls transport back to an industry with low added value. Faced with the traffic produced by the distribution and exchange of content on-line, carriers feel they are not recovering the costs generated by users. In particular, voice services still account for much of the income of mobile phone operators. These operators risk in turn to be confronted with VoIP: their customers could one day download on their phone software that would give them access to Skype so that the time spent on their network would elude them.[17]

To avoid remaining mere carriers, these firms devise defensive strategies[18] aimed at making Internet and content providers pay a rate reflecting the cost of their investments. They also threaten to reserve priority space on their network to deliver services to their customers. These tactics are not always compatible with the rules of open competition; they show that regulatory issues are still not completely settled in this competitive universe and might even hinder the deployment of the broadband offer required by the new services.

17. T. Standage, "A telecoms convergence: Your television is ringing," *The Economist*, October 14, 2006.
18. See for example, A. Mohammed "Verizon Executive Calls for End to Google's 'Free Lunch'," *The Washington Post*, February 7, 2006.

On the offensive side, the old and new telecom operators multiply their services by playing the card of one-stop shopping and convergence. On a convergent IP network, new services can be added since it is often only a matter of software[19] rather than infrastructure. Wireless operators, in particular, offer data and video transmission services with increasingly versatile sets. The old telecom operators develop new products like HD television on fibre optics or again video on demand. But in addition to one-stop shopping for transport services, these firms form alliances with content producers to be a more significant element in the added value chain. However, the new trend of Internet user appropriation is about to present carriers with a challenge for which, apart from the defensive measures described above, they are barely beginning to develop strategies to tap part of the value of these exchanges on their networks.[20]

Meanwhile, manufacturers offer more and more high-performance electronic instruments supporting the distribution of content, in particular mobile sets that can receive, exchange and distribute content. These incremental innovations help increase the demand for broadband and create more competition between the various stakeholders of the added value chain, but also new market opportunities.

Finally, at the leading edge of technology and a possible new strategy of network operators and manufacturers, we are beginning to hear of a new convergence that might somehow be the **ultimate convergence** some have been dreaming of for a good while between mobility and the fixed line (FMC: fixed/mobile convergence).[21] With a wired broadband Internet connection and a WiFi set, it will soon be possible to have only a mobile phone and, therefore, a single telephone number. Inside a house or a building, the mobile phone would operate on the wired Internet connection through the WiFi technology or another to come even more high-performance. Outside, the phone would revert to an operator's mobile network. We can imagine this

19. T. Standage,op.cit.
20. See M.Reardon, "Phone, cable companies embracing Web 2.0," CENETNews.com, November 8, 2006.
21. T. Standage, op. cit.

mobile phone will be highly sophisticated and include multiple functions. This can only increase the ease and fluidity of exchanges between users.[22]

Rapid evolution of the culture of media firms

These firms must first change their approach to the market and, instead of designing only contents they hope customers will buy, let users define part of the content they wish to see and exchange. There would then be more and more interaction between the media and their customers. This is not new since newspapers, for instance, have for a long time dedicated a page to their readers. Radio and television stations also encourage their audience to give their opinions on various topics in open-line programs or on discussion panels. But the scale of the phenomenon fuelled by the Internet is without precedent. Users control the topics on which they want to express themselves as well as the form to give to the content. The potential audience is considerable and such content can give rise to multiple exchanges. This content may then be far more attractive than the content distributed by the conventional media. This is not lost on advertisers who historically have been one of the media's main sources of income.

Rather than try and resist these new trends in the distribution and use of content, the more dynamic firms attempt to cash in on them. The purchase of MySpace by CorpNews is considered by some as a visionary stroke by media mogul Rupert Murdoch. With these changes in culture, media firms have begun **redeploying their human, technological and financial resources** to adapt to the proliferation of content distribution means and increasing audience fragmentation. The decompartmentalization of organizations and the importance given to on-line distribution through various technologies are frequent strategies. To speed up the transformation of the organization, media firms make acquisitions or forge alliances with firms often born into the Internet. They also conclude mutual agreements whose terms are sometimes novel and imaginative. The media organizations'

22. British Telecom has begun to offer this service to its customers.

ability to adapt becomes a crucial strategic element to ensure their survival. In this regard, as our analysis shows, the management decompartmentalization and distribution strategy of the Canadian Broadcasting Corporation's on-line content is a close and interesting example of it. The Crown Corporation did not hesitate to change its business model to fit the new market conditions.

The obstacles to content appropriation

There are, and will continue to be, unavoidable legal battles in this redefinition of the media sector, but they should fade as soon as firms that produce all kinds of content find a way to remain profitable in this new context. Admittedly, Google's presence in YouTube will exacerbate copyright and intellectual property disputes. Google is already facing a series of obstacles in its attempts to put virtual libraries on-line. The network effects Google can derive from YouTube and, therefore, the diversion of Internet traffic as well as the forthcoming development of advertising techniques on this site, represent a threat for the conventional audiovisual content networks. Even if broadcasting networks understand the interest in associating with such sites, we cannot expect, at least in the short term, easy alliances between Google and many content producers. There may be legal battles during the introductory phase of the business model. In addition, the other products, both content and material goods, that can be derived from YouTube and represent significant income for Google could be the subject of legal disputes.

In the medium term, however, the power of attraction of IP technologies and the movement of content appropriation through communities of interest on the Internet will intensify and should induce stakeholders to find ways of taking advantage of these new trends while protecting their interest.

Advertising management

Advertisers, from individuals to multinationals, generally make up the media's main source of income. From now on stakeholders must come to terms with a much more complex environ-

ment. The optimization of advertising budgets through a multitude of content distribution means and an audience fragmentation difficult to assess becomes complicated and involves a much higher margin of risks than before. The allocation profile of advertising budgets per medium is changing and unstable for want of an historical reference to assess the media's effectiveness. The arrival of big new advertising players born of the Internet changes the paradigms of the marketing world. While in the conventional media, the wealth of information is rather thin if the distribution is very important (like a commercial spot in a prime time TV show), on the Internet one can offer as much content as one wants about a product one is promoting. But available studies do not yet make it possible to assess their relative effectiveness.[23] Moreover, many major advertisers targeting the young audiences that visit sites like MySpace and YouTube and their competitors worldwide will review their advertising budget allocation strategy. Their presence on those sites might lead to a reduction of their advertising on more conventional vehicles in various countries. Conventional media managers will have to assess the impact of such changes on their income.

Customer mobility is another dimension to be taken into account in the choice of advertising vehicles. Direct advertising on mobile phones will increase with the use of sets able to receive text and pictures. The Japanese, and to a lesser degree European, experience can guide advertisers in their strategic choices. In this environment still full of uncertainty, the spending profile of advertisers of all categories is bound to change significantly over the next few years. Past experience can hardly help anticipate the future advertising spending profile.

23. *The Economist*, Special Report, The Newspaper Industry, op. cit.

Irrational exuberance?

Are we witnessing a wave of acquisitions similar to that of 1997 in the telecom and dot-com industries which culminated in the stock market crash, the loss of billions of dollars by investors and countless bankruptcies of heavily indebted companies whose income forecasts were far too optimistic?[24] Financial analysts are cautious in their comments, but do not foresee a similar wave.[25] First, the purchase of MySpace by NewsCorp at $580 million does not seem excessive and it is estimated NewsCorp could make a healthy profit if it resold it today. This was surely not the case, for instance, when AT&T paid a hefty price for cable companies in 1998. The telecoms' current acquisitions are based on the search for economies of scale and network and not on over-optimistic forecasts. In the case of Verizon, for example, analysts feel the strategy of taking fibre optics up to users will not be as profitable as anticipated by the company, but its survival is not in question.

Did Google pay too much for MyTube? The value of the transaction is less than 2 % of its market valuation so that Google could afford to pay that much without endangering its financial health. The amount paid was a pre-emptive strategy to ensure Google's presence in this type of site based on a community of interest.[26] The business model to secure a return on the investment remains to be determined so that it is difficult to assess the impact of the acquisition on Google's profitability. Companies like Yahoo, Viacom or Time Warner will be under pressure to acquire a similar site such as Facebook, Xanga, Bedo and others that number millions of first-time hits. Here again there are speculative elements since we cannot assess the potential profitability of those sites. In the long run, network economies will prevail so that some sites will dominate and others will be less profitable or disappear. But at this stage, we are still a long way

24. Y. Rabeau, "The Schumpeterian Wave in Telecommunications: Public Policy Implications," *Choices* 10, No 7, August 2004, Montreal, Institute for Research on Public Policy.
25. T. Lowry and R. D. Hof, "Smart Move or Silly Money 2.0," *Business Week*, October 23, 2006.
26. T. Lowry and R. D. Hof, op. cit.

from a speculative bubble like that of the 1990s. This recent experience should incite companies to be more cautious in their assessment of future acquisitions.

Business opportunities

The proliferation of content distribution means and audience fragmentation will lead to a considerable increase of small electronic transactions. Computer companies and financial institutions will try and offer new products to minimize transaction fees for all stakeholders and associate with content producers to achieve economies of scale. The security and ease of the modes of payment is an important dimension in the success of those exchanges. E-Bay's success is a point of reference financial institutions will want to examine to offer the millions of users effective ways of dealing with each other.

Reviewing broadcasting regulation

Regulation needs to be thoroughly reviewed to take into account the proliferation of content distribution means and the emerging form of competition. The forbearance principle by which the regulator withdraws from a market once competition is strong enough to avoid the monopoly effects, may apply in some respects. However, the complex regulation of contents to promote the Canadian media and their human resources hardly tallies with the emerging environment. If the phenomenon which sees users define themselves the sound and visual content they want to consume, distribute or exchange continues to expand, the regulation of contents becomes less and less effective. In addition, the current asymmetry of regulation because Internet radio is not regulated will help newcomers take market shares by, for instance, distributing non-Canadian contents. Competitors will want to be freed from the regulator's constraints and it will be difficult to maintain this type of regulation. Faced with this rapid evolution and the trend toward a complex, fragmented media world, it is essential to go back to the drawing board.

Up to now, the business models very recently developed to deal with the new forms of content distribution were, we might say, ad hoc models ensuing from the current technological innovation on the market and the resulting consumer behaviour. The informed, avant-gardist profile of the worldwide consumer is about to become one of the growth engines of the new media and the new modes of content production, distribution and consumption. Because of that, it is undoubtedly difficult to predict the successful models to come. The consumer has never been so central in the business process and we can predict an era of offer created by demand, contrary to Jean-Baptiste Say's premises[27].

Finally, the new business models will be determined in particular by the success of some technological accessories compared to others and the effectiveness of the corresponding content distribution platforms. The variants of business models will be a function of the available platforms and the number of strategic partners a firm will seek will vary with the accessories used in the value proposition to the customer. We will then be able to predict niches within this broadcasting market where various specialized equipment manufacturers and others will be in a competitive situation and will be entitled to different parts of a market segmented according to the preferred media. The future, therefore, remains uncertain, especially since not everything is settled yet.

"It ain't over till it's over!" **Yogi Berra**

27. Editor's note: Renowned 19th–century French economist who developed the concept of supply economics as opposed to that of demand economics.

El Dorado is not just around the corner

Comments by
Arash Amel, André H. Caron,
Vincent Crosbie, Kenneth J. Goldstein,
Robert Picard and David Targy

The proliferation of distribution spaces of all kinds and the enthusiasm for them are mind-boggling, especially since, as Yves Rabeau points out, this environment is fraught with uncertainty.

But when you pay hundreds of millions of dollars to acquire a network or a site that seems to have the wind at its back, you expect to make a profit. But how?

Winning business models have not yet been invented. Users, especially young people, are looking for freebees. Advertising is migrating partially to the new media but forecasting the real importance of such transfers is risky. The fragmentation affecting the old media is also the fate of the new media. The audiences for these sites are often minuscule.

Nor do we know, as Pierre Bélanger points out, what relationship users of community networks will have with the information and entertainment products of the traditional media. Moreover, advertisers are concerned that the presence of advertising will cause a negative reaction from users of networks such as MySpace and Facebook.

In short, as shown by the comments on the texts presented by Messrs. Rabeau and Bélanger, El Dorado is not just around the corner.

Arash Amel

Pierre Bélanger and Yves Rabeau both point out in their presentations that distribution has become fragmented, and in recent years production has too.

A market changing this fast always makes people a little nervous.

In a recent interview, the head of Sequoia Capital, one of the first companies to invest in YouTube, said he wouldn't invest in any company if the CEO was more than 30 years old and wore a suit. This is an industry led by young people and by the exuberance of youth.

But the big question of profitability arises – how can you make money with this type of service? – especially for the media that have made such an acquisition. If you look behind Google's purchase of YouTube, you'll see that not a penny changed hands. The transaction was done entirely on paper.

And if you look behind the advertising agreement whereby Google will pay MySpace $900 million over three years, you'll see that the agreement is based on very precise levels of return.

Video sharing isn't really new. Many of today's most successful sites already existed 10 years ago. What's new is broadband connectivity. Previously, these visionaries were limited by Internet access with dial-up connections. With broadband, they can acquire an audience. To give you an idea of the size of the markets involved, Europe alone has about 80 million broadband connections, and the total should exceed 120 million by 2010. In the Western world, there are about 150 million and that number is projected to rise to 200 million in 2010.

Competition in Europe stems from two very significant phenomena: higher speeds and lower prices. In the United Kingdom in recent months, free broadband services have been launched,

whereby broadband is used for other types of service, such as Rupert Murdoch's Sky pay television or telephone services. Thus there is a ready base that on-line content and video previously didn't have. Media companies are very aware of what happened when they neglected on-line companies. In the case of music, they experienced the pressures of piracy. They don't want that to happen again.

Broadband offers consumers two types of access: vertical integration and open access. Implementation of vertical integration means that the cable or telecommunications operator has control over the content and distributes it to subscribers by means of a decoder. This is how television works. The open-access concept involves the open Internet, which gives owners of content and suppliers of services the opportunity to reach consumers directly without using a network. For on-line video distributors, the Internet has fragmented distribution. As a result, network operators, radio and television networks, pay television and technology suppliers are fighting for the same markets.

The fragmentation of production is due to the extraordinary drop in costs. Twenty or 30 years ago, shooting, editing and distributing home videos was a very costly undertaking. Today, you only have to look at the plethora of video-sharing sites to see how much the situation has changed. Right now, there are more than 100 sites, and possibly close to 300 according to some people, and their number is constantly rising. This phenomenon enables professionals, independent production houses, corporate videographers, semi-professionals and journalists, as well as you and me, to produce and distribute videos, with access to millions and millions of people. With the development of more innovative business models for video-sharing sites, such as Revver and Metacafe,[1] there are now some financial incentives driving production. All you need is a video camera, Internet access and a good idea.

1. Editor's note: Revver shares with the creator, on a 50-50 basis, the income that it derives from an advertisement associated with a video offered on its site, while Metacafe pays creators whose videos are downloaded more than 20,000 times.

On-line videos are creating traffic that is intense and loyal. Since the beginning of 2006 alone, there have been 26 billion transmissions in the United States. This figure is expected to top 80 billion in 2010. The related income is $1.2 billion and it will rise to $6 billion in 2010. This explosion is due partially to the liberal business models of several U.S. networks and partially, in response to this on-line presence, to their desire to grab onto the flow of on-line advertising instead of leaving it to Google and video-sharing sites. Video sharing represents more than half of the on-line data flows in the United States.

But the lion's share of the revenues still comes from traditional content sources, and on-line video businesses are still trying to figure out how to make a profit on their product. Currently, more than 60 % of this $1.2 billion comes from repeats of television series such as *Desperate Housewives* and the advertising that goes along with them, and it doesn't look as if that will change any time soon. A survey of on-line video companies shows they still have relatively high storage and bandwidth costs in relation to their revenues.

André H. Caron

What I like most about Professor Rabeau's presentation is the concept of an environment that is being built. And when we talk about building, we're talking about a mutual action that we must not neglect. What makes YouTube a success is precisely the concept of exchange.

Institutions should have no illusions about economies of infrastructure because what they have to put in place to meet needs involves considerable human resources. If a broadcaster wants more exchanges, or interaction with consumers, there has to be a return on the interactions. The emerging generation is used to quick responses. If you cut costs somewhere, don't hesitate to reinvest the money in human resources so that your sites are up-to-date, and feedback can take place rapidly. Security will also be crucial, not only for advertisers, but also for consumers.

Pierre Bélanger's presentation explores Web 2.0 in greater depth. The traditional media first regarded the new technologies as competitors. Their first response was: "What are these new technologies going to do to us? We'll bypass them or ignore them. They're nothing but a passing fad." But then they said, "Maybe we can compete with them." Now, we've entered a third phase, in which they're saying: "Maybe they're our allies." I'd go a little bit further. I believe the traditional media may find themselves playing second fiddle, not in two or three years but over the long term. In other words, the real economy will be virtual. You'll still see traditional media, but they'll no longer be making the profits you thought they would. It's an assumption.

Another element that comes back is the electronic highway. Remember that expression from 20 years ago? What was the first reaction to the electronic highway? The introduction of toll booths. We saw that this model didn't work. We saw that young people, who were the most innovative, could get around the toll booths or, quite simply, wouldn't play the game. Perhaps we ought to think of this highway as a free highway, but with service areas that will generate money. In other words, along the highway you have 7-Elevens, Couche-Tard outlets and gas stations. Why? Because at a certain point on your journey you want to stop, you want to eat, you want to fill up. Rather than closing the door by charging a fee to use the highway according to the traditional model, you give people free access and, on the way, you offer services that really interest them. Maybe then people will spend much more money than they would on tolls.

Another idea: I was going to call my comments this morning "Looking for a Second Life." That title was inspired by the website secondlife.com, a virtual-reality site where everything is ephemeral, everything is virtual, but an economy is being created. People are ready to pay real-life money to exchange virtual works of art or to own land in a virtual village. I think the traditional media also have to start looking for a second life.

