Toward a Political Economy of Digital Culture:
From Organized Mass Consumption to Attention Rivalry

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Introduction

According to the editor of this volume, the term "cultural industries" includes "the arts and creative sectors that encompass, but are not limited to, publishing, film, music, photography, design, and tourism."[1] Because of the development of digital technologies in computers and telecommunications equipment, more and more cultural artifacts are being produced, stored, and delivered digitally. The increased speed of digital devices and innovations in computer networks and digital compression technologies make it both easier and less expensive to deliver words, music, symbols, and images (in fact, anything that can be digitized) to consumers around the world.

One of the key consequences is that the cultural industries, which used to depend solely on analog technologies, have had to adjust their business models and strategies to

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[1] J.P. Singh, "APSA Short Course on Culture Industries, Technologies, and Policies," August 20, 2006, http://www3.georgetown.edu/grad/cct/10344.html.

deal with the new digital technologies. Some firms have done this successfully, others have not. Also, cultural industries catering to mass audiences tended to use one-way distribution systems (e.g. television and radio broadcasting) and stored media like CDs and DVDs to deliver their services to consumers. The interactivity of digital technologies and file sharing of increasingly large digital files via the Internet is making business models premised on one-way distribution and the sale of content on stored media increasingly obsolete.

The ability of information and computing technologies (ICTs) to facilitate interactive exchanges among those connected to networks also makes it more difficult to differentiate consumers and producers as "consumers" share their writings, images, and music with others. One important example of this is the recent rapid growth of the "blogosphere" which is widely interpreted as competing with the mainstream news media.[2] A blog is a web page with topical items which is regularly updated in reverse chronological order. The blogosphere is the collective community of all blogs. By 2008 there were over 70 million blogs.[3] Most of these are not competitors to the mainstream news media but a small minority, such as The Drudge Report, Salon, Daily Kos, The Huffington Post, and Politico, are. The mainstream media have become increasingly dependent on the more widely viewed blogs to identify what is newsworthy and what is not, as a result.

Another example of the importance of interactivity is the growing popularity of social networking sites such as Facebook and MySpace. As of September 2008,

[2] "Blogosphere," *Wikipedia*, http://en.wikipedia.org/wiki/Blogosphere.

[3] Technorati, *State of the Blogosphere 2008*, http://technorati.com/blogging/state-of-the-blogosphere/.

Facebook had 39 million unique visitors while MySpace had 59 million.[4] On both sites,

users network with others and share photos, videos, and URLs.

The profusion of cultural material available via the Internet means that old

producers have to compete with a wide variety of new producers for the attention of

audiences, which is what I call "attention rivalry." To be more specific, Table 1 below

lists the old and new players in a variety of cultural industries to show how the

competition for ears and eyeballs has increased.

Table 1. Old and New Players in the Culture Industries		
Industry	**Old Analog Players**	**New Digital Players**
Television	ABC, NBC, CBS, Fox, HBO, other cable channels and networks	HDNet, YouTube, Yahoo, Google, Hulu, Joost, Vimeo
Movies	Major Hollywood Studios	Dreamworks, Lucasfilm, Pixar, BitTorrent file-sharing software
Music	Major recording studios	iTunes, Napster, Rhapsody, Amazon
Books	Traditional publishers	Google, eBooks, Amazon
Journalism	Newspapers and TV news	Slate, Politico, Blogs, CNN.com

Some of the new players are owned or controlled by the old players. For example,

Hulu.com is owned by NBC, and BMG (a major recording studio) owns Napster. There

have also been mergers and acquisitions within and across the two groups. For example,

Google recently purchased YouTube, News Corporation bought MySpace, and Disney

purchased ABC and Pixar.   The large media companies are still looking for the right

combination of analog and digital channels.

The ease with which anything digital can be copied, transmitted, and stored forces

the distributors of content to look at new business models. A good example is Apple's

creation of iTunes as an alternative to the distribution of music via recorded media such

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[4] "Twitter Grows Fastest, MySpace Still the Social King," *Nielsen News*, October 23, 2008, http://blog.nielsen.com/nielsenwire/online_mobile/leading-social-networking-sites-still-growing/.

as audio CDs.[5] The recording industry reported that aggregate sales of CDs and other

recorded media dropped precipitously after the introduction of file-sharing software and

digital audio players. The retail value of the sales of RIAA member firms declined from

a high of $14.6 billion in 1999 to $8.0 billion in 2007.[6] In record stores near wired

college campuses, sales frequently dropped to zero.[7] Even though some of these lost

revenues were recovered in the form of payments for legal downloading of digital files,

consumers would not go back to purchasing albums that included songs that they really

did not want to buy.