A subtitle I could have used for my comments is "The Paradoxes of Young Users." Young users don't want to pay for certain things on the Internet, but are prepared to download ring tones every two weeks for a dollar apiece; young people won't pay for

a land-line phone, but use their cell phones all day long on a pay-per-use basis. There are lots of paradoxes, but we shouldn't consider them contradictory. Perhaps the most spectacular example was when I returned from Europe with my photo cell phone two years ago. I talked to people in the industry and everybody laughed in my face. They said: "A cell phone that takes pictures? No one will take pictures with that. The image is fuzzy. The colour is lousy. You can't print it out." I said to them: "You don't understand what it represents, what it symbolizes. It represents communication and a symbolic exchange. Quality doesn't matter to young people who want to exchange photos at a party." We have to stop seeing choices as all or nothing. People who take photos with a cell phone aren't going to stop taking them with a digital camera. People who buy big-screen televisions aren't going to stop watching *Desperate Housewives* clips on their computers.

Vincent Crosbie

This morning's presentations concerned two subjects: the collision of old and new media and the use of new media by the younger generation.

Most of you are familiar with the cohort method, which says essentially that the media habits we acquire in our teens and twenties stay with us for the rest of our lives. About 50 years of studies and statistics have confirmed this. I think it's especially true for the people we call the "millennials". Generally speaking, the first people to adopt new media are young people. They give us a good indication of what the future holds.

Professor Bélanger pointed out that most of the on-line video creators are young people. And I think the examples he cited reflect this. But, at least in the United States, there are also older people who are doing this sort of thing, communities of retirees who exhibit the same habits and behaviours. I suggest there is something latent that can be exploited to help companies in the future.

The millennials don't constitute a new type of human evolution, a sort of "homo numericus". But I think they are significant

because they're the first to have lived during an era when technology has advanced to the point where not everyone receives quite the same thing from the media. If we look back, say, 50 years, in Montréal, Ottawa or Toronto I think there were only one or two television channels, three or four daily newspapers and a handful of radio stations. These were all the media we had access to. Today, with the arrival of cable in the 1970s, offset printing, which made production and distribution of niche magazines economically feasible in the 1980s and the Internet in the 1990s, Canadians, at least those who have the Internet, have access to all the newspapers, all the television networks and all the radio networks in the world. The millennium generation has discovered this phenomenon and has grown up with it. The habits it has acquired are those that were easily accessible, with this abundance of media.

What I'm trying to say is that each of us has a unique set of interests. We all have common interests, such as the weather, a war or an event of that type; many of us share an interest, such as a hobby, a sports team, certain fashion designers; and each of us has individual interests. It may be growing bonsai trees, a certain actor or a past-time. Each of us has a unique set of these common interests, which are shared and individual.

It has always been this way. It's just that, in years past, the media, whether the print media or analog radio and television, could only offer the same thing to everyone, and the editor or the producer had to decide which story or news item best met the common demographic profile. So there was story somewhere that you knew nothing about because the editor had to give priority to a generic product. I myself am a fan of FIFA and Formula 1, but the newspaper I subscribe to, the *New York Times*, doesn't offer this type of information. I know that it has the information because I myself sold it the FIFA news wire when I was with Reuters, but it doesn't publish it because it has to offer the public the product that interests the greatest number of people. In this case, it's a distribution problem. The stories exist, but they don't reach the people who are interested in them.

But the members of the millennium generation discovered they could use the new media to find content relevant to their specific field of interest. I think it's the nature of Google,

MySpace and YouTube to offer content that responds to individual interests. That's what is hiding behind fragmentation and personalization. I think it's an important business concept because, for the time being, people have to go looking for this information, they have to locate it. That's why search engines have become so popular. Similarly, with video, the nature of YouTube and MySpace is to find people with common interests.

If we found a way to exploit this latent demand, which has probably always existed but today we have the means to meet it, if we found a way to give people what they're looking for without their having to look for it, this would be an attractive business model, a good basis for the business model of the future.

The other question is the brand. Most traditional media companies are still based on the concept of offering a product that reflects the interest of the largest number of people. It's the nature of the mass media, and I believe it's doomed to failure. People will always want to know about general-interest news, such as wars, the weather and other news, but companies that persist in offering a product, be it a newspaper or program, that they hope will satisfy the largest number probably won't survive very long.

A few years ago, I attended conference where Time Warner's media head was one of the speakers. Someone asked him what Time Warner's strategy was for the 21st century. He said something along the lines of, "Well, we'll get through it one way or another." He said that in the United States eight large companies had dominated the media in the 20th century, that eight would dominate in the 21st century and that Time Warner would be one of them. Well, I don't think this groping-your-way-along approach will be enough to ensure survival in the future. He said he hoped Time Warner would be a leader along with Yahoo, Google, MySpace and e-Bay, and all the names he cited were brands no one had heard of five years ago.

So I think it's important to have a good grasp of what's happening, beyond fragmentation and individualization, to understand why we use the new media and the nature of the changes we're witnessing. In my opinion, it's because we now have the technology, we have this horn of plenty and people can find

exactly what they want in this universe. A company that cannot segment each article, each video sequence, each song, each portion of its content and send it to the right individual, even if it has to go beyond its brand, is going to have difficulty in future.

Kenneth J. Goldstein

Professors Rabeau and Bélanger provided a very good explanation of the relationship between the media, distributors and consumers, but there is another group of customers, the advertisers, who foot a good portion of the bill.

An interesting article appeared after Land Rover announced in 2006 that it would no longer advertise on television but would create its own Internet channel. The article said: "The role change represents a fundamental shift in the relationship between the advertisers and the media… Insead of using traditional media outlets like TVnetworks to distribute TVprogramming with commercials embedded in it, broadband will become the source of content for channels that advertisers distribute directly to consumers."

With a bit of hindsight, we can see that the concept of the media is a very recent phenomenon. The media appeared only 150 years ago as classic intermediaries between content, advertisers and consumers. The media developed content to attract an audience, advertisers purchased advertising space and consumers in all likelihood listened to or watched commercials. The premise was that the media economy was an economy of scarcity, first because of the costly high-speed presses that began to consolidate the newspaper industry about a hundred years ago, and then because of the scarcity of radio frequencies, creating what we would have to call an abnormal industry.

The real story of today's media is that the industry is becoming normal. The problem is that, soon as you go from an era of scarcity to an era of intense competition, anyone can be part of the media industry. Take a look at www.homemadesimple.com on the Internet. You'll see a site that could be mistaken for Martha Stewart Living, but it's free, and more than three million

visitors have signed up to receive housekeeping tips. In fact it's a site run by Procter & Gamble. So Procter & Gamble is part of the media industry. If you visit Wal-Mart's site, you'll see advertisements for products you can buy at Wal-Mart. In other words, Wal-Mart is an advertiser and Wal-Mart is also a medium. With hindsight, we can see that the role of the media is changing not only in relation to consumers, but also in relation to the fact that now everyone is part of the media.

The second point is that sources of content can become media themselves if they're important enough and popular enough. We've talked about films and we could also talk about sports. In 10 years at the most, it's likely that no sports will still be broadcast by what we consider a traditional medium. All sports will be offered to consumers by teams or leagues, which in turn will become media. This is already the case of the Yankees Entertainment and Sports (YES) Network in New York.[2] And it should be noted that this phenomenon does not have to occur everywhere to have an impact on the traditional media, because as soon as the New York Yankees have an outlet, the economics of their relationship with ESPN or any of the more traditional networks changes. The stakes are no longer simply between ESPN and NBC, they are between ESPN, NBC and how much we can do if we do it ourselves. That changes the entire economic dynamic.

A third general point is the concept of extending the traditional media to new platforms. The Canadian Broadcasting Corporation (CBC) is one example and there are many others. Most of these extensions will fail. They will fail because too many media are not rethinking what they essentially are. They think it's enough to move their old model to a new medium. And the fact is that the explosion of choices not only changes where you are but also what you are. Until we wake up, everything will seem to be turning out for the best in the best of all worlds. You can receive on your portable computer, you can receive on your cellular phone, but what you receive will have to change.

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2. Editor's note: This channel, which belongs to the owners of the New York Yankees baseball team, presents the team's games on cable services in New York and neighbouring states.

Robert Picard

What struck me about this discussion of the new media environment is that we have created a situation where many voices can now be heard with the new technologies, but most of them have very few listeners. There are very few places that attract a large number of people or receive a great deal of attention.

In assessing what we have gained, we must distinguish clearly between the ability of individuals to express themselves or find the content they're looking for and the ability of companies to create economic value with these technologies. We've reached a point where financing and distributing content will no longer be as easy as it once was. As we were told this morning, the real change that has occurred is that the media space, which was previously controlled by the media, is now increasingly controlled by consumers. We have therefore gone from a supply market to a demand market, where we can no longer presume that our activities will attract large audiences or that we will make profits as businesses.

In this environment, it isn't surprising that financing for new initiatives – cable, satellite, television and radio, audio and video downloading, digital television and portable media – is essentially provided by consumers. We're in a situation where, for each dollar spent by advertisers, consumers spend three dollars. Even so, we want to give them more and extract more money from them. As an economist, I find this situation quite troubling because it's debatable whether we can continue to squeeze money out of consumers. We're quickly reaching a point where the only way to create consumption will be to lower prices, which is not an especially positive situation for businesses.

If we consider the overall effect of new media and media that aren't so new but are constantly proliferating, we see that the business model based on huge audiences, which paid very little or nothing at all for content, no longer obtains. And we have to understand that a large portion of the content that is being created and distributed, no matter how interesting it may be, has very little exchange value. And this problem is not restricted to the new media. It's a problem that has always existed for all types of medium. I'm afraid we'll see a great deal of digital media

bankruptcies because certain players don't understand the fundamental reality that consumers are not willing to pay for most of the content they consume and never have been, whether the environment is digital or not.

If we now consider the business logic of the traditional media and the contemporary media, we see there are really three basic business models.

With the first model, we have content with a high exchange value, for which consumers are prepared to pay directly and substantially. We know what this content is: successful, high-quality films, television shows, sports and other events, magazines for certain professions or specific niches, pornography and games – all of them things that people believe have a high exchange value. In this case, the challenge is that the ability of consumers to pay and the quantity of high-value content are limited. There is, and there will be increasingly in the future, consolidation of services and concentration of content creation in the hands of a few major players. It's absolutely necessary economically, and it will happen even if it's not socially desirable.

The second business model is based on large-scale assembly of content that is created by professionals and consumers and can generate enough traffic to attract advertising or other types of sponsorship. Most of these sites offer content of average quality or older content from which big profits have already been made. To a considerable extent, they may also include content created by consumers, unknown content, which may or may not be interesting. When Google, Yahoo, MySpace and YouTube position themselves in this sector, they are positioning themselves in an area previously dominated by commercial publishers and broadcasters by creating high-traffic sites where average or unknown content is exchanged, but also where exchange systems for content with a high value can be created.

The third business model that we see appearing is based on content with a reduced economic value, content that may be sponsored by commercial interests or incorporated into a subscription offer because people are not prepared to purchase it separately. If we look at what people have traditionally done, we see that this has always occurred. If people were not prepared

to pay much for radio and television, if they were not prepared to pay much for music and average videos, they will hardly be more likely to pay to obtain them on a digital medium. We've seen an illustration of this with Howard Stern's move to satellite radio. He has lost about 90 % of his audience. People were prepared to listen to him and they liked him when he didn't cost anything, but many people have decided he's not worth $13 a month. We therefore see development problems for portable and downloadable, digital, land, cable and satellite services and audio and video services. We see that an effort is being made to combine services offering greater content variety, which will be paid for by a group arrangement or by sponsorship.

I'd like to remind you that there is nothing really new in these business models. What we're trying above all to determine is which model succeeds for which content supplier in which circumstances. But all these models have been applied in various forms by the traditional media over the past century. The new channels, podcasts, blogs and peer-to-peer sites are attracting users. But we have to think that, with rare exceptions, their audiences will remain smaller than the lowest shares for radio and television and often will not exceed that of cable television, which is 1 % or less of the entire audience.

This means that these new channels, which are mainly distribution channels, can afford to invest very little in content, and their unit returned is relatively small. We see very few cases in which large or other companies can turn a profit or have significantly improved their financial situation by investing in them. That doesn't mean that they won't be able to do so in future or that they won't be able to use them to offset a portion of the revenues they have already lost, but the situation is quite different from the one we tend to imagine. And the main reason we don't foresee big profits for companies in this area is that the new competitive environment is doing exactly what a competitive environment is supposed to do. It's supposed to make life difficult for the main players. It's supposed to reduce the excessive profits that large companies earned in the past – exactly the type of profits that made them such desirable investments over the past quarter-century.

We therefore think this new environment is one where it will still be possible to make money, but it won't be easy to do so, and it won't necessarily produce the type of profits that were made during the last half of the 20th century.

David Targy

Behind the rhetoric and exuberance surrounding the new media, there is definitely a universe perceived as extremely threatening to the traditional media.

In France in any case, the traditional media are positioning themselves on the Internet from a standpoint that is fairly clear, namely they're staking out a brand territory. The objective is to create an ecosystem around a brand with a multimedia presence. In reality, the benefits sought on the Internet are more image benefits than financial benefits. In response to media scrutiny of their development on the Internet, in France there is an economic reality that I would like to describe for you: it's that the Internet is a limited outlet in terms of revenues, both advertising revenues and other revenues. On-line advertising in France represented €380 million, in other words CA$630 million, in 2005, and content sites, namely traditional media sites and dot-com sites took in only 25 % of that amount.

Why do the traditional media earn such limited advertising revenues on the Internet? The answer lies in an analysis of the sector. When we analyze an economic sector, there is always a link that controls the sector and concentrates wealth creation. On the Internet, it is quite clear that search engines are in a position of strength and are earning most of the advertising revenues. I'm thinking especially of Google, Yahoo and the sites of Internet providers, which have a 65 % market share in France.

The sites of the traditional media and the dot-com sites therefore receive 25 % of €380 million, or €120 million, which represents a fairly skimpy share, and I would say that, on a five-year horizon, this windfall may triple but it won't increase much more than that. Accordingly, we can say that the Internet won't be a source of growth or profitability for the traditional media. There-

fore, what companies are looking for on these new media is the brand visibility that comes with being present on all points of contact with their potential audience.

The other economic weakness of the new media that they have difficulty in selling content, not only because there are free substitutes – I'm thinking especially of illegal downloading – but also because the willingness to pay is in fact limited by the fact that you have to pay for Internet access. The Internet is all too often regarded as completely free. That's not the case. You have to spend €20 to €30 a month to access this enormous universe of content and that's money that isn't used to pay for Internet content.

To summarize, I would say that today it's very difficult for a publisher of Internet content to create value. First, there's the problem of how to place a value on advertising space and advertising contact on the Internet, which is 10 to 20 times less costly than it is on traditional media. And then there's the problem of how to place a value on content in relation to Internet users, who are not prepared to pay for it. In brief, the traditional media believe that wealth is being created today and will still be created over the next five years by the traditional media, and that the Internet medium is simply a manifestation of a brand.

As for radio, it is embracing the new media from the standpoint of multiple broadcasting of its programming. Streaming radio is a major Internet application in France : 22 % of French Internet users say they have listened to on-line radio. It's the sixth Internet application. And there is podcasting., which is also developing and is generating a great deal of traffic on sites such as Europe 1, France's main generalist station. Podcasting creates an economic-model problem because this type of listening is delinearized and desynchronized. What is emerging in France is the sponsorship model, with an advertisement added at the start of a podcast. But the economic model of the podcast creates two problems. The first is measurement of the audience and the second is that you can podcast only programs that do not contain music or involve live shows, which would create copyright problems. So that considerably limits what you can offer with podcasting.

As for television, in France a fairly recent development, going back to early 2006, is video on demand (VOD) with a repeat rate that is now very limited. Only 1% of France's population has used VOD since the beginning of the year. That's a very small number. And only 18% know what it is; therefore 82% of the French don't know what VOD is or aren't the least bit interested in it. Even so, this situation hasn't prevented television networks from embracing this potential market. All the networks offer video on demand, but only for screening on a computer, so that creates comfort problems. For video on demand, in terms of the economic model, the question of exclusivity also arises. Currently, the platforms offer pretty much the same product. It's likely that there will be a danger of differentiation in future, and that this differentiation will involve the purchase of exclusivity. What will this economic model be worth when the platforms will have to negotiate rights with the large U.S. film studios?

Finally, there is a phenomenon that many people have talked about this morning and that is also central to the concerns of the French media: the explosion of the community phenomenon on the Internet. It's clear that this is titillating the large French media because they see in community platforms the opportunity to generate a loyal mass audience that traditional sites have difficulty attracting. In France, all the television networks are trying to develop their own amateur-video site.

I see several advantages of hosting Internet communities for the large media: the content is created by others; if it works, the phenomenon supplies itself and spreads by word of mouth and can attract an audience whose loyalty is difficult to secure with traditional content. Except that there are two limitations on the hosting of communities: there won't be room for everyone. In this area, networking effects come fully into play. The audience goes where it has the greatest opportunity for visibility. The question I'm asking is: Of the multiplicity of platforms that are being created, which will survive? If you're a young talent or a young video producer, you'll put your video where it has the greatest chance of being watched, and that most likely means YouTube or MySpace.com. The big question is this: Will the traditional media be able channel and tap into this community phenomenon? Another limit that I foresee is how to place advertising in a space based on expression and privacy between

Internet users? Will the brands find a lucrative space there? And, conversely, will Internet users be prepared to accept the intrusion of advertising into a space that is creative and fairly private?

PART 2

Regulation of Old and New Media

Points of View on Governance and Media Regulation in the Context of Digitalization

Pierre Trudel*

Summary

Current developments in the technological environment of electronic media and other cultural industries challenge earlier paradigms used to define the legal frameworks for these sectors.

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Digitalization is perceived as redefining the context in which information is broadcast and exchanged. This transforms the reasons legislation is considered necessary and ideas about what it seems rational to govern by legislation, regulations and other mechanisms. The overall governance of regulatory frameworks for media is thus changing.

Since contexts are evolving, the way legislation works and how it is set out are also changing. Increasingly, rules are developed in areas outside of government. In addition to the traditional sources of law, there are now stakeholders' networks and practices. These many sources of normativity link the requirements of public policy as well as the intentions and strategies of enterprises. Law now tends to be stated through processes that can create openings among different normative systems. Many regulatory processes compete to define rules for activities in a world characterized by the convergence of media that were considered distinct until recently.

Regulation is now conveyed in a greater variety of ways. Many consider recourse to common law principles to be a more effective approach than specialized regulations. However, control through specialized regulation places the accent on the specific nature of the media and remains an avenue preferred by other authors who focus on the media's uniqueness. Some have suggested recourse to the principles and mechanisms of competition law. The open-network paradigm, of which the Internet is the most common archetype, is being studied in order to identify regulatory approaches able to take into account the environment's network nature. This line of research has resulted in a movement towards analysing regulation in accordance with network layers.

In conclusion, technological and economic changes alter the perspectives and ideas we use to think about media regulation. However, the principal reasons it is considered necessary to regulate the media in a democratic context still remain. What technological changes do tend to modify are the techniques used by government and other stakeholders to re-establish equilibrium and implement public policy objectives.

Introduction

Major changes in the media world are accentuating the need to gain a better understanding of normativity and regulation in the new information environments and of technology's potential effects on law. New electronic spaces, cyberspace's consequences and potential for cultural activities, and even the emergence of norms in the new environments involve locations grouped together under the label "the Internet" that are now proving to be a compelling field of research[1].

The purpose of this literature review is to identify and categorize work on regulation of media and cultural industries in the context of digitalization and other contemporary trends. Here, we take stock of currents of thought on regulation, changes in its foundations and the way it is developed, expressed and applied. We describe paradigms proposed to explain transformations of the media and changes in of the postulates used in designing regulation.

Analyses of the legal aspects of media regulation can be grouped into three main categories.

First, there are descriptions of the existing situation; they describe the requirements flowing from legislation and policy. We will not discuss this work as such, except when it covers changes in media regulation.

Second, there are studies that discuss why we have regulation. The fundamental freedoms guaranteed by constitutional texts limit states' abilities to regulates the media. This is why a question necessarily arises concerning legitimate motives for regulation. Since they suppose freedom of expression, in principle the media cannot be regulated in just any manner. Because it generally limits fundamental freedoms, media regulation has to be justified and expressed through rules compatible with freedom of expression. A number of works assess the cogency of such

1. Ronald G. ATKEY, "Technological Change and Canada/US Regulatory Models for Information, Communications and Entertainment", [1999] 25 *Can.-U.S. L.J.* 359-377; Michael A. GEIST, "The Reality of Bytes: Regulating Economic Activity in the Age of the Internet", (1998) 73 *Wash. L. Rev.* 521.

justifications and methods of regulation. When conditions change, justifications for regulation can be challenged. However, some justifications also remain fully applicable. In such cases, it is then the regulatory mechanisms, approaches and strategies that are debated.

Finally, there are studies on changes in the way the media are regulated, the places where normativity develops, the ways rules are expressed and the means by which normativity is stated. In a world marked by the network paradigm, regulation flows through both generally applicable law rules and principles (civil law, criminal law, intellectual property law) and specialized regulations based on the postulate that media activities are unique. There are also analyses exploring the advantages and limitations of competition law and public spending as vectors for regulation. The emergence of the network paradigm leads researchers to seek analytical approaches that are consistent with it; in this respect, the network layers model seems to have potential.

Notes on terminology

It is important to specify the meanings given to the various concepts related to regulation.

"Governance" refers to the way the activities of a country, region, social group or public or private organization are oriented, guided and coordinated. The word is very old but has come back into vogue in the last decade. It designates "a form of government based on cooperation, partnership or contract among a number of public and/or private stakeholders"[2]. Governance refers to the idea of a unity or collaboration among all members of society, no matter what the level. Thus, it can be understood as the result of interaction among government, the public service and citizens in the political process as a whole. According to Andrée Lajoie, who bases her analysis on a study

2. "Les mots de la gouvernance", *Sciences Humaines Hors série*, No. 44 March-April-May 2004, p. 6. [Our translation.]

Tim Plumptre did for the Law Commission of Canada[3], the concept of governance "concerns everything related to the institutions, processes and traditions involved in public interest debates"[4], including government and the public sector but also civil society, the private sector, citizens, the media, etc.

Governance may be economic, political or administrative, depending on whether it concerns decisions with impact on economic activities, decision-making processes inherent to formulating public policy or policy implementation mechanisms[5]. Thus, governance is not associated strictly with government. It includes both government apparatus and social stakeholders themselves.

Regulations, understood as the results of an activity through which the specific obligations of organizations and individuals are set out in formal texts, are often considered a minor source of law owing to their often technical and changing nature. However, they prove to be an essential, primary source in complex matters. For example, in order to explain the substance of law applying to radio and television, one has to identify what results from regulations[6].

Moreover, in media environments, there are activities that ensure or re-establish balances and are therefore intended to make complex sets of activities function smoothly. Such activities have to be considered in order to provide relevant descriptions of normativity in electronic environments. This is the level at which the notion of regulation comes into play.

The notion of regulation is different from that of regulations in that it concerns the wide range of processes by which the

3. Tim PLUMPTRE, *Vers un plan de recherche sur la gouvernance*, (Ottawa: Law Commission of Canada, 1998).
4. Andrée LAJOIE, *Gouvernance et société civile, Intervention devant la Société royale du Canada*, November 20, 1999, tapuscript, 17 pages; Jacques CHEVALLIER, "La gouvernance et le droit", in *Mélanges Paul Amselek*, (Brussels: Bruylant, 2005), pp. 189-207. [Our translation.]
5. United Nations Development Programme, *Governance for sustainable human development, a UNDP policy document*, (New York, 1997), pp. 2-3.
6. Pierre TRUDEL and France ABRAN, *Droit de la radio et de la télévision*, (Montréal: Éditions Thémis, 1991), pp. 1004 ff.

behaviour of a complex system "is maintained or adjusted in accordance with a few rules or norms."[7]

Regulations applying to the media are generally part of a complex process that results from a large set of factors. The prevailing framework generally appears as a complex mechanism of regulation that fits the above definition of this notion.

1. Changes in the reasons underlying regulations

Melanie J. Mortensen notes that "[t]echnological convergence, privatization and increased competition have led to new challenges for communications law in the last decade."[8] The author focuses on the role of changes that have occurred in the world of media, which have generated questions about the foundations of regulations. In many respects, knowing the legal aspects of a phenomenon is a matter of knowing the reasons that lead to the adoption of rules, in other words, that make it "rational" to adopt those rules in order to provide a normative framework for that phenomenon.

When their purpose is to implement policy, legal frameworks are generally based on values that regulations are intended to reflect. The values are often contradictory, but the regulations cannot be analysed without referring to them. Values are the basis for the requests for control that lead to the institution of legal frameworks for activities; the frameworks necessarily rest on those values. They are what we call "reasons."

State intervention is not necessarily automatic. More than ever, legislation must be justified. The values that people try to defend through law form a set of reasons that are present in arguments justifying legislation and regulatory measures applying to various aspects of activities.

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7. André-Jean ARNAUD, Ed., *Dictionnaire encyclopédique de théorie et de sociologie du droit*, 2nd Ed., (Paris: L.G.D.J., 1993), p. 521; Jean-Louis AUTIN, "Réflexions sur la notion de régulation en droit public" in Michel MIAILLE, Ed., *La régulation entre droit et politique*, (Paris: L'Harmattan, 1995), 44. [Our translation.]
8. Melanie J. MORTENSEN, "Beyond Convergence and the New Media Decision: Regulatory Models in Communications Law", [2003] 2 *Canadian Journal of Law and Technology*, online: <http://cjlt.dal.ca/vol2_no2/index.html>.

Analysis of the legal dimensions of phenomena supposes, first, that we identify the reasons underlying requests for control over certain aspects. The ideas about reality held by stakeholders and decision-makers and the imperatives dictated by concerns arising at different times in what is known as "public opinion" certainly play a major role in the emergence and concretization of reasons, which are seen as legitimate motives for intervention through legislation or in other ways. Studying the legal aspects of an issue thus requires identifying the reasons the state or legal norm could be called upon to intervene. This is where we find the essence of law relating to regulations governing most activities with collective stakes.

Reasons for legislation clearly have their origin in a perception of reality on which there is a degree of consensus. In this respect, the role of imagination, myths, beliefs and concerns that appear in society at given points seems crucial to the form and content of much legislation. Reasons also reflect the context in which policy is adopted.

Changes in the conditions of production and circulation of information alter ideas underlying thought on regulations. The changes differ from one legal system to the next. They affect the perceptions and points of view that form the basis for legislation, what it can cover and what seems to escape it.

For example, audiovisual regulations seem to be disintegrating. Newspapers, television shows, films, phone calls, computer data, commercial services such as purchases and banking, and all other forms of information and communication can now be in a single format: digital bits. The Internet is the incarnation of the convergence of media environments. The idea of convergence echoes the centripetal trend in radio broadcasting, the press, telecommunications and computing.

Traditionally, regulation of the media, radio and television was based on postulates such as: wavelengths are rare public resources, broadcasting media are intrusive and there is a need

to remedy the deficiencies of unregulated media[9]. More recently, particularly in telecommunications, there has been insistence on universal access. We constantly hear about the need to regulate content that is offensive in relation to values prevailing in a specific societal context[10].

Other classical reasons highlight the dysfunctionality of the market, which regulations would be designed to solve. This would justify rules against concentration of ownership and in favour of pluralism and diversity, such as regulations promoting a wide range of sources of information, preventing standardization in the delivery of information, fostering diverse content and protecting minority cultures. There is also a desire to avoid situations in which a small number of bodies control public opinion. Other measures are designed to protect public broadcasting[11].

Other reasons place the accent on the need to preserve the network's neutrality[12], particularly in the search for means to prevent evils that seem clearly harmful, such as child pornography, violations of privacy[13] and threats against children[14].

Arguments related to technological changes and the transformations they cause in terms of habits and practices are among

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9. Ad VAN LOON, "The end of the broadcasting era : What constitutes broadcasting and why does it need to be regulated", *Communications Law*, Vol. 9, No. 5, 2004, p. 182.
10. Michael BOTEIN and Dariusz ADAMSKI, "The FCC's new indecency enforcement policy and its European counterparts : A cautionary tale", [2005] 15 *Media L. & Pol'y* 7-56.
11. Council of Europe's Advisory Panel to the Steering Committee on the Mass Media, cited in Ad VAN LOON, "The end of the broadcasting era : What constitutes broadcasting and why does it need to be regulated", *Communications Law*, Vol. 9, No. 5, 2004, p. 183.
12. Mark A. LEMLEY and Lawrence LESSIG, "The end of end-to-end : preserving the architecture of the Internet in the broadband era", 48 *UCLA L. Rev.* 925 (2001) ; Michael A. GEIST, *Telecommunications Policy Review Submission*, Mémoire présenté au Groupe d'étude sur le cadre réglementaire des telecommunications, août 2005. <http://www.teletude.ca/epic/internet/intprpgecrt.nsf/vwapj/Geist_Michael.pdf/$FILE/Geist_Michael.pdf>.
13. OECD Report, *The Implications of Convergence For Regulation of Electronic Communications*, Dsti/Iccp/Tisp(2003)5/Final. See also : *FCC's Regulation of Consumer Proprietary Network Information (section 222)*.
14. Jens WALTERMANN and Marcel MACHILL, Eds., *Protecting Our Children on the Internet*, (Gütersloh : Bertelsmann Foundation Publishers, 2000).

those most often mentioned in support of new ways of viewing regulation.

Digitalization

Digitalization of information has raised a number of questions concerning media regulation. Many authors speak of a "digital revolution." The Internet is emblematic of the new conditions that information technologies generate in radio and television production and broadcasting and also in traditional media, such as the press.

Digitalization is involved in the most characteristic changes in the "information society," and is most often seen as a badge of those transformations. Other influences include both the general phenomenon of globalization in the media sector and technology's specific potential to create convergence among different kinds of content in a single communication environment. Digitalization seems to be both a factor and a result of the trend toward globalization. It is not the only factor in globalization, but it contributes to making it more perceptible.

Digital compression and high-speed networks are removing limitations on transmission capacity[15]. The increase in the capacity of distribution systems makes it possible to have access to hundreds of channels[16]. Thus, traditional regulations based on the scarcity of frequencies and bandwidth seem to be losing their foundations and legitimacy[17]. These changes can be seen as a chance to simplify existing regulations or to extend their application to new platforms and services[18].

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15. Colin R. BLACKMAN, "Convergence between telecommunications and other media", (1998) 22:3 *Telecommunications Policy* 163, p.164.
16. Christian S. NISSEN, "Public Service Media in the Information Society", report prepared for the Group of Specialists on public service broadcasting in the Information Society, February 2006. <http://www.coe.int/T/F/Droits_de_l'Homme/Media/1_Cooperation_intergouvernementale/MC-S-PSB/H-Inf(2006)003_fr.pdf> p. 12.
17. Colin R. BLACKMAN, op. cit. p. 163.
18. Lili LEVI, "On the Mixed Cultures of Regulation and Deregulation", 38 Jurimetrics 515 (1997-1998) (Review of the book, *Rationales & Rationalizations: Regulating the Electronic Media*, Robert CORN-REVERE, Ed., (The Media Institute: Washington, D.C., 1997.))

A number of authors discuss digitalization, its features and its consequences with respect to application, and analyse the applicability of legislation designed to regulate media and cultural industries. At first the premise was that the Internet could not be controlled[19]. Increasingly, there is a tendency to qualify statements about the network's supposed ungovernability[20].

Digitalization gives rise to new platforms (audiovisual services on the Internet and digital television by cable or satellite). Especially now that there are high-speed networks, the Internet can compete with services traditionally offered by broadcasters (such as online films and television) and telecommunications industries. "It will open up a whole range of new media services to the public. Digital technology has the potential of bringing new freedom of choice to individual members of the audience."[21]

Digitalization is said to have many virtues, such as making information more portable in a number of forms (e.g., data, audio and video) and on all types of networks[22] and platforms. Thus, some authors express doubts regarding the importance of broadcasting regulations in maintaining and strengthening national identity. Radio and television are moving towards models in which consumers choose content. This casts doubt on the media's ability to create shared cultural references, which are inherent to protection of national identity. Others argue that, even if broadcasters' role[23] is smaller and television is no longer the unique source of information and entertainment, they still have great influence on society[24].

The potential of communications based on Internet protocols has led us to abandon the notion of the household; "an increas-

19. For example, Dov WISEBROD, "Controlling the Uncontrollable: Regulating the Internet", [1995] 4 *Media & Communications L. Rev.* 331-363.
20. Michael BIRNHACK and Niva ELKIN-KOREN, « The Invisible Handshake: The Reemergence of the State in the Digital Environnment », [2003] 8 Va. J.L.& Tech 6, <http://www.vjolt.net/archives.php?issue=15>.
21. Christian S. NISSEN, op. cit. p. 6.
22. Colin R. BLACKMAN, op. cit.
23. Cass R. SUNSTEIN, "Television and the Public Interest", [2000] 88 *Cal. L.Rev.* 499-564, p. 528.
24. Ellen P. GOODMAN, "Media Policy out of the Box: Content Abundance, Attention Scarcity, and the Failures of Digital Markets", (2004) 19 Berkeley Tech. L.J. 1420; Cass R. SUNSTEIN, op. cit. p. 531.

ing proportion of media consumption takes place while the individual is on the move via an ever-growing number of mobile and handheld devices. All receivers will contain some kind of computer microprocessor and will be able to handle text, sound and images combined in many striking ways."[25] Some authors are of the opinion that "communications policy inevitably will become a mere subset of Internet policy"[26].

Digitalization makes competition possible by lowering barriers to market entry[27]. However, this involves significant costs for broadcasters and users.

Digitalization of electronic media can lead to major cultural and political change: "What is currently happening all around us in connection with the digitalization of the electronic media and the emergence of a new media market may well lead to cultural and political changes as profound as those which followed Gutenberg's revolutionary discovery of the printing press five hundred years ago"[28]. Many authors underline the importance of participation by the general public[29].

Digitalization's influence can be seen at the level of ideas that form the basis for media regulation[30]. What it enables or facilitates helps to change points of view. With respect to law, the new ways of seeing the media have consequences on the reasons, in other words, the arguments, underlying relevant regulations. Digitalization also raises questions about approaches, strategies, means and methods for designing, expressing and applying regulations.

Digitalization is frequently presented as concomitant with a higher level of media convergence.

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25. Christian S. NISSEN, op. cit., p. 9.
26. Kevin WERBACH, "A Layered Model for Internet Policy", (2002)1 J. on Telecomm. & High Tech. L. 37.
27. OECD, Working Party on Telecommunication and Information Services Policies, *The Implications of Convergence for Regulation of Electronic Communications,* DSTI/ICCP/TISP(2003)5/FINAL (2004).
28. Christian S. NISSEN, op. cit., pp. 13–14.
29. Yochai BENKLER, "Net Regulation: Taking Stock and Looking Forward", (2000) 71 U. Colo. L. Rev. 1203.
30. On this notion, see: Pierre MANNONI, *Les représentations sociales,* (Paris: PUF, 1998).

Convergence

Convergence is a central theme in the literature on media regulations[31]. A number of authors have noted that technological, social and economic changes tend to eliminate distinctions between telecommunications and mass media. The convergence of production and broadcasting environments is also discussed.