In book publishing and other print media, the shift to digital distribution has

begun, but portable high-resolution digital readers are still not widely available. Two

impressive recent entries in the market for digital readers are Amazon's Kindle and

Sony's Digital Reader.   Still, it is unlikely that books, magazines and newspapers will be

as strongly affected by file sharing as audio and video recordings, at least until these and

other digital readers come down in price and go up in quality.[8]

 More important for print media is the attention rivalry from other media that may

be driving people away from reading. According to recent studies of media usage,

increased time spent viewing websites on the Internet is cutting into the time spent

reading newspapers and listening to the radio while TV viewing is so far relatively

unaffected. When asked where they get their news, people are reporting that they turn to

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[5] "iTunes," *Wikipedia*, http://en.wikipedia.org/wiki/ITunes.

[6] Recording Industry Association of America, *2007 Year-End Shipment Statistics*, http://76.74.24.142/81128FFD-028F-282E-1CE5-FDBF16A46388.pdf.

[7] "New Twist on CD Sales," *p2pnet.net news*, April 10, 2004, http://p2pnet.net/story/1187; and Felix Oberholzer-Gee and Koleman Strumpf, "The Effect of File Sharing on Record Sales: An Empirical Analysis," June 2005,
 http://www.unc.edu/~cigar/papers/FileSharing_June2005_final.pdf.

the Internet increasingly and decreasingly to newspapers (see Figure 1). Declining

circulations and the loss of newspaper advertising revenues to on-line services like

Craigslist is putting many local newspapers out of business.[9]

In addition, the average price of all but mass-market paperback books is rising

rapidly. Textbook and academic journal prices are rising much faster than the rate of

inflation.[10] Libraries are acquiring fewer books and journals and dealing with gaps in

their collections via interlibrary, so academic books that are not textbooks are now less

economically viable than previously. This is a major problem for younger scholars in

fields where scholarly book publication is the main criterion for promotion and tenure.

The content of mass media is shifting in response to increasing levels of attention

rivalry. TV shows are trying to mimic the interactivity of social networking sites and

new radio stations are copying the eclectic musical programming of iPod and MP3 player

owners.[11] Internet delivery currently favors short formats over long ones, but that is

probably only a function of current computing and network transmission speeds.[12]

People are demanding that their consumer electronic devices be capable of dealing with

multiple channels, so car radios now permit users to easily plug in their iPods or MP3

players, some game consoles can play DVDs and let users access the Internet, and TVs

can be connected to devices that let users play video clips from YouTube. The next

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[9] Thomas E. Patterson, *Creative Destruction: An Exploratory Look at News on the Internet*, A report from the Joan Shorenstein Center on the Press, Politics and Public Policy, John F. Kennedy School of Government, Harvard University, 2007.

[10] Margaret Webb Pressler, "Textbook Prices on the Rise," *Washington Post*, September 18, 2004, p. E01.

[11] Dave Demerjian, "'Imitation iPod' Invades Radio." *Wired*, July 13, 2006, http://www.wired.com/culture/lifestyle/news/2006/07/71362.

[12] Jeffrey A. Hart, "Video on the Internet: The Content Question," in Darcy Gerbarg (ed.), *Digital Television: Beyond HD and DTV* (New York: Springer, forthcoming).

generation of consumer electronic devices will let users share media with others on a variety of players and platforms.

Infotainment, Edutainment, and Attention Rivalry

One of the consequences of the transition to digital technologies is that the boundaries between previously separate cultural industries are becoming fuzzier. There was already some movement in this direction under analog technologies. In television, for example, the distinction between entertainment programming and news programming eroded as networks increasingly focused on ratings and advertising revenues. With the ability to package audio and video information in both analog and digital formats and to combine them with the interactive capabilities of the Internet came new possibilities for convergence.