The cleavage between the telecommunications and broadcasting industries, which justified separate regulations for each industry, is challenged by digitalization and the resulting convergence[32]. Some see infrastructure and content as coming closer together[33].

Traditionally, broadcasting regulations targeted content while telecommunications regulations targeted the conduit without taking content into account. Indeed, the Internet developed largely free of regulatory intervention. The fragmentation of

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31. Rob FRIEDEN, "Wither Convergence: Legal, Regulatory, and Trade Opportunism in Telecommunications", (2001-2002) 18 Santa Clara Computer & High Tech. L.J. 205; P.H.A. FRISSEN, A.M.B. LIPS and J.E.J. PRINS, "Regulatory Review Through New Media in Sweden, the UK and the USA: Convergence or Divergence of Regulation?" (1998) 5 Electronic Communication Law Review pp. 123-257; Jon M. GARON, "Media & Monopoly in the Information Age: Slowing the Convergence at the Marketplace of Ideas", (1999) 17 Cardozo Arts & Ent. L.J. 491; Arlan GATES, "Convergence and Competition: Technological Change, Industry Concentration and Competition Policy in the Telecommunications Sector", (2000) 58 U. Toronto Fac. L. Rev. 89; Anders HENTEN, Rohan SAMARAJIVA and William H. MELODY, "Designing Next Generation Telecom Regulation: ICT Convergence or Multisector Utility?" WDR 2002 Final Report, 9 January 2003; J. HILLS and M. MICHALIS, "Technological Convergence: Regulatory Competition. The British Case of Digital Television", (1997) *Journal of Policy Studies* 18(3/4): 219-237; Chris MARSDEN and Stefaan VERHULST, Eds., *Convergence in European Digital TV Regulation: Law in its Social Setting*, (Blackstone Press Limited, 1999). Review: L. HITCHENS, (2000) 24(6) Telecommunications Policy 631-633; OECD, Working Party on Telecommunication and Information Services Policies, *The Implications of Convergence for Regulation of Electronic Communications*, DSTI/ICCP/TISP(2003)5/FINAL (2004).
32. OECD, Working Party on Telecommunication and Information Services Policies, op. cit.
33. Louis-Leon CHRISTIANS, "Convergence and proceduralisation – Generalisation vs. contextualization", (1998) 22:3 *Telecommunications Policy* 255.

regulation of these industries does not provide a "coherent and flexible framework"[34] to deal with convergence.

Convergence necessarily raises the question of which legal framework will have jurisdiction over the activities concerned. For example, what happens when technologies undergo changes that eliminate distinctions between broadcasting and telecommunications? Should we apply the regulatory framework of broadcasting or that of telecommunications? In such cases we have converging technologies but diverging regulatory frameworks[35].

Technological convergence generates a degree of synergy among so-called mass media, such as television, and media that used to be considered interpersonal, such as the telephone. The differences in regulations governing cable industries and telecommunications had to decrease in order to finally facilitate the application of similar norms for similar services. The regulatory convergence that has occurred has allowed cable TV operators to provide interactive services and telecommunications companies to offer video on demand and access to databases. Ideas have changed; the differences between media, which were often the basis for their different legal statuses, are fading. Thus there is debate over which regime should be applied to the entities resulting from this convergence: that of the written press, the audiovisual industry, telecommunications or services?

Digitalization and convergence also facilitate concentration of media ownership[36] owing to growing inter-relations and complementarity among telecommunications, publishing, broadcasting and computing, which share the same economic

34. OECD, Working Party on Telecommunication and Information Services Policies, op. cit., p. 3.
35. Christopher S. YOO, "The Rise and Demise of the Technology-Specific Approach to the First Amendment", (2002-2003) 91 *Geo. L.J.* 245; Colin R. BLACKMAN, op. cit.
36. Yale M. BRAUNSTEIN, op. cit.

players. There is horizontal concentration and vertical integration[37], in other words, economic convergence[38].

1.1 Changing spaces

References to space have undergone major changes with digitalization: national space and listening space have been redefined. Portability and other technological features of media undermine a number of regulatory postulates concerning listening space. The space resulting from the network environment cannot be reduced to physical space. Its borders are drawn differently and require a new definition of what is meant by space.

Authors note that it is more difficult to situate the space in which people listen to or watch media. The dissolution of listening space tends to support arguments about the diminishment of national spaces as reference points for regulation. The importance of national borders seems to be vanishing. It is thus not surprising to see a loss of relevance, and even legitimacy, of state law with respect to regulation of conduct in virtual spaces. Ideas are changed by the emergence of a space that seems to ignore national borders and in which many familiar foundations for legal principles and practices disappear[39].

Thus, the legitimacy of regulations governing some content within a nation's borders is adversely affected by the fact that such information is easily available on the Internet. A French court might very well prohibit the publication of a text on an Internet site, but the text could be republished on a site outside of the jurisdiction of French law and in practice just as accessible in France. The legitimacy of the prohibition issued by national legislation thus seems to be challenged: what is the point in

37. Christopher S. YOO, "Vertical Integration and Media Regulation in the New Economy", (2002) 19 Yale Journal on Regulation 171.
38. Jan VAN CUILENBURG and Pascal VERHOEST, "Free and Equal Access – in Search of Policy Models for Converging Communication Systems", (1998) 22(3) *Telecommunications Policy* 171-181, p. 171.
39. Dominique GILLEROT and Axel LEFEBVRE, with the collaboration of Marc MINON and Yves POULLET, Eds., *Internet: la plasticité du droit mise à l'épreuve*, (Brussells: Fondation Roi Baudouin, 1998), p. 18.

prohibiting something that can be published so easily from another location? In contrast, the application of some national legal requirements could have consequences on all network users. In the German Compuserve case, an order requiring the removal of content excusing Nazism could be met only by eliminating the offensive content everywhere in the network[40]. In this situation, application of national legislation generated censure well beyond its borders.

It is clear how powerful digitalization is in redefining the space where the legitimacy of rules is constructed and analysed. Network space affects either perceptions about the legitimacy of regulations or perceptions about their effectiveness. This indicates shifts in a number of the presuppositions we use to conceive of and apply law.

Greater choice for viewers and listeners

Digitalization has led to changes in media-related habits: users are seen as having greater control[41] over content, in particular with respect to broadcasting time and reception[42]. Digitalization and other technological developments have enabled broader distribution of control over communications capacity[43].

Interactive capacities change perceptions about consumers. We are going from a "passive masses" paradigm to an "interactive individual" paradigm. This explains demands for regulations that place control in consumers' hands[44]. Some have no qualms about proclaiming the consumer's sovereignty while others argue that viewers are able to choose only if the production conditions

40. Stuart BIEGEL, « Indictment of CompuServe Official in Germany Brings Volatile Issues of CyberJurisdiction into Focus », UCLA Online Institute for Cyberspace Law and Policy, <http://www.gseis.ucla.edu/iclp/apr97.html>.
41. Ron WHITWORTH, "IP Video: Putting Control in the Hands of the Consumers", [2005] 14 *CommLaw Conspectus*, 207-241.
42. Yochai BENKLER, "Communications infrastructure regulation and the distribution of control over content", (1998) 22:3 *Telecommunications Policy* 183, p. 195.
43. Yochai BENKLER, "Siren Songs and Amish Children: Autonomy, Information, and Law", (2001) 76 *N.Y.U. L. Rev.* 23.
44. Ron WHITWORTH, op. cit.

of some kinds of content are maintained, for not all content will necessarily be delivered in an unregulated market[45].

New intermediaries

With digitalization, a new group of intermediaries is emerging[46]: gatekeepers[47], also known as infomediaries[48]. Consequently, "broadcasters, both private and public, have lost their former pivotal position vis-à-vis independent programme makers and advertisers as the only "gate" or access point to consumers"[49]. The elimination of intermediaries that accompanies digitalization can be destabilizing[50].

Enterprises' vertical integration gives them the potential power to prevent their competitors from accessing their platforms. They can develop exclusive technical protocols: "subscribers using the device or receiver of one provider cannot get the content and services from another. The equipment is tied to the subscriber contract and there is no service interoperability"[51].

1.2 Effectiveness of regulation

Doubt is cast on the effectiveness of regulation, such as domestic quotas based on the limited number of national channels. Reference is made to increased ability to easily circumvent requirements "by simply placing the satellite uplink in a country with more liberal rules. The emergence of Internet distribution

45. Ellen P. GOODMAN, op. cit.
46. Guy PESSACH, "Media, Markets and Democracy: Revisiting an Eternal Triangle", (2004) 17 *Can. J. L. & Jurisprudence*, p. 209-223.
47. Jonathan ZITTRAIN, "A History of Online Gatekeeping", [2006] 19 *Harvard Journal of Law and Technology*, < http://jolt.law.harvard.edu/>.
48. Guy PESSACH, op. cit.; Review of Edwin BAKER, *Media, Markets, and Democracy*, (New York: Cambridge University Press, 2002), pp. 285-307.
49. Christian S. NISSEN, op. cit., p. 11.
50. See Yochai BENKLER (2000), op. cit.
51. Yochai BENKLER, "From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access", (2000) 52 Fed. Comm. L.J. 561;

of content has also added to this open, international market outside public control."[52]

Technological change creates pressure for amendments to the existing regulatory framework, but the speed of change requires flexibility in the approach to be adopted. Some authors warn against enshrining solutions[53] and providing answers where there were not yet any questions[54]. The need for flexibility has often been invoked in favour of leaving some areas unregulated[55].

Elimination of geographical borders entails a need for international cooperation[56] and internationalization of law[57]. "[T]he main actors on the media scene are now international corporations unrestricted by frontiers and national ties. They have no territorial allegiances nor do they have obligations to cultural heritage," and "companies of this size and transnational orientation can neither be monitored nor controlled by national governments"[58].

There is no "immediate mechanical link between the existence or disappearance of a phenomenon and the existence or

52. OECD, Working Party on the Information Economy, *Digital Broadband Content: Digital Content Strategies and Policies*, DSTI/ICCP/IE (2005)3/FINAL, <www.oecd.org/sti/digitalcontent>; Christian S. NISSEN, op. cit.
53. Richard S. WHITT, "A Horizontal Leap Forward: Formulating a New Communications Public Policy Framework Based on the Network Layers Model", (2003-2004) 56 *Fed. Comm. L.J.* 587, p. 619.
54. Michael K. POWELL, "The digital migration: Toward a new telecom act" 4 J. *Telecomm. & High Tech. L.*: "you should not have a solution until you have a problem. Before the government opens up a regime, you ought to have good evidence of how that problem presents itself and that there is actually a problem."
55. OECD, (2005), op. cit.
56. Gareth GRAINGER, "Liberté d'expression et réglementation de l'information dans le cyberspace: Perspectives et principes d'une coopération internationale dans ce domaine", in *Les Dimensions Internationales du Droit du Cyberespace,* (Paris: UNESCO – Economica, 2000).
57. See, for example, Susan A. MORT, "The WTO, WIPO and the Internet: Confounding the borders of copyright and neighboring rights", (1997) 8 *Fordham Intell. Prop. Media & Ent. L. J.* 173.
58. Christian S. NISSEN, op. cit., p. 10

disappearance of a set of regulations"[59]. According to some, it is not a technology alone but rather a complex interaction that determines use: "There is, then, no reason to think that digital technology will 'force' society to pattern its communications channels in the Internet model."[60]

The "information society" would then flow from a new culture with its own norms[61]. However, some point out that amendments to regulations have been simply incremental[62], despite the promise of convergence and technological change.

Institutional changes have also occurred in the way regulatory authorities operate[63].

1.3 Challenges to the viability of public interest regulations

Some authors find that public service values have lost ground and ask questions about the future of public interest regulations in the day of digitalization and convergence. This is translated into smaller roles for parliaments and governments in policy statement and application.

Thus, a whole line of research focuses on the future of regulations based on so-called public interest imperatives[64].

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59. Pierre TRUDEL, "La recherche sur les rationalités des règles de droit et les techniques de réglementation- Éléments d'un modèle", p. 12. [Our translation.]
60. Yochai BENKLER, (1998), op. cit., p. 190.
61. Kathy BOWREY, *Law and Internet Cultures*, (Cambridge, UK: Cambridge University Press, 2005).
62. Lori A. BRAINARD, *Television: The Limits of Deregulation*, Boulder, CO, Lynne Reinner, 2004, p. 82.
63. Colin SCOTT, "The proceduralization of telecommunications law", (1998) 22:3 *Telecommunications Policy* 243; Christina SPYRELLI, "Regulating the regulators? An assessment of institutional structures and procedural rules of national regulatory authorities", (2003-2004) 8 *International Journal of Communications Law and Policy*.
64. Daniel Patrick GRAHAM, "Public interest regulation in the digital age", (2003) 11 *Comm. Law Conspectus* 97; Mike FEINTUCK, "Regulating the media revolution: In search of the public interest", (1997) 3 *J. Info. L. & .*; Justin BROWN, "Digital must-carry and the case for public television", 15 *Cornell J.L. & Pub. Pol'y* 73.

Magnified by the premise that users are in full control of what they choose to listen to and watch, the idea that public interest regulations will waste away highlights the difficulty of applying rules in environments that seem to be controlled by users. This may be why, despite the increase in channels of communication, regulatory organizations continue to apply stricter rules to media, which are seen as less dependent on users' decisions. General television, for example, is still subject to heavy penalties if it violates indecency regulations, which remain very strict[65].

1.4 Persistent concerns about content

Technology may have resulted in the convergence of broadcasting media and telecommunications, but content concerns, which traditionally justified the regulatory frameworks, remain. Despite strong warnings about the impossibility of or great difficulty in applying traditional regulation, the challenge of regulating potential violations in media environments remains. Protecting national creative production and broadcasting is an imperative that does not disappear with technological change[66].

Thus, studies document the return of the state in digital environments[67]. Noting that network development was possible only thanks to public authorities, analyses show the now crucial role of gatekeepers in the operation of network environments and, at the same time, their potentially major role in the establishment and application of government regulations.

A number of studies show the persistence of so-called public interest requirements as the ultimate justification for regulation.

65. Michael BOTEIN and Dariusz ADAMSKI, op. cit.; Robert CORN-REVERE, « Can Broadcast Indecency Regulations Be Extended to Cable Television and Satellite Radio? », (2006) 30 *Southern Illinois University Law Journal* 243.
66. Peter S. GRANT and Chris WOOD, *Blockbusters and Trade Wars: Popular Culture in a Globalized World*, Douglas & Mc Intyre, (2004) ; Amy E. LEHMANN, "The Canadian cultural exemption clause and the right to maintain an identity", [1997] 23 *Syracuse J. Int'l L. & Com.*, 187-218.
67. Michael BIRNHACK and Niva ELKIN-KOREN, op. cit.

The requirements can be related to broader problems, such as those involving religious and other pressure groups[68].

From this point of view, concerns about child protection play a significant role in discourse on reasons underpinning regulations[69].

1.5 Emergence of privacy protection arguments

As individuals gain greater choice in what they want to see and hear, privacy protection stakes rise. Systems based on subscriber choice almost always make it easier to find out what choices people make. Connection and subscription data are becoming more and more crucial.

One current of thought focuses on the need to regulate the processing of user information by private companies because "marketers and advertisers, with their ability to track consumer electronic media usage patterns, purchase habits, and interests are secretly compromising the privacy interests of the public."[70]

Changes in the broadcasting industry make it possible for users to interact and choose content, which generates information on user practices and habits. In the United States, the FCC has tried to regulate[71] use of consumer proprietary network information, which can include data on phone calls and services to which the user subscribes, provided the consumer gives explicit prior consent to use of the information. Since they restrict advertising, these regulations were struck down following a challenge based on violation of freedom of commercial expres-

68. Philip M. NAPOLI, "The public interest obligations initiative: Lost in the digital television shuffle", (2003) Vol. 47, No. 1, *Journal of Broadcasting & Electronic Media*, pp. 153-156; Daniel Patrick GRAHAM, op. cit.; M. FEINTUCK, *op. cit.*; Bruce M. OWEN, *The Internet challenge to television*, (Cambridge, Mass: Harvard University Press, 1999); Cass R. SUNSTEIN, op. cit., p. 512.
69. Michael BOTEIN and Darius ADAMSKI, op. cit.
70. Shaun SPARKS, "Opting in is out: Balancing telecommunications carrier commercial speech rights with consumer data privacy", (2000) 5 *International Journal of Communications Law and Policy* 1.
71. Based on the *Telecommunications Act of 1996*, § 222(f)(1)(A)-(B), 47 U.S.C. § 222 (1999).

sion. The provisions were also designed to foster competition by preventing providers from using that type of information in order to gain advantages. However, some authors suggest that the market should be allowed to run its course because it provides benefits for consumers and develops self-regulatory mechanisms[72].

2. Changes in the ways regulation is expressed

In a digital world, law is increasingly stated in reference to technological norms that are to be controlled, limited or channelled. The way law is stated reflects the conditions prevailing in the contexts where it is conceived, negotiated and applied.

Public decisions flowing from policy implementation can be expressed in a number of ways. We will call the various techniques used to impose rules of conduct on those engaging in an activity "regulatory techniques." By adopting a given technique or combination of techniques, the authorities responsible for fine-tuning policies define and provide for the ways the rights, obligations and interests of various parties will be articulated. In most cases, this is the process that produces rules that provide a framework for activities and impose standards of conduct on enterprises and individuals.

2.1 Sources of normativity

Changes in regulation can be seen at the level of the locations where it is developed. Law is produced where it is "thought." Governments remain one of the primary places where law is designed; they are the primary locations of mediation among values, possibilities and threats relating to technology. However, law is also considered elsewhere. In a digital world, law is not produced in exactly the same places as before. National forums and government authorities continue to play a major role in

72. Svetlana MILINA, "Let the market do its job: Advocating an integrated laissez-faire approach to online profiling regulation", 21 *Cardozo Arts & Ent. L.J.* 257. Shaun A. SPARKS, "The direct marketing model and virtual identity: Why the United States should not create legislative controls on the use of online consumer personal data", (2000) 18 *Dick. J. Int'l L.* 517.

development and application of law, but national law alone often proves unable to provide an adequate framework for activities occurring in cyberspace. Rules of conduct are also developed in other places, and replace or link with state law[73].

Regulations can flow, at least in part, from both technological and legal norms. There seems to be a degree of competition among the various places and networks that produce regulations governing the various activities that take place on networks. Regulation of cyberspace seems to flow from normativity that is naturally international. While it plays a major role, state law seems to be being replaced by other sources of norms; contracts, contractual practices and technological conditions seem to be crucial.

Traditionally, legal systems have a hierarchical, linear, branching design. They are hierarchical in that each part is in a relation of superiority or inferiority to the others. The relations are linear in that there is a one-way flow between the various hierarchical levels. The system is branching in that its various parts are generated from a single point. Networks are increasingly replacing hierarchical institutions as locations where normativity is designed and stated, and networked normativity is tending to replace the hierarchical, linear, branching design. The network concept defines and determines a virtual space, and thus becomes a frame of reference or even a metaphorical tool that is required in order to identify the *situs* of interactions among participants in cyberspace activities. The network is the place of interaction, but also the location where normativity is developed, debated and applied[74].

In networks, principal reference points are developed and then generally linked by other poles of normativity. This explains the idea of law linked through a number of vectors. Indeed, law is sometimes replaced by international principles and sometimes linked through them to national legislation while at the same time the latter is linked to regulatory normativities and norms

73. André-Jean ARNAUD, "De la régulation par le droit à l'heure de la globalisation. Quelques observations critiques", (1997) 35 *Droit et société*, 11-35.
74. Thomas SCHULTZ, "La régulation en réseau du cyberspace", [2005] 55 *R.I.E.J.*, 31-90.

established by stakeholders[75]. Networks are superimposed on government institutions and international authorities[76]. They constitute a process of dialogue and exchange through which strategies are formed that will be able to deal with contexts produced through the networking of information. The results are co-regulatory phenomena that legal systems have to take into account.

States

The redefinition of space caused by digitalization seems to impact on the effectiveness of state law. When it applies to interactions involving elements external to its territory, state law can run up against practical difficulties that undermine its effectiveness. Moreover, state law competes with other normativities. It seems easier than ever to circumvent rules or simply exempt oneself from them.

Governments are vectors for worries, fears, expectations and values in the name of which rules are requested. Legislation is not random; it reflects the cultural features of the human society in question. This is why it seems so naïve to say that state regulations have become obsolete. The fact that technological changes make it difficult to apply some laws does not automatically entail the disappearance of the reasons underlying their existence. As soon as there are reasons to limit some activities, the real question is "how?"

When it applies within national territory, state law often belongs to a broader regulatory approach. It states principles, formulates objectives and prescribes criteria, but leaves greater and greater space for other sets of norms to keep it up to date. Frequently, legislation is only one aspect of a co-regulatory process in which other sources of normativity play roles of varying importance.

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75. Pierre TRUDEL, "Quel droit et quelle régulation dans le cyberespace?" *Sociologie et sociétés*, Vol. 22, No. 2, Fall 2000, pp. 189-209, <http://www.erudit.org/erudit/socsoc/v32n02/trudel/trudel.pdf>.
76. François OST and Michel DE KERCHOVE, "De la pyramide au réseau? Vers un nouveau mode de production du droit?' (2000) 44 *R.I.E.J.* 1- 82.

International forums

Given the insufficiencies and lack of effectiveness of state regulations, the usual reflex is to look for an international legal determination. The purpose is to make law substantially similar everywhere, which could solve problem of the ineffectiveness of an individual state's legislation. Such an approach could be suitable for matters targeting coordination of behaviour. However, it will be more difficult to apply with respect to rules prescribing conduct or content and flowing from ideas that are ethical, moral or closely linked to national culture.

International deliberations have resulted in norms designed to be relayed in the normative apparatus of states and other entities with influence over cyberspace. Technological changes are accompanied by the emergence of networks uniting decision-makers, researchers, regulators and other stakeholders playing a role in the normativity of communication spaces. Anne-Marie Slaughter notes that, in so far as these networks influence policy development, they should be seen as participating in international governance[77]. A number of communities of jurists, researchers and technicians co-exist. They all suggest forms of regulation and behaviour or demand the adoption of certain norms with respect to broadcasting. In addition to such more or less formal networks, there are also entities made up of decision-makers belonging to government apparatus[78].

Technological normativities

"Technical architecture" means the set of technological components and artefacts, such as equipment, software, standards and configurations, which determine access and the right to use cyberspace resources[79]. Regulation through architecture plays a

77. Anne-Marie SLAUGHTER, "The real new world order", (1997) 76 *Foreign Affairs*, 183-184.
78. Mary L. CHEEK, "The limits of informal regulatory cooperation in international affairs: A review of the global intellectual property regime", (2001) 33 *Georges Washington Int. L.R.*, 277, p. 278.
79. Lawrence LESSIG, *Code and Other Laws of Cyberespace*, (Basic Books, 1999) ; Joel R. REIDENBERG, "Lex Informatica", (1998) 76 *Texas Law Review* 553-584. <http://reidenberg.home.sprynet.com/lex_informatica.pdf>.

role on a level different from that of law[80]. It results from the imposition of technological constraints that are difficult to circumvent or completely unavoidable and force individuals to behave in accordance with the desires of those who create the constraints. The individual's ability to circumvent or deliberately violate the norm is reduced and, in some cases, eliminated. Lessig considers that "the most effective tool that law might use is the regulation of code"[81].

The role of technical architecture in regulation of communications activities has been highlighted by a number of authors. Larry Lessig shows that the formation of legal frameworks results from a confrontation and struggle among four constraints: the market, law, social standards and nature. In cyberspace, the last constraint is replaced by code. According to Lessig, code includes software that makes cyberspace what it is, establishes constraints on what stakeholders can do and defines conditions for access. Greenleaf suggests using the word "architecture" to designate the set of constraints flowing from the technological framework. Reidenberg argues that the architecture itself is not a source of regulation but rather a reflection of the regulation implicit in network design choices and the capacities of the underlying systems. These rules are integrated into the design of networks and standards. Reidenberg holds that the technology-imposed rules governing information flows and communication networks form a "Lex Informatica" that policy framers have to understand and acknowledge. They have to promote architecture development compatible with the principles they want to see prevail[82].

Study of the normative effects of cyberspace's technical architecture is an approach that could make it possible to understand and act on Internet normativity.

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80. Daniel BENOLIEL, "Technological standards Inc.: Rethinking cyberspace regulatory epistemology", (2004) 92 *Cal. L. Rev.* 1069.
81. Lawrence LESSIG, (1999), op. cit.
82. Pierre TRUDEL, "La Lex Electronica", in Charles-Albert MORAND, Ed., *Le droit saisi par la mondialisation*, (Brussels: Éditions Bruylant, collection Droit international, 2001), pp. 221-268.

Self-regulation and co-regulation

Self-regulation has long been used to express the obligations of the media. Self-regulation refers to norms developed voluntarily and accepted by participants in an activity[83]. The primary feature of such rules is that they are voluntary. They are not compulsory in the same sense as government legislation; subjection to self-regulation is generally consensual. With respect to new media resulting from digitalization, this form of regulation raises much interest[84].

The advent of a networked world where temporal and spatial markers seem blurred has generated interest in thought on norms and the various factors providing a framework for activities occurring wholly or partially in networks or the virtual spaces they make possible. These phenomena have created interest in the concept of co-regulation, which Bertrand DuMarais defines as follows: "Co-regulation (i.e., policy cooperation) can be defined as a place of exchange and negotiation among stakeholders and those with legitimate interests in certain constraints and in which best practices are compared in order to adopt them as recommendations. The location can also be used for mediation"[85].

The concept is not new: Yves Poullet points out that "its use to provide a framework for the information society had already been recommended in various international forums" [86]. In 1998,

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83. Pierre TRUDEL, "Les effets juridiques de l'autoréglementation", [1989] 19 *Revue de droit de l'Université de Sherbrooke*, 251.
84. John CORKER; Stephen NUGENT; Jon PORTER, "Regulating Internet Content: A Co-Regulatory Approach", (2000) 23 *U.N.S.W.L.J.* 198; Llewellyn GIBBONS, "No Regulation, Government Regulation, or Self-Regulation: Social Enforcement or Social Contracting for Governance in Cyber-Space", (1997) 6 *Cornell Journal of Law and Public Policy* 475; J. A. JACOBS, "Comparing Regulatory Models-Self-Regulation vs. Government Regulation: The Contrast Between the Regulation of Motion Pictures and Broadcasting May Have Implications for Internet Regulation", (1996) 1(1) *Journal of Technology Law & Policy* 4.
85. Bertrand DU MARAIS, "Autorégulation, régulation et co-régulation des réseaux", in Georges CHATILLON, Ed., *Le droit international de l'Internet*, (Brussells: Bruylant, 2002), p. 296. [Our translation.]
86. Yves POULLET, "Technologies de l'information et de la communication et 'co-régulation': une nouvelle approche?" *Droit & Nouvelles technologies*, <http://www.droit technologie.org/2_1.asp?dossier_id=126> [Our translation].

at the OECD ministerial meeting held in Ottawa, a desire was expressed for an "effective mix" of public and private action to regulate electronic commerce. At a regulators' summit initiated by UNESCO, there was talk of co-regulation of new media.

It was in France that research on the notion of co-regulation led to a more operational definition and implementation of the concept. The report of the group chaired by Christian Paul, MEP, recommended an approach involving dialogue among stakeholders. Co-regulation is less a form of normativity as such than a process. According to Yves Poullet, it "looks like a 'place' where consensus can be built among various stakeholders in regulation (e.g., legislators, judges, enterprises, civil associations and regulatory authorities)."[87]

2.2 Means of stating normativity

Digitalization's influence can be detected in the forms normativity takes and in its modes of expression. It is increasingly common for law to be expressed as a component of a normative network in which it is simply a link. With respect to the way it is expressed, normativity is frequently a program-like set rather than imperative rules requiring immediate application. Often, it takes the form of a statement of the qualities of technological tools, processes and behaviours accompanying activities taking place in cyberspace. In order to obtain sufficient adaptability, openness is sought among normative systems so that there can be links among ethical, technological, state, national and international normativities.

Since the regulation results from synergy rather than application of a single text, legislation leaves much space for notions that require research into what prevails in other normative systems. As soon as legislation is only an aspect of a regulatory process with numerous components, openings to other normative systems have to be written into it. Generally, there is a clear tendency to frame legislation using generic notions. A degree of technological neutrality is sought. The legislation has to be

87. Id.

designed to provide a framework for a set of equivalent situations, no matter what technological tools are used.

From this point of view, recourse to standards is a major feature in the framing strategies of many legislators. A number of countries have amended their legislation to ensure functional equivalence of documents and their legal value, no matter what the medium. Legislation indicates how legal situations in the paper world can be transposed into a universe like the Internet. Rather than trying to describe the obligations for each environment in which there is interaction, requirements are based on the functions performed by the various actions and processes involved in production and circulation of documents and information. Rules identify the qualities that tools and documents must have rather than the actions that have to be performed to achieve a given result.

Control through common law

As electronic media become more and more commonplace, interest increases in using common law regulation alone to provide a framework for operation. This approach supposes the abandonment of specific regulations, such as those resulting from the *Broadcasting Act*.

Research has been done on the applicability of criminal, civil and general commercial law, including intellectual property law, as regulatory mechanisms in digital environments. In particular, work has been done on the feasibility of replacing existing regulatory mechanisms with recourse to property rights over resources such as the frequency spectrum. [88]

Networked normativity, which is characteristic of environments based on the use of computer communication networks, leads to changes in ways of seeing the division of responsibili-

88. John BERRESFORD and Wayne LEIGHTON, "The law of property and the law of spectrum: A critical comparison", [2004] 13 *CommLaw Conspectus*, 35-49.

ties[89]. The classical model that is a feature of liberal states, in which each department and administrative body is considered to have complete, exclusive control over certain information, is gradually being replaced by a model in which regulation takes a greater variety of paths.

A set of normative systems applies in networks. One version of this is an interconnected set made up of interacting centres of normativity. Networks are made up of spaces in which prevail all or some norms that apply to users, broadcasters and producers. Norms can be imposed either because they define, even implicitly, the conditions for conducting the activities or because a government is able to exercise authority, as is usually the case in environments completely or partially controlled by a state.

Networks are also made up of links through which normativities and their consequences become explicit and spread. The rules flowing from centres of normativity link together and diffuse through the various virtual spaces. They co-exist, and either complement one another, or compete, in other words, vie with one another to gain dominance.

One of the major links between state centres of normativity and stakeholders in networks is provided by accountability regimes[90]. Such regimes are generally set out in a country's common law. For most stakeholders, accountability provides the framework delimiting their actions and prescribing the extent of their obligations. In sum, it is to manage risk and limit responsibility that both collective and individual stakeholders adopt rules of conduct. This is how the requirements stated in centres of normativity are linked. In each environment, international principles and the principles adopted as laws in centres of nor-

89. Pierre TRUDEL, "Un 'droit en réseau' pour le réseau : le contrôle des communications et la responsabilité sur Internet", in Institut canadien d'études juridiques supérieures, *Droits de la personne : Éthique et mondialisation,* (Cowansville : Éditions Yvon Blais, 2004), pp. 221-262 ; Pierre TRUDEL, (2000), op. cit.

90. Scott NESBITT, "Rescuing the balance ? : An assessment of Canada's proposal to limit ISP liability for online copyright infringement", [2003] 2 *Canadian Journal of Law & Technology*, <http://cjlt.dal.ca/vol2_no2/index.html> ; Pierre TRUDEL, "Responsibilities in the context of the global information infrastructure", [1997] 29 *International Information & Library Review*, 479-482.

mativity are linked through micro-regulation and self-regulation.

Control through specialized regulations

This approach is based on mechanisms specific to the particular features of media. One example of such a mechanism is the *Broadcasting Act*.

Some invoke the features specific to electronic media, which do not necessarily disappear because of digitalization. For example, Philip Napoli explains the unique character of regulations applying to communications industries in relation to other areas of activity[91]. The stakes involved in broadcasting remain broadly perceived as different from those of both other commercial industries and other public services; indeed, the issues they raise would belong to both commerce and public services[92].

Broadcasting's special treatment with respect to regulation is justified by the fact that frequencies are a public resource that cannot be employed without a mechanism that guarantees exclusive use. Thus, there necessarily has to be a mechanism that ensures that each frequency is used exclusively by the person who has the right to do so. Currently, in every country in the world, exclusive use is ensured through an attribution mechanism governed by specific legislation. There is no *a priori* right to obtain a frequency in order to express oneself. There is also no right to claim to own them all to the exclusion of other citizens.

The right to use a public resource is traditionally granted in exchange for something: broadcasters are required to fulfill so-called public interest obligations. Thus, in the United States, broadcasters have certain duties in the public interest. The Gore

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91. Philip M. NAPOLI, "The unique nature of communications regulation: Evidence and implications for communications policy analysis", [1999] 43 *Journal of Broadcasting & Electronic Media*, 565-581.
92. Eve SALOMON, *Guidelines for Broadcasting Regulation*, 2006, UNESCO, Commonwealth Broadcasting Association, 76 p., online: <http://portal.unesco.org/ci/fr/ev.php-URL_ID=22182&URL_DO=DO_TOPIC &URL_SECTION=201.html>.

report proposed to extend such obligations to cover digital broadcasters as well[93].

In his study on broadcasting regulation in six of the world's most developed countries, Wolfgang Hoffman-Riem found that:

> The idea that broadcasters should offer high-quality programs is commonplace; it crops up again and again in speeches. Just what is meant by high-quality programming however, is debatable. Proponents of the market model usually maintain that the appropriate level is reached when a significant number of recipients accept the programming. In this case, ratings are considered to be a reasonable indicator of quality. But in most instances, quality is perceived to be a more complex category, and this generally triggers considerable controversies as to criteria and how they are operationalized[94].

In Canada, the question of the quality of radio and television programs has arisen in most debates on regulations. Effective availability of national content has often been invoked as a reason to promote the maintenance and renewal of dedicated regulatory mechanisms[95].

Control through competition law

Given the relative strength of entry barriers owing to prior authorization processes in electronic media, regulations often contain rules specific to the broadcasting industry in order to prevent abuse of dominant positions. The disappearance of differences between broadcasting and telecommunications explains greater interest in recourse to competition law in order to procure regulatory tools. This kind of approach entails that the primary regulatory mechanism results from competition

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93. *Charting the Digital Broadcasting Future*, <http://www.benton.org/publibrary/piac/report.html>.
94. Wolfgang HOFFMAN-RIEM, *Regulating Media, The Licensing and Supervision of Broadcasting in Six Countries*, (New York, London: Guilford Press, 1996), p. 305.
95. Christopher S. YOO, (2002-2003), op.cit.

law. From this perspective, what are regulated are practices that can be understood through competition law concepts.

According to some, competition law can provide the required general regulation[96], but others argue that it does not permit "the *contextualised* insertion of democratic constraints"[97] essential to media regulation[98]. Monica Arino notes that the number of channels and interactivity do not in themselves guarantee that consumers have freedom of choice[99]. A larger number of channels does not necessarily generate greater variety. She acknowledges that there is very little discussion on the issue of whether the European Commission's competition policies have had an impact on audiovisual offerings in European countries. However, what seems easier to verify is the fact that the Commission has never discussed issues pertaining to pluralism. Since competition law is presented mainly as a set of rules ensuring competition in markets, it seems little adapted to the imperatives of regulation designed to strengthen pluralism[100].