Infotainment refers to the combination of information and entertainment, while edutainment refers to the combination of education and entertainment. We are experiencing, for example, a considerable trend toward infotainment and edutainment in higher education. Professors are expected to entertain classes just as news anchors are expected to entertain their television news audiences.[13] The enhanced use of graphic aids in the classroom via PowerPoint and other types of presentation software is part of this trend. As students, and just about everyone else in society, like to "time-shift", professors find themselves uploading their digital presentations to the web so that students can view them at their leisure. In order to keep classroom attendance up, many resort to making attendance part of a student's grade.

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[13] This idea appeared first and most convincingly in Neil Postman, *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* (1985).

No one denies that the transition to digital production, storage, and delivery of entertainment, information, and education has the potential of having a positive impact on society, but there are obviously many downsides as well.   Attention rivalry leads to a more distracted public, always looking for ways to filter out unwanted information. Consider, for example, the problem of cleaning out the spam from one's email inbox. Spam filtering software is easily defeated by dedicated spammers, but people buy it anyway in an effort to reduce time wasted doing the filtering by hand.

More importantly, people who used to get their political information from print and electronic media that, because of their need to attract broad audiences, include multiple viewpoints so that readers can decide for themselves about different issues, now can get access to news that is aimed at smaller audiences with a particular slant on public affairs. As a result, people will be less exposed to views that are in opposition to their own.

Another potential downside is that people will get used to and actually enjoy being presented with too much information, a phenomenon that most of us have observed in our children's so-called "multi-tasking." The child who plays a networked computer game on a laptop while listening to music, watching television, and chatting with friends on-line is becoming a common sight in many U.S. households. In university classrooms, we find students instant messaging on their laptops or texting on their cell phones in the classroom.[14] We used to talk about the benefits of multimedia presentation of information, but the idea was to do this with a coherent set of ideas so as to improve

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[14] "Law Professor Bans Laptops in Class, Over Student Protest," *USA Today*, March 21, 2006, http://www.usatoday.com/tech/news/2006-03-21-professor-laptop-ban_x.htm?POE=TECISVA.

learning outcomes for children with different learning styles. How much learning is going on in homes and classrooms when there are no restrictions on multitasking?

The Role of Government

Political institutions can influence the way in which digital technology is introduced and deployed in a variety of ways. Laws regarding distribution systems can obviously influence the ability of consumers to access digital content. The government gets involved in the building of new telecommunications network infrastructure, either directly or via authorization/subsidy of private efforts. So far the U.S. government has favored relying on the telephone companies and cable TV providers to build out the broadband network. The consequence is that broadband in the United States has become dependent on the ability of those two types of firms to find ways to extract additional revenues from households for Internet access and pay TV services. The United States is far behind countries like Korea and Denmark on the percentage of citizens who have access to broadband as a result.

The transition to digital television requires administrative and legislative authorization and new forms of regulation.   Governments can put an official stamp of approval on new technical standards and can use government procurement policies to support one form or another of digital technology.[15]

Governments willing to employ industrial policies can subsidize the development of new digital technologies and related industries, as was clearly done in the case of the

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[15] See Jeffrey A. Hart, *Technology, Television, and Competition* (New York: Cambridge University Press, 2004); Hernan Galperin, *New Television, Old Politics: The Transition to Digital TV in the United States and Britain* (New York: Cambridge University Press, 2004); and Michael Starks, *Switching to Digital Television: UK Public Policy and the Market* (London: Intellect Books, 2007).

broadband policies of East Asian countries like Taiwan and Korea (copying the earlier success of Japan).[16] But this is only one method: there are many others: e.g., rapid depreciation rules for business taxation, R&D tax credits, negotiation of new digital standards, reforming capital markets to make it easier for digital startups to get access to venture capital, etc. So far the United States has decided not to employ these methods to shape or speed the deployment of digital technologies.

The introduction of digital technologies creates pressures for political and policy change. The movie and recording industries, for example, want protection from the potential negative effects of file-sharing by making it more difficult or even illegal for individuals to share copyrighted material. In the late 1990s, they engaged in a massive campaign to educate the public about the evils of digital "piracy" and lobbied governments intensively to enforce intellectual property rights. In the United States, this effort culminated in the passage of the Digital Millennium Copyright Act (DMCA) of 1998.[17] The industry's lobbying effort continues with ongoing debates over the so-called "Broadcast flag"[18] and digital rights management (DRM).[19] The success of the industry's congressional lobbying efforts has spawned a counter-movement led by legal scholars like Lawrence Lessig and Tim Wu.[20]

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[16] Marcus Noland and Howard Pack, *Industrial Policy in an Era of Globalization: Lessons from Asia* (Washington, D.C.: Peterson Institute, 2003).