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96. Campbell COWIE and Christopher T. MARSDEN, "Convergence, Competition and Regulation", (1998) 1 *International Journal of Communications Law and Policy*; S. DEAKIN and S. PRATTEN, "Reinventing the Market? Competition and Regulatory Change in Broadcasting", (1999) 26(3) *Journal of Law and Society* 323-350; W.T. STANBURY, "Regulation and Competition in Broadcasting in the Age of Convergence, in Dale ORR and Thomas A. WILSON, *The Electronic Village, policies issues of the Information Economy*, Toronto, C.D. Howe Institute, 1998, pp. 181-213; Iain C. SCOTT, "Competition law in the Canadian telecommunications industry", [paper presented at *Breaking the Mould: Reconceiving Telecommunications Regulation* at the Faculty of Law, University of Toronto, Feb. 17-18, 2000]; (2002) 37 Can. Bus. L.J. 249.
97. Louis-Leon CHRISTIANS, op. cit.
98. Laurent GARZANITI, *Telecommunications, Broadcasting and the Internet: EU Competition Law and Regulation*, 2nd Ed., (London: Sweet & Maxwell, 2003); S. DEAKIN and S. PRATTEN, op. cit.; Arlan GATES, (2000), op. cit.; Klaus W. GREWLICH, "'Cyberspace': Sector-Specific regulation and competition rules in european telecommunications", (1999) 36 *Common Market Law Review*, pp. 937-969.
99. Monica ARIÑO, "Digital war and peace: Regulation and competition in european digital broadcasting", (2004) 10 *European Public Law*, pp. 135-160; Monica ARIÑO, "Competition law and pluralism in European digital broadcasting: Addressing the Gaps", *Communications & Strategies*, nº 54, 2nd quarter 2004, p. 97.
100. Joseph FARRELL and Philip J.WEISER, "Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age", (2003-2004) 17 *Harv. J.L. & Tech.* 129.

2.3 Regulation based on network layers

Work based on convergence paradigms tends to promote approaches that consider regulation in network contexts. A range of approaches are suggested to provide regulation or, generally, a legal or normative framework for media and cultural industries; of these, the network layers approach seems to be the most advanced[101].

Authors who promote the network layers model contrast it with that of traditional regulations, portrayed as governing various industries as if they were located in isolated silos.

These regulatory paradigms were inspired by the Information Layered Architecture (ILA) model of telecommunications management. This kind of model provides an interface mechanism among the layers, based on referencing between managed objects. According to the authors, the network can be seen in terms of different levels of abstraction. Originally, this idea was useful for dealing with large numbers of telecommunications processes involving clients, services, networks and management of network components. Applied to regulation, the model makes it possible to situate functions, roles and responsibilities based on tasks and other aspects of network operation.

As the media have entered the Internet, a number of attempts have been made to understand how Internet protocol-based services could fit into existing regulatory and public policy frameworks[102].

Some argue that services functioning in accordance with Internet protocols should be included in existing regulatory categories even though adjustments may cause problems. Others consider that it is inappropriate to impose existing regulatory frameworks on activities occurring in accordance with Internet protocols. The network layers approach reflects convergence: it moves away from the idea of the press, broadcasting, etc.

101. Rob FRIEDEN, "Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach", (2002-2003) 55 Fed. Comm. L.J. 207.
102. Richard S. WHITT, op. cit,; Craig MCTAGGART, «A Layered Approach to Internet Legal Analysis», (2003) 48 *McGill L.J.* 571.

belonging to distinct realms. It also provides a paradigm that takes into account the convergence resulting from digital technology. The network layers model can be used to analyse and provide answers to public policy questions relating to Internet content and transactions, and regulation of broadband networks.

After nearly two decades in which the leading postulates tended to exclude state intervention, recent research has found that "the state never left the scene". More and more studies are emerging that analyse new regulatory trends in decentralized network environments. They point out the growing importance of private gatekeepers and control hubs in network environments[103].

Conclusion

Technological and economic changes have led a number of authors to take a second look at the postulates of media regulation. Some have perhaps been a little hasty in proclaiming the death of media regulation[104]. Generally, analysts have found that many of the reasons underlying regulation may have undergone transformations but have not disappeared, though the location, time, legal categories and even medium through which legal information is expressed have all changed.

In a world marked by the Internet, legal norms are flowing from sources different from the usual crucible. International forums are increasingly called upon to update universal norms. While governments remain major centres where norms are framed and produced, their role is tending to shift towards that of linking international normativities and stakeholder practices.

Increasingly, norms are developed in networks. Negotiation, mediation and development of new co-regulatory approaches

103. Michael D. BIRNHACK and Niva ELKIN-KOREN, op. cit.; Christopher S. YOO, "Beyond Network Neutrality", [2005] 19 *Harvard Journal of Law & Technology.*
104. Steve MITRA, "The death of media regulation in the age of the internet", [2000] 4 *N.Y.U. Journal of Legislation and Public Policy* 415-438.

are tending to replace and supplement traditional forms of regulation. The spread of network environments tends to favour the abandonment of hierarchical processes for producing norms. Norms are proposed, debated, applied and remodelled in processes that are often informal and relay values and principles resulting from consensus reached in both official forums and stakeholder communities.

In network environments, law and regulation seem increasingly fluid. Normativity appears as a sometimes transitory synergy among a number of interacting power centres. In order to obtain effective norms in such a context, law has to be expressed in such a way as to leave multi-directional openings towards various sources of normativity. Rules have to be stated in such a way as to make them able to adapt to technological change. Thus we are witnessing the emergence of law that expresses general rules designed to cover all situations requiring governance, no matter what technology is used. The result is regulation that increasingly takes the form of a number of centres of normativity. In relation to one another, the centres provide principles, links and explanations that make possible the dialogue essential to conducting activities in accordance with the values it is considered necessary to preserve.

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Should We Regulate and If So How?

Summary of the Discussion

Éric Labbé*

Introduction

The emergence of the new media is a phenomenon that calls the predominant regulatory model into question, but also creates the opportunity to review, to redefine or to reaffirm its underlying values. The transformation that the media industry is undergoing gives us a new opportunity to rethink not only the government regulatory system but also the value system that shapes it. The current climate is open to the debate and predisposes actors and researchers to deliberations that are coloured by protection of business interests, various normative positions and diverging perceptions of the new media's real impact on the industry. The text that follows is a summary of this strategic debate, as expressed by comments and discussions in response

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to the paper *Points of View on Governance and Media Regulation in the Context of Digitalization* by Professor Pierre Trudel.

The comments reflect not only the complexity of the problems facing the industry's actors, but also the will, which is shared by most of them, to respond in order to preserve the fundamental values underlying media regulation. The seven main themes presented below emerged from this debate.

But first it would be useful to reiterate the various premises and contextual elements presented by the participants to support their arguments (1). These basic postulates often explain the dichotomic nature of their positions on the advisability of regulating the new media and the appropriate regulatory strategies.

Largely determined by this divergence of postulates, the regulatory asymmetry that currently opposes the new media and the traditional media, amid essentially emerging transformations, still gives rise to divided opinions (2).

Despite these diverging perceptions, a consensus emerges in favour of the need for regulation to protect the public interest and cultural identity (3). In this way, the participants would like to maintain and to protect the economic, political and social values underlying the existing regulation, at least with respect to the content conveyed by the media.

If the will to preserve certain values is constant, opinions on the regulatory means to achieve it are divided (4). Recognition of certain profound changes in government regulation does not seem to authorize a redefinition of the role of the State, although many actors are concerned that the current regulatory strategies will soon be obsolete.

The use of technology as a complementary means of regulation also raises various concerns (5). The democratic deficiencies that the technological approach could involve as well as the dangers it may create for societal pluralism make this normative approach a questionable strategy.

From the economic standpoint, liberalization of the market and creation of healthy competition are proving to be ascendant values of media regulation (6). And yet the regulatory mecha-

nisms used for this purpose are still heavily dependent on the particularities of each national market and have to be compatible with the underlying value of protection of cultural identity, mainly through limitations on foreign ownership of the media.

Media regulation continues to be subject to freedom of expression, a value that is vital for democratic societies. If we note a contextual redefinition of this basic freedom, we also see that its impact on the legal framework could be particularly conducive to the concept of pluralism and a certain regulatory symmetry (7).

1. Premises and context

1.1 Ignorance of the new media's real impact

Before sharing their ideas, several participants pointed out that it was still difficult to determine the precise impact of the new media on business models and, *a fortiori*, the advisability of regulating them. This observation is based among other things on Canadian and British statistics showing that consumption of on-line services has not considerably changed the amount of time consumers spend in front of their television sets (R. Collins).

1.2 Structural trends

Certain structural trends were identified, however, even if their tangible and definitive economic effects cannot be. Driven by digital convergence, the new media are causing a disaggregation of the traditional model, in which the functions previously integrated into one company are now being carried out by several. This change in structure leads to a new allocation of roles (content producer / distributor / network operator), creates new contractual relations and changes relationships of power (A.Van Loon).

If the digital-convergence phenomenon characterizes the emerging media reality, it also creates competition between the various content distributors (cable distribution, satellite, Inter-

net, etc.) in favour of suppliers, which now have more choice. This freedom includes the ability to offer exclusive products, the power to control the quality of the platforms used and the opportunity to strengthen management of rights, notably through digital rights management systems (A. Van Loon).

> *If you are a content provider and you want to offer your services on a commercial basis to end users, to consumers, you need to be able to control the quality of the distribution platform […]. As a result, you can see the development of strategic partnerships or quality agreements. (A. Van Loon)*

1.3 Perspective of negligible impact

The transforming media industry inspires various scenarios that are more or less prejudicial for the traditional media. The recent migration of a portion of advertising revenues to the new on-line media is creating anxiety, resulting in calls for protection of the traditional media and abandonment of regulatory asymmetry, which, from this standpoint, favours the new media unduly.[1] According to several participants, neither this reactionary sentiment nor the resulting legal strategy appears justified as yet. The new media, embodied by digital technology and the Internet, must instead be considered complementary to the traditional media.

The complementary nature of the new media can take many forms. It is thought first that Internet platforms cannot currently finance their content and are therefore dependent on traditional content producers. Even so, Internet platforms have become indispensable for the traditional media, which are forced to use all available channels to encourage consumers to return to their main platform, where a mass audience is synonymous with substantial advertising revenues and is required to finance content. An Internet broadcast of an episode of a popular television

1. It should be noted, for example, that the Canadian Radio-television and Telecommunications Commission (CRTC) decided in 1999 to exempt new media broadcasting undertakings from the requirements of Part II of the *Broadcasting Act*, S.C. 1991, c. 11 and from regulations applicable to broadcasting undertakings. *Exemption Order for New Media Broadcasting Undertakings*, Public Notice CRTC 1999-197, Appendix A, (2000) 134/1 Can. Gaz. I, 8.

program can be used to sustain the traditional audiovisual channel instead of competing with it (P. Grant).

> *The Internet cannot be the only platform. All the platforms are needed to finance TV programs. That is what is happening with theatrical movies. Theatres' sales are a major source of revenue but, without DVD revenue, most theatrical movies would not cover their costs and many of them would be commercial failures. [...] The Internet will be more complementary than competitive. It is interesting, in that regard, that there has not been any noticeable decrease in conventional TV viewing in the past five years. (P. Grant)*

This complementary nature is also synonymous with pluralism. The Internet can be considered a unique historical opportunity to disseminate an assortment of cultural content. Unlike the traditional media, the emerging channels are not constrained by the golden rule that content must appeal to the masses. From this perspective, the new media represent not so much a threat as a vehicle for diversity, enabling any production to find a distribution channel.

1.4 Perspective of decisive impact

The complementary nature of the new media may be experienced as a source of relief by those players whose operations are most threatened. But this idea is not shared by all the participants. With their heightened awareness of the music industry's experience with the Internet, some fear that the current statistics are not capable of revealing the profound changes that await the market, and that this latent transformation is quickly rendering the regulatory status quo obsolete (J.-P. Le Goff).

1.5 Dichotomy of perspectives

In their perception of the new media's impact, some participants evince a relatively conservative attitude: they want to save the industry from a needless economic and regulatory abyss, described by one as a "ruinous downward spiral". Others, however, adopt an avant-garde position, calling for industry players and legislative authorities to take quick, comprehensive action to deal with imminent phenomena.

2. Relevance of regulatory asymmetry

2.1 Rationality of regulatory asymmetry

Being generally moratory or transitory, the phenomenon of regulatory asymmetry involves a specific regulatory approach for certain players or activities, notably in a situation involving an emerging and transforming market. The resulting legal inequality is closely related to the changes occurring on the market and can be called into question with each significant change. The increasing presence of new platforms and the migration of advertising revenues provide the opportunity to scrutinize the existing regulatory asymmetry, which favours the new media, and to examine the advisability of subjecting them to the existing legal framework or, instead, lightening the regulatory burden on the traditional media.

2.2 Preservation of regulatory asymmetry

Like the debate over the real impact of the new media, the participants' perception of the relevance of the existing regulatory asymmetry is not unanimous. At one end of the spectrum, some believe that regulatory asymmetry is in tune with the asymmetry of the market. The complementary nature of Internet platforms does not indicate that the new media are "cannibalizing" the traditional media. Moreover, nothing indicates that the current situation is substantially undermining the relevance of regulation of the traditional media. On the contrary, the economic and intellectual property systems continue to be decidedly favourable to the traditional media and thus justify a regulatory system conducive to the development of new media (P.Grant).

> *The issue is not 'Is there asymmetry that calls for regulation?' but 'Is there asymmetry and is it causing cannibalization in a material way?' […] I do not see that cannibalization happening […] (P. Grant)*

Preservation of regulatory asymmetry is also encouraged by the idea that each medium has to be regulated separately, as a function of the specific needs it creates. The causal and deterministic argument that economic and technical convergence necessarily outweighs regulatory convergence is therefore

rejected. Contrary to the new principle of technological neutrality now being disseminated in legal circles, it is instead proposed that different regulatory solutions be applied as a function of the media technologies used. France's transposition of Europe's Telecom Package[2] of 2002 provides an illustration of the technology-specific regulatory approach by distinguishing on-line electronic communications from on-line audiovisual communications (S. Regourd). Similarly, Britain's *Communications Act*[3] of 2003 specifically excludes Internet content from its field of application (R. Collins).

> *Ce qui me paraît erroné, c'est de vouloir raisonner sur la question de la réglementation d'une manière univoque, en confondant les médias traditionnels et les nouveaux médias. Je pense que nous devons amener des réponses différentes. C'est ce qu'exprime la tendance dominante du droit communautaire européen.*
>
> *La question de la convergence réglementaire, qui est fondée sur un déterminisme technologique outrancier, est aujourd'hui dépassée du point de vue du droit positif […]. Vouloir confondre les contenants avec les contenus serait reproduire cette erreur historique qui avait amené à confondre la téléphonie et la radio. (S. Regourd)*

2. The reference is to a legislative package that includes a framework directive and many specific directives and decisions: *Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services*, OJEC L 108 of 24 April 2002 (Framework Directive) ; *Decision no. 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community*, OJEC L 108 of 24 April 2002 (Radio Spectrum Decision) ; *Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities*, OJEC L 108 of 24 April 2002 (Access Directive) ; *Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services*, OJEC L 108 of 24 April 2002 (Universal Service Directive) ; *Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the protection of privacy*, OJEC L 201 of 31 July 2002 ; *Directive 2002/77/EC of the Commission of 16 September 2002 on competition in the markets for electronic communications networks and services*, OJEC L 249 of 17 September 2002.
3. *Communications Act 2003* (2003 c. 21), hereafter "*Communications Act*".

> *Ofcom [the regulator of broadcasting and telecommunications in the United Kingdom] has no power to regulate Internet content (or content received on 3G telephones). This is clearly not technologically neutral regulation, but it does not seem to have engendered generally irresponsible or antisocial behaviour from service providers using media beyond Ofcom's reach. (R. Collins)*

Still, certain jurisdictions may believe that exploitation of a new medium by owners of traditional media should be subject to the existing regulation because of the privileged economic position these players already enjoy. For example, this economic exception would make it possible to distinguish, from the regulatory standpoint, Web dissemination associated with a traditional media company from that by any private company (F. Sauvageau).

2.3 Obsolescence of regulatory asymmetry

At the other end of the spectrum of the matter of regulatory asymmetry, the participants tend to be more concerned about regulation of the content provided by new media and the hyperchoice available to consumers of digital technologies (J.-P. Le Goff). They fear, for instance, that the effectiveness of quotas for cultural content is threatened by the availability of choice aggravated by the Internet. The regulatory logic used for broadcasting, which obliges traditional media to invest in cultural content in return for the privilege of owing a public medium, seems in this respect more compromised than ever. Moreover, they see a new regulatory trend toward consumer choice at the expense of content quality (P. Trudel). The migration of advertising revenues to on-line platforms seems to add an additional obstacle to the system's sustainability. These concerns force us to recognize that it is increasingly necessary to renew the social contract in light of the new technical reality (P.-L. Smith). In this way, it is hoped that we can go beyond the debate that needlessly opposes civil society and the media industry, prevent an invasion of foreign media by means of the new media and thus benefit cultural identity (C. Larouche).

> *I favour an integrated 'technologically neutral' regime based on an 'Internet' regime of general authorization and effective application of general law – be it competition, defamation or obscenity law. If broadcasters are to be treated differently, they will increasingly be operating at a disadvantage in comparison with rivals using online media. But if broadcasting law and regulation become the normative basis of all regulation of electronic communication service, then an unacceptably negative impact on freedom of expression seems almost inevitable. (R. Collins)*

3. Need to regulate: public interest and cultural identity

3.1 Beyond technical determinism

On the margins of the debate over the relevance of regulatory asymmetry, several commentators and stakeholders insisted on the importance of continuing to protect the public interest and cultural identity. There is a consensus that the current regulation is not based substantially and solely on the scarcity of frequencies, but more on economic, political and cultural rationalities. In this sense, it does not appear advisable to move toward deregulation on the pretext that digital technologies are "inexhaustible" (P. Juneau). The phenomenon of technical convergence must not be used to justify the withdrawal of content rules or to call into question the logic of the general interest, which characterizes the State's normative approach (S. Regourd). Concretely, nothing in Web 2.0 or the push/pull technology distinction makes it possible to determine what constitutes desirable content or to believe that regulation has to be more lax (T. Gibbons).

> *The push/pull point does not necessarily say anything about whether regulation is desirable. The real issue is how one can exert leverage at the point of control. (T. Gibbons)*

3.2 Importance of the public interest and cultural exception

On the contrary, the State should quite legitimately regulate content to protect the public and the "cultural exception". Despite the current logic of deregulation and market competition, these fundamental interests have to be preserved and imple-

mented as responsibilities of the State. Regulation of content is central and must be separated from regulation of technology. In this sense, it is necessary to challenge the idea that competition law can protect the general interest and cultural exception (S. Regourd).

Applied in such countries as Canada, France and Australia, the traditional system of national quotas remains an entirely legitimate strategy to protect the cultural identity of audiovisual and radio content. This system allows for dissemination of foreign content and protection of national content, and helps avoid "cultural tragedies" and acculturation of the masses (P. Grant).

> *La culture n'est pas une marchandise comme les autres. La question culturelle ne peut être abandonnée au marché. Cela signifie que la puissance publique doit exercer un certain nombre de responsabilités (S. Regourd).*

4. Regulatory change and the role of the State

4.1 Sustainability of the State's role: the concept of jurisdiction

A number of participants recognize that the transformation occurring in the media industry involves profound changes in traditional regulation by the State. This transformation seems to be causing an internationalization of legal sources, modification of their content and a relative reduction of the perimeter of government regulation. They insist, however, that this profound change does not call into question regulation of the traditional media or the State's role in determining applicable rules (S. Regourd).

The sustainability of the State norm and role is based, among other things, on the still-current concept of jurisdiction. Proponents of this position reject the argument for a non-national space created by a transnational digital environment. On the contrary, they believe it is still possible to associate a market, a language and a social community with one or more specific jurisdictions. The economic, contractual and social relationships that arise in the digital environment generally take root in territorially specific places. For example, the blogs disseminated

by the French constitute a specific market intended for the French (T. Gibbons).

Legal categories, such as intellectual property, are also still defined by the concept of jurisdiction. It is the same for the different players in the new media industry, such as Internet service providers, suppliers of on-line content and, more generally, the new business models. They remain closely associated with a specific jurisdiction with the power to exercise regulatory authority through such means as licenses and specific authorizations (T. Gibbons).

In addition, the relocation of businesses to regulatory havens is still an epiphenomenon that must not be overemphasized, causing us to forget about the importance of promoting the public interest through government regulation. Participants stressed the importance of not subjecting general law and its basic standards, especially as regards defamation and obscenity, to the idea conveyed by the Internet of the quintessence of freedom (T. Gibbons).

> *The loss of entry control over U.K. television markets has meant, however, that the government's ability to secure desired behaviour (e.g. provision of public-service content) from licensees has declined. For example, Ofcom has weakened the demands for public-service programming it has traditionally made on advertising-funded television in recognition of the adverse economic impact on broadcasters of increased competition (whether via satellite or the Internet). (R. Collins)*

4.2 Primacy of the democratic process

The persistence of the Regalian role, which some consider a withdrawal into the concept of the nation state, is also motivated by the importance accorded the democratic process that traditionally characterizes government norms. It is felt that social, economic and technical standards do not offer the same guarantees of legitimacy and predictability as laws adopted by the State and thus may adversely affect protection of the general interest (T. Gibbons).

> *We have to distinguish between politically legitimate law and other norms. The fact that norms are emerging from user communities or commercial communities does not necessarily mean they have the same status as politically legitimate norms. (T. Gibbons)*

4.3 Limitations and conditions of alternative means of regulation

From the same perspective, a number of participants commented on the effectiveness of self-regulation and co-regulation as means that are alternative or complementary to government regulation. As a voluntary norm, self-regulation constitutes a normative approach that is difficult to reconcile with the public interest. It is effective only when the actors' private interests correspond to that of the general will (T. Gibbons). If the desire of a business to subject itself to self-regulation can nevertheless be motivated by the wish for an image of accountability, it remains that the search for equity and protection of the public can be ensured only by market logic and voluntary marshalling of private interests (T. Gibbons). From this standpoint, self-regulatory solutions should be implemented in "the shadow of the traditional regulatory hierarchy" and not, as could be suggested, as an alternative means of regulation (R. Collins).

> *A culture of extensive consultation and of, qualified, transparency has become rooted. But there are few means for people to directly affect the decisions and practices of bodies such as the BBC (self-authorising), Ofcom (established as an independent and expert body subject to political direction in limited circumstances and judicial review only when* prima facie *acting perversely) and the self-regulatory bodies on which much increasingly falls. (R. Collins)*

Seen as a process allowing consensus building among regulatory actors, the concept of co-regulation did not give rise to specific comments. The participants, however, wanted to offer a different and more precise definition, which, coming from the British context, makes co-regulation a "botté en touche" strategy whereby the industry is responsible for implementing general standards determined by law. This strategy has been used in many areas, including quality of advertising content and spon-

sorship, and could be transposed for regulation of on-line content, targeting Internet service providers in particular (T. Gibbons).

4.4 Importance of interdepartmental co-operation

The need for co-operation between various government departments and public interest bodies was also stressed. If we must recognize that existing regulatory policies have value and a future, it is still vital that we try to respond to the problems created by the new digital environment, especially as regards copyright and protection of cultural markets. This objective can be achieved, at least within the government apparatus, only if the agencies, commissions and departments responsible for these matters co-operate closely. For example, in the Canadian context it is vital to understand that, in this era of technical and economic convergence, the Canadian Radio-television and Telecommunications Commission (CRTC) can no longer function without a precise framework provided by elected officials. It is up to the executive power to take action and to manifest its will to ensure greater co-operation between the public regulatory players (R. French).

4.5 Risks of a wait-and-see strategy

Contrary to the position in favour of the sustainability of the government's role in regulation, certain participants suggest that the normative impact of the transformation of the media industry is more profound and that it is important to immediately prepare a normative response adapted to the imminent reality of an industry shaped by new and powerful "market forces". The current observation of media regulation that is effective and adapted may quickly become erroneous and obsolete. In this sense, it appears advisable to do more research on consumer needs and to examine means of regulation suited to a technical context characterized by diffuse control levers (J.P. Le Goff).

4.6 Conditions of adapted regulation: centres of normativity and incentives

Technical convergence, consumer hyperchoice and the transnational nature of the Internet have created a context that is increasingly resistant to traditional regulation. To the extent that all players can easily withdraw from the traditional legal framework, it is important that the State recognize and influence "centres of normativity", and even encourage or, to the extent possible, force the positioning of players with power over regulated activities (P. Trudel).

According to the logic of this strategy, the idea of greater consumer accountability is laudable but may be illusory, since consumers cannot individually control the market (T. Gibbons). The participants recognize, however, that consumer accountability is an interesting component of an adapted regulatory system, if one rejects the option of an essentially prohibitive regulation that has become strategically obsolete. It appears more desirable to use incentives, which are better adapted to the age of hyperchoice and the transnational digital space (R. Collins).

Without denying the importance of the role of general laws relative to public order, it is also conceded that the application of more targeted regulation, such as the model of "network strata", could be justified to respond effectively to antisocial content on open digital networks such as the Internet (T. Gibbons).

5. Technology as a means of regulation

5.1 Skepticism

The option of using technology to regulate activities in digital environments gave rise to many comments. The participants do not necessarily recognize that technology is assimilable to legal normativity, as suggested by Lawrence Lessig and his famous adage that Code is Law. Regulation by means of technology appears, for example, to be deficient vis-à-vis the democratic process and legitimacy. Technical standards are conceived of

more as tools serving the operation of a service of the information society, such as the TCP/IP[4] Internet protocol, rather than as true norms designed to regulate the content offered by such a service (T. Gibbons).

> *There is a difference between rules created to facilitate a service in a technical way, for example, technical protocols, and rules about the content of a service. I am not too convinced by Lessig's idea of code being law. (T. Gibbons)*

5.2 Technical regulation and jurisdiction

Despite a degree of skepticism, a good number of participants contemplated the possibility of using technical mechanisms to re-establish territorial control over transmission of on-line content. Many interests of a jurisdictional nature could thus be given greater protection in the new digital universe, such as cultural content and intellectual property rights. For example, they contemplate using the ability to exercise technical control over Internet service providers to censor foreign content or, as with the example of DVD regionalization, to filter foreign Internet users to protect access to content not yet available in their territory (P. Grant) (Richard Collins).

5.3 Possibility of circumventing technology

The proposed strategies constitute indirect regulation that uses technology to achieve legislative, economic or contractual objectives. It is important to note that their implementation involves considerable difficulty. For instance, filtering based on the nationality of IP addresses is not entirely effective (R. Collins). Consumers can access the Internet by using "foreign" or "non-territorial" IP addresses; moreover, they can use proxy servers to defeat measures that control access to protected content.

4. Editor's note: TCP (transmission control protocol) is a set of rules used along with IP (the Internet protocol) to send data.

> *Peer-to-peer networks, iTunes, podcasting and devices such as Slingbox (which takes a broadcast video stream, gives it an IP address and makes it accessible from a remote location over the Internet) mean that governments' ability to secure desired behaviour from firms as a condition for access to national markets has declined and that individuals' ability to consume services from outside national boundaries has increased enormously – as has their ability to consume material, such as 'user-generated content' via websites such as* www.Youtube.com. *(R. Collins)*

5.4 Pluralism and democratic model

The very idea of technical censorship of foreign content, such as through a licensing system for Internet service providers, met with considerable criticism. This approach appears inimical to pluralistic societies where many cultural communities co-exist. There are concerns that such a solution calls to mind authoritarian political systems; in China, for instance, Internet service providers are obliged to censor content that runs counter to the regime's ideals. In reality, the State must choose between a liberal system and censorship as a function of the commercial and political rationalities specific to it. In a democratic and pluralistic society, it does not appear to be advisable to adopt regulation that prevents immigrants and cultural communities from accessing foreign content (R. Collins).

This criticism can be qualified in that a system to license Internet service providers constitutes indirect regulation that should be debated democratically between the different social players. Cyberspace gives a deceiving image of absolute freedom, probably resulting from a certain technical determinism, which it is imperative to resist. There are sufficiently effective regulatory mechanisms that must be discussed according to a democratic process (T. Gibbons).

6. Importance of creating a competitive market

6.1 Specific regulation: from licenses to general authorizations

The creation of a competitive market represents a rising value of media regulation. The oversight models likely to guarantee its implementation range, in principle, from regulation specific to the media, including a system of prior authorizations (licenses), to regulation that instead relies on general rules of competition law. It appears from the observations presented that protection of the electronic media from the abuses of dominant positions can arise from specific regulation, even when the traditional licensing system is replaced, so as to liberalize activities, by general authorization of access to the market (R. Collins).

Transposing the *Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services*[5], The British *Communications Act* of 2003, for example, introduces into its media regulation devices arising from concepts of competition law, in accordance with the will expressed by the European legislator (R. Collins).

Still, this link with competition law creates new difficulties related to the lengthy process required to resolve complaints arising from an anti-competitive situation. In the United Kingdom, such lawsuits may take up to three years to be heard. Such a delay may be equated with a veritable denial of justice and stimulate a favourable perception of a system of prior authorizations (R. Collins).

6.2 Heritage of State monopolies

To create a competitive market in the broadcast sector, one often must deal with former State monopolies whose heritage has a strong influence on the market. The British experience shows that these institutions can continue to dominate the market for long periods. With a radio share of more than 50 % and more than 35 % for television, the BBC still enjoys a privileged position. The diversification of its operations, mainly through on-line

5. Supra, note 2.

services, and the support it continues to receive from the State, indicate that it could become an "enemy of diversity." It is felt, however, that there is no need to change this political and legislative stance, since the State will inevitably suffer a gradual loss of control over access to the media market (R. Collins).

> *The BBC remains a highly popular and widely trusted organisation but there is an increasing (but still minoritarian) concern about its size, internal efficiency, market power and possibly adverse effect on innovation, diversity and pluralism. (R. Collins)*

6.3 Media ownership and concentration

Restrictions on foreign ownership often constitute a regulatory strategy designed to help protect national, cultural and economic Interests. In response to an Industry Canada recommendation in favour of abolishing such limitations, certain participants examined Europe's approach to foreign ownership.

Although harmonization was attempted early in the 1990s, European law has thus far shed no specific light on limitations on foreign ownership, which continues to be a matter for national regulation. Rather, the European Community aims to promote media pluralism and to combat concentration. Creating a domestic market, the European regulatory framework nevertheless prevents member states from imposing special restrictions on the participation of nationals from the European economic space (A. Van Loon).

From this standpoint, Britain's *Communications Act* of 2003 addressed and provided oversight of the problem of concentration of ownership, but abolished any restriction on the holding of interests by foreigners, using a logic calling for deregulation and openness of the British market (R. Collins). Such a restriction no longer appeared to be necessary, since the United Kingdom uses, develops and supports the BBC, a public broadcaster that is the veritable champion of the British market (T. Gibbons).

The regulatory approach to foreign ownership therefore depends on the market specific to each member state, as suggested by the limitations specified by Italian, French and Span-

ish law. We must note, however, that restrictions on foreign ownership do not adequately prevent concentration of ownership, which is often typical of small markets (R. Collins).

As regards concentration, with *Regulation (EC) no. 139/2004 of the Council of 20 January 2004 on the control of concentrations between undertakings* [6] guaranteeing the opening-up of European markets to competition, it is interesting to note that the Commission generally believes that the threats related to the advent of large media companies in other countries are not creating specific competition problems on the European level, to the extent that these companies are generally present on various national markets. Still, a referral system exists in the event that a member state wishes to oppose such a merger. Whereas certain national markets are broad enough to sustain a diversity of ownership without regulation, others require intervention. This referral system aims to allow a review of concentration at the best-placed level to assess the potential effects (A. Van Loon).

7. Freedom of expression and its impact on regulation

7.1 Media and terrorism: a less consensual freedom

If it is not advisable to question the sustainability of fundamental rights, given the new media reality, it is noted that the security-related rhetoric that characterizes the post 9/11 era is having specific consequences on regulation of communication. The generous acceptance that generally defines freedom of expression appears to be increasingly nuanced by the will to manage terrorism-related risks. The recent standards still aim to promote and to stimulate a diversity of opinions and values, but they also express the idea that limits have to be set. Referring to an "appropriate level of freedom of expression", the new British regulation of 2003 illustrates this trend and contributes to certain concerns regarding a basic freedom that is less and less consensual (R. Collins).

6. OJ L 024 of January 29, 2004.

7.2 Normative support for media pluralism

Still, freedom of expression provides a promising paradigm for the pluralism objective of the European Community's media law. Pursuant to Article 10 of the *European Convention on Human Rights*,[7] freedom of expression is conceived not only from the standpoint of those who impart information but also from that of those who receive it. This two-edged basic freedom makes it possible not only to ensure the media are protected from unjustified censorship by the State apparatus, but also to guarantee consumers have diverse sources of information and opinion (S. Regourd).

> *La liberté d'expression ne saurait se concevoir uniquement du point de vue des émetteurs du message, mais aussi des récepteurs. Ce qui doit être consacré est un droit à une certaine information honnête et pluraliste, applicable tant aux nouveaux médias qu'aux médias traditionnels. (S. Regourd)*

7.3 Normative support for regulatory symmetry

Freedom of expression can also constitute a legal argument against a certain discrimination between the various media. It is thought, for example, that the proposed revision[8] of the Television without Frontiers directive[9] involves regulation of audiovisual content that discriminates against certain digital media. If the proposed legal framework applied only to audio-

7. *Convention for the Protection of Human Rights and Fundamental Freedoms*, Nov. 4, 1950, Rome, ETS no. 005, on line: http://conventions.coe.int/Treaty/en/Treaties/html/ 005.htm.
8. *Proposal of 13 December 2005 for a Directive of the European Parliament and of the Council amending Council Directive 89/552/EEC on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities*, on line: http://europa.eu/scadplus/leg/en/lvb/l24101a.htm.
9. *Council Directive 89/552/EEC of 3 October 1989 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities*, OJ L 298 of 17.10.1989, p. 23–30.

visual media (linear[10] and non-linear[11]), it would constitute regulation that is technologically non-neutral with respect to the other Internet media, such as digital radio and newspapers. Such a distinction creates, especially between the non-traditional media, a new regulatory asymmetry that is foreign to the protection of freedom of expression provided under Article 10 of the *European Convention on Human Rights*. Moreover, it is felt that non-linear media, embodied by video on demand, should not be covered by the revision, since these services tend to be exclusively national and therefore fall outside the Directive's field of application (A. Van Loon).

> *From the standpoint of fundamental rights, I cannot see what justifies imposing more regulation on audiovisual media services. Why exempt the press, magazine publishing and book publishing but impose rules on audiovisual media ? Also, I cannot see any justification under Article 10 of the* European Convention on Human Rights *for drawing a distinction between websites owned by companies that are regulated in a strict way and other websites. (A. Van Loon)*

Conclusion

The question of regulation of new media offers a spate of normative avenues that legislators and industry players will have to discuss further. The diversity of perspectives on the real impact of the new media as well as divergences regarding the appropriate regulatory means and strategies illustrate the degree to which a consensus is not imminent. This diversity of positions is problematic if we consider that the transformation of the media industry could quickly render the existing legal framework obsolete. From this standpoint, inertia and retrenchment of positions appear to be the worst solutions. It is imperative that we continue research on the economic and social impacts of the

10. Linear services are audiovisual media services received passively by the user, such as traditional television programs, whether by traditional means of distribution, the Internet or cellular telephony (« push » content).
11. Non-linear services are unprogrammed audiovisual media services that are requested by the user, such as video on demand (« pull » content).

new media and above all public discussions involving experts on the industry, its players and regulatory authorities.