[17] U.S. Copyright Office, *The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary*, December 1998, http://www.copyright.gov/legislation/dmca.pdf.

[18] Electronic Frontier Foundation, "Broadcast Flag," http://www.eff.org/IP/broadcastflag/.

[19] "Digital Rights Management," *Wikipedia*, http://en.wikipedia.org/wiki/Digital_rights_management.

[20] Lawrence Lessig, *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity* (New York: Penguin, 2004).

Toward a Political Economy of Digital Culture

Digital information and communications technologies are clearly transforming what Arjun Appadurai called the "mediascapes" of modern societies.[21] Especially in the United States, where the media are controlled by private firms, media creators, packagers, and deliverers have had to revise their business models to deal with the need to compete effectively with other media in a crowded media environment. There are still plenty of non-digital ways to participate in the cultural aspects of society, but the digital media are making major inroads against the analog alternatives especially in mass or popular culture. Power shifts accompany these changes in the mediascape. We saw in the 2008 presidential election campaign, for example, how one candidate gained an important advantage over others by utilizing digital media effectively.
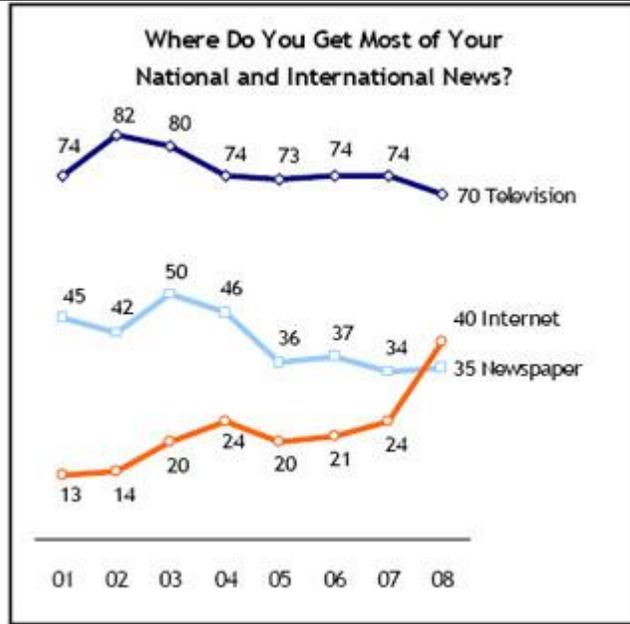
Developing a political economy of digital culture will allow us to look not just at the net outcomes for society as the digital transition goes forward but also to predict who within society will win and lose. The potential losses of old players in the culture industries and the potential gains of new ones are likely to play a key role in political systems across the globe. We should examine carefully the claims of those pushing the digital transition so that citizens will be empowered by access to computers and high-speed networks, especially if there are only a few providers of that access and citizens have little control over the rules and architecture of the system. We should remain equally skeptical about claims that the digital transition will result in "surveillance

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[21] Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization* (Minneapolis: University of Minnesota Press, 1996).

states."[22] As social scientists, we can inform public debates over these and related issues

by applying the methods and theories of political economy and political science to this

dynamic new area.

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[22] For example of works in the surveillance school, see Oscar Gandy, *The Panoptic Sort: A Political Economy of Personal Information* (Boulder, Colo.: Westview, 1993); David Lyon, *Surveillance Society: Monitoring Everyday* Life (Buckingham: Open University Press, 2001); and Gary T. Marx, *Windows into the Soul: Surveillance and Society in an Age of High Technology* (forthcoming). The recent revelations about the Bush administration's massive mining of telephone and SWIFT data ostensibly to prevent terrorism gives these claims more credibility than they had before.

Figure 1. Where Do Respondents Get Their National and International News?

Where Do You Get Most of Your National and International News?

Source: Pew Internet and American Life Surveys.