Public debate and investment in the democratic process by industry players are especially needed if we are to provide, if necessary, a comprehensive regulatory strategy that is vital to sustain the public interest and to protect cultural identity.

APPENDICES

A Few Statistics on the Canadian Situation

List of Tables

Appendix A: Penetration and Use of Devices and Services

Table 1.1
Penetration and use of video devices and services, 18 years and over, 2005

Table 1.2
Penetration and use of audio devices and services, 18 years and over, 2005

Table 1.3
Penetration and use of Internet services, 18 years and over, 2005

Table 1.4
New ways of accessing video content, by age group, 2005

Table 1.5
New ways of accessing audio content, by age group, 2005

Table 1.6
Ownership of mobile devices among Canadians aged 12 and over

Appendix B: Radio Listening, Television Viewing and Internet Use

Table 2.1
Changes in weekly per capita listening to conventional radio, by age group, 1999-2006

Table 2.2
Changes in viewer average weekly television viewing hours, by age group, 2002-2003 to 2005-2006

Table 2.3
Changes in viewing share (% of hours)
of television services by type of service,
2002-2003 to 2005-2006 (BBM-NMR metered data)

Table 2.4
Distribution of Canadians who use the Internet,
by age group, 2004 to 2006

Table 2.5
Share of time spent on the Internet among other media and entertainment activities
(TV, radio, reading, music, Internet, DVD and video games), by age group, 2003 to 2006

Appendix C: Financial Data

Table 3.1
Changes in advertising revenues by media ($million), 1997 to 2005

Table 3.2
Changes in profit before interest & taxes (PBIT) (% of revenues), commercial radio, 1997 to 2006

Table 3.3
Changes in profit before interest & taxes (PBIT) (% of revenues), commercial television, 1997 to 2006

Appendix A

Penetration and Use of Devices and Services

Table 1.1
Penetration and use of video devices and services, 18 years and over, 2005

	Total – Canada	Anglophones	Francophones
Over-the-air distribution services	12 %	10 %	17 %
Analog distribution services	40 %	41 %	38 %
Digital distribution services	44 %	44 %	42 %
VHS player	82 %	82 %	81 %
DVD player	79 %	80 %	75 %
Personal video recorder (PVR)	4 %	4 %	2 %
Video-on-demand (VOD)*	5 %	5 %	4 %
Mobile television subscribers	< 1 %	< 1 %	< 1 %

*Past month.
Source : CBC/Radio-Canada, Media Technology Monitor (MTM)[1], 2005.

In 2005, Canadians were looking for diversity in television services : 44 % of anglophones and 42 % of francophones used digital distribution services, which gave them significantly more choice in televised content. These proportions should continue to grow. Also appreciated was the personalization of television offerings made possible by widely available devices such as the VHS player (82 %) and DVD player (79 %). Video-on-demand (VOD) and Personal video recorders (PVRs), which extend the personalization of listening choices even further, are emerging. In this increasingly varied technological world, there is still a not insignificant share of Canadians who use only over-the-air distribution services – 10 % of anglophones and 17 % of francophones.

1. The CBC/Radio Canada Media Technology Monitor (MTM) is conducted annually by CBC Research and is used to track the adoption of media technologies and their progression through the adoption cycle. The results for 2005 are based on telephone interviews of a sample of 12.000 adults 18 and over – 6.000 francophones and 6, 000 anglophones.

Table 1.2
Penetration and use of audio devices and services, 18 years and over, 2005

	Total – Canada	Anglophones	Francophones
Pay audio listener*	21 %	21 %	21 %
iPods, MP3 player penetration	21 %	23 %	14 %
Satellite radio subscribers	<1 %	<1 %	<1 %
Download podcast*	6 %	7 %	3 %

*Past month.
Source: CBC/Radio-Canada, MTM, 2005.

While almost all Canadians aged 18 and over listen to radio (90 %), we noted that one-fifth of Canadians (anglophone and francophone) are looking for more diversified and individualized radio: 21 % use pay audio services and 21 % own an iPod or MP3 player. In addition, 6 % turned to podcasts.

Table 1.3
Penetration and use of Internet services, 18 years and over, 2005

	Total – Canada	Anglophones	Francophones
Internet Connection at Home	72 %	75 %	60 %
1. Dial-up	15 %	13 %	20 %
2. Broadband	56 %	61 %	39 %
Audio downloading*	18 %	20 %	12 %
Audio Streaming*	21 %	23 %	16 %
Video downloading*	10 %	11 %	7 %
Video streaming*	16 %	17 %	14 %

*Past month.
Source : CBC/Radio-Canada, MTM, 2005.

Seven Canadians in ten have Internet access at home. Approximately two in ten download audio content and/or listen to streaming audio. In terms of video content, at least one in ten uses one or both of those technologies. We note that more anglophones use these different types of services.

Table 1.4
New ways of accessing video content, by age group, 2005

	Anglophones				Francophones			
	18-34 yrs	35-49 yrs	50-64 yrs	65 yrs +	18-34 yrs	35-49 yrs	50-64 yrs	65 yrs +
Personal Video Recorder (PVR)	5%	5%	3%	1%	2%	3%	2%	1%
Video-on-Demand (VOD)*	6%	7%	3%	2%	7%	5%	3%	1%
Video streaming*	26%	19%	13%	5%	26%	15%	8%	3%
Video downloading*	22%	11%	5%	2%	16%	5%	3%	0%

*Past month.
Source: CBC/Radio-Canada, MTM, 2005.

As expected, new ways of accessing video content are most popular among the youngest group of respondents, but of these new services, by far the most popular among respondents aged 18 to 34 are watching streaming video and downloading video content.

Table 1.5
New ways of accessing audio content, by age group, 2005

	Anglophones				Francophones			
	18-34 yrs	35-49 yrs	50-64 yrs	65 yrs +	18-34 yrs	35-49 yrs	50-64 yrs	65 yrs +
iPod, MP3 player penetration	42 %	24 %	13 %	3 %	23 %	16 %	7 %	2 %
Download podcast*	12 %	9 %	4 %	1 %	5 %	2 %	2 %	0 %
Audio streaming*	38 %	25 %	14 %	6 %	28 %	17 %	10 %	3 %
Music Downloading*	41 %	18 %	3 %	3 %	26 %	11 %	4 %	2 %

*Past month.
Source : CBC/Radio-Canada, MTM, 2005.

Young Canadians seem to have turned to other platforms that provide greater flexibility as to when, where and how they access music and other audio content. Two anglophones in five and one francophone in five aged 18 to 34 say they own a digital music player, and effectively the same proportions hold for those who had streamed audio and/or downloaded music content.

Table 1.6
Ownership of mobile devices among Canadians aged 12 and over

	2003	2004	2005	2006
Cell phone	50%	56%	58%	58%
Laptop computer	10%	15%	17%	–
Handheld Wireless E-mail device	–	2%	4%	–

Source: Solutions Research Group, *Fast Forward Trend Analysis*, prepared for the CRTC (August 2006).

Nearly three Canadians in five (58%) aged 12 and over own a cell phone. The penetration rate for that device has leveled off, however, remaining unchanged from 2005 to 2006. Laptop computers continue to make inroads, but without ownership being widespread: fewer than one Canadian in five (17%) owned a laptop in 2005, compared to one person in ten two years earlier. Portable wireless electronic mail devices (like the *Blackberry*) are still emerging: 4% of Canadians owned one in 2005.

Annexe B

Radio Listening, Television Viewing and Internet Use

Table 2.1
Changes in weekly per capita listening to conventional radio, by age group, 1999-2006

	Number of listening hours / week							
	1999	2000	2001	2002	2003	2004	2005	2006
12 yrs +	20,5	20,3	20,1	20,2	19,5	19,5	19,1	18,6
Teens 12-17 yrs	11,3	10,5	10,1	9,4	8,5	8,5	8,6	7,6
Adults 18-24 yrs	17,3	18,1	17,3	16,7	16,3	15,7	15,2	14,1
Adults 25-34 yrs	21,3	20,6	20,5	20,1	19,3	19,3	18,1	18,3
Adults 35-49 yrs	21,6	21,8	21,6	21,7	21,3	21,5	21,0	20,6
Adults 50- 54 yrs	21,6	21,9	21,6	22,3	21,8	21,6	21,5	21,0
Adults 55-64 yrs	23,2	22,8	22,7	23,1	21,9	22,1	21,9	21,1
Adults 65 +	22,7	22,4	22,3	22,8	22,3	22,3	21,6	21,3

Source: BBM InfoSys audience measures (meter) cited in CRTC, *Broadcasting Policy Monitoring Report*, 2007.

Canadians are listening to conventional, over-the-air radio less and less. Since 1999, per capita weekly radio listening levels are decreasing by almost two hours a week. The decrease is seen across al age groups. The decrease is, nonetheless, more marked among those under 35. It remains to be seen if that group will, with age, continue to listen to radio less often than their elders.

Table 2.2
Changes in viewer average weekly television viewing hours, by age group, 2002-2003 to 2005-2006

	Number of viewing hours / week (BBM-NMR metered data)			
	2002-03	2003-04	2004-05	2005-06
2 yrs +	28,6	28,6	28,1	27,6
Children 2-11 yrs	18,8	19,3	20,5	18,8
Teens 12-17 yrs	21,1	21,3	21,3	20,0
Adults 18 yrs +	30,6	30,7	29,9	29,6
Adults 18-34 yrs	24,4	24,6	23,3	22,5
Adults 18-49 yrs	25,9	26,0	25,0	24,4
Adults 25-54 yrs	27,3	27,5	26,5	25,9

Source: BBM InfoSys audience measures (meter) cited in CRTC, *Broadcasting Policy Monitoring Report*, 2007.

Changes in measurement methods preclude an analysis of changes in viewing over a longer period. Viewing for all Canadians has decreased by one hour a week since 2002-2003. The decrease is especially pronounced for people aged 18 to 34.

Table 2.3
Changes in viewing share (% of hours) of television services by type of service, 2002-2003 to 2005-2006 (BBM-NMR metered data)

	2002-2003	2003-2004	2004-2005	2005-2006
Services canadiens				
Total English- and French-language	73,9 %	76,2 %	77,1 %	77,4 %
1 – Traditional public[1]	9,3 %	10,1 %	9,4 %	9,8 %
2 – Traditional private	31,9 %	32,9 %	33,0 %	31,4 %
3 – Pay and specialty channels	31,1 %	31,3 %	32,0 %	33,7 %
4 – Digital specialty channels	1,6 %	1,9 %	2,7 %	2,5 %
Other languages	1,2 %	1,3 %	1,4 %	1,2 %
Total Canadian services	75,2 %	77,5 %	78,3 %	78,7 %
Foreign services	22,2 %	19,9 %	19,2 %	18,5 %
Other services (PVs, others)	8,7 %	8,8 %	9,7 %	9,1 %
Total	100 %	100 %	100 %	100 %

Source: BBM InfoSys audience measures (meter) cited in CRTC, *Broadcasting Policy Monitoring Report, 2007.*
N.B. Numbers have been rounded off and percentage totals may not always equal exactly 100.
1. Includes educational services.

In 2005-2006, Canadians watched more Canadian television programs (nearly 79 % of viewing hours) than in 2002-2003 (75 %). It was foreign services (mainly American) that lost ground to Canadian pay and specialty services. Overall, traditional services – both public and private – thus kept their share of the market.

Other BBM data collected for previous years, using the radio and television diary rather than the meter method, show that the rise in the viewing share of Canadian services is a trend that began soon after 2000. A good portion of the increase in viewing hours for specialty and pay services has occurred since at the expense of foreign services.

Table 2.4
Distribution of Canadians who use the Internet, by age group, 2004 to 2006

	2004	2005	2006
Total	*70 %*	*74 %*	*72 %*
12-14 yrs	95 %	87 %	95 %
15-19 yrs	93 %	96 %	96 %
20-29 yrs	83 %	87 %	86 %
30-49 yrs	76 %	80 %	77 %
50 yrs +	48 %	53 %	51 %

Source : Solutions Research Group, *Fast Forward Trend Analysis,* prepared for the CRTC (August 2006), p. 34. Numbers refer to overall Internet use (counting all points of access) in the previous 7 days.

The number of Internet users seems to have leveled off to some extent. As the following Table shows, however, Canadians across all age groups use the Internet for an increasingly large part of the time they devote to media activities and entertainment.

Should we conclude from this that increasingly intensive use of the Internet will affect the amount of time spent with other media and in particular, television viewing? Not necessarily, says analyst Ben Veenhof of Statistics Canada, who has studied the results of a major survey on how Canadians spend their time[1] that grouped respondents according to time spent on personal use of the Internet: non-users (less than 5 minutes a day); moderate users (5 minutes to one hour a day); and heavy users (more than one hour a day).

Veenhof notes that the data from this survey do not tell us whether respondents have reduced their television viewing time over the years, but concludes that Internet users are not very different from non-users in the time they spend watching television. "The findings indicate that heavy Internet users are in fact regular television viewers who still find time for this traditional medium in spite of their choice to go online"[2]. They find more time than other respondents to listen to music in conventional formats (CDs, tapes and vinyl records), and to read texts in traditional formats (books, magazines and newspapers). In short, for heavy users, navigating the Internet appears to have become simply one more media entertainment activity among others, rather than replacing another activity. This may be explained by the fact that heavy Internet users clearly spend less time working at paid employment. They also spend less time on domestic tasks and personal care activities such as sleep and relaxation. Students and the unemployed are the most likely to be heavy Internet users.

1. Statistics Canada, *2005 General Social Survey, Cycle 19: Time Use,* Veenhof, Ben, *The Internet: Is It Changing the Way Canadians Spend Their Time?* (August 2006).
2. *Ibid., p. 16.* See also on this subject Zamaria, Charles, André H. Caron and Fred Fletcher, *Canada Online! A comparative analysis of Internet users and non-users in Canada and the world: Behavior, attitudes and trends 2004*, Toronto, Ryerson University, 2005.

Table 2.5
Share of time spent on the Internet among other media and entertainment activities (TV, radio, reading, music, Internet, DVD, video games), by age group, 2003 to 2006

	2003	2004	2005	2006
Total	*11 %*	*13 %*	*15 %*	*15 %*
12-14 yrs	18 %	19 %	18 %	21 %
15-19 yrs	17 %	20 %	22 %	22 %
20-29 yrs	14 %	17 %	18 %	18 %
30-49 yrs	13 %	15 %	17 %	16 %
50 yrs +	6 %	8 %	9 %	10 %

Source : Solutions Research Group, *Fast Forward Trend Analysis,* prepared for the CRTC (August 2006), p. 79.

Appendix C

Financial Data

Table 3.1
Changes in advertising revenues by media ($million), 1997 to 2005

Média	1997	1998	1999	2000	2001	2002	2003	2004	2005	*% of growth 1997 à 2005*
Television	2 105	2 332	2 373	2 454	2 547	2 595	2 821	2 939	3 013	***43 %***
Daily newspapers	1 546	1 596	1 629	1 731	1 678	1 684	1 696	1 751	1 784	***15 %***
Radio	849	920	953	1 001	1 045	1 080	1 171	1 209	1 310	***54 %***
Magazines	647	707	721	805	845	900	950	994	1 028	***59 %***
Weekly newspapers	634	764	787	820	836	849	862	875	883	***39 %***
Billboard	220	246	269	293	310	321	338	356	404	***84 %***
Internet	10	25	56	110	97	117	237	365	519	***5 090 %***
Total	**6 011**	**6 590**	**6 788**	**7 214**	**7 361**	**7 546**	**8 075**	**8 488**	**8 942**	***49 %***
Annual growth	*9 %*	*10 %*	*3 %*	*6 %*	*2 %*	*3 %*	*7 %*	*5 %*	*5 %*	

Note: The returns for daily newspapers do not include classified advertising.
Source: Carat Expert, May 2006, cited in CRTC, *Broadcasting Policy Monitoring Report, 2006*.

Between 1997 and 2005, radio advertising revenues grew by 54 %, compared to 43 % for those for television. Total advertising revenues for all media increased by 49 %. Of the total expenditures for all advertisers across all media, the shares for television and radio remained stable : in 1997, those shares were 35 % and 14 % respectively; in 2005, they were 34 % and 15 %. The share of advertising expenditures that went to the Internet rose sharply : in 1997, it represented less than 1 %; in 2005, it reached 6 %.

Table 3.2
Changes in profit before interest & taxes (PBIT) (% of revenues), commercial radio, 1997 to 2006

	PBIT
1997	10,4 %
1998	13,7 %
1999	15,3 %
2000	16,3 %
2001	16,0 %
2002	15,9 %
2003	19,3 %
2004	18,3 %
2005	20,7 %
2006	20,1 %

Source : CRTC financial database, cited in CRTC, *Broadcasting Policy Monitoring Report, 2007.*

In the period 1997-2006, PBIT margins for radio increased significantly : the profit percentage for the year 2006 was double that in 1997.

Table 3.3
Changes in profit before interest & taxes (PBIT) (% of revenues), commercial television, 1997 to 2006

	PBIT
1997	16,1 %
1998	12,3 %
1999	14,7 %
2000	15,2 %
2001	15,1 %
2002	10,3 %
2003	14,6 %
2004	15,5 %
2005	18,1 %
2006	14,1 %

Source : Statistics Canada, Radio and Television Broadcasting Survey.

The profit margins of private television are holding steady.