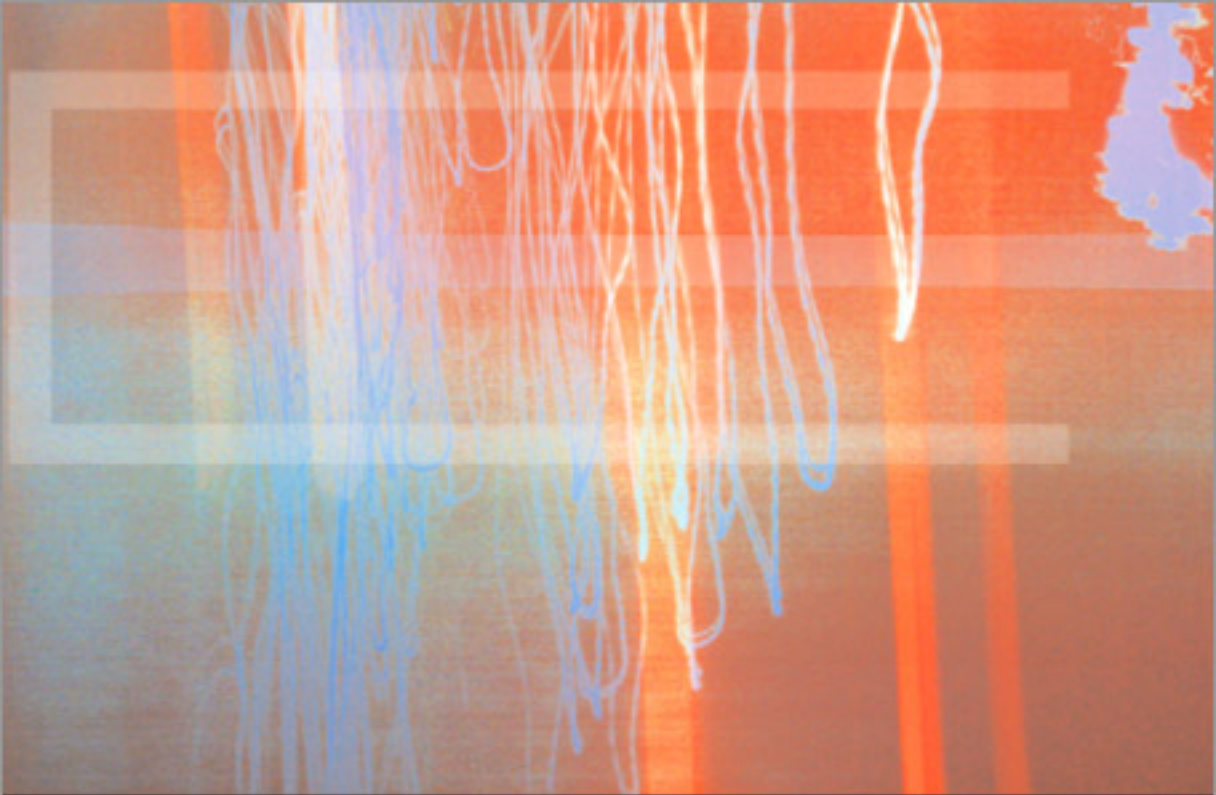




The Internet and the Mass Media

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and Ruth Towse



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PREFACE

In 2000, 50 academics, all with sufficient expertise to have been nominated by their European government agencies, gathered in a small, stuffy room in Brussels to be initiated to the ins and outs of the European Science Foundation's Committee on Science and Technology (COST) procedures and, specifically, to formally start the COST A20 Project, the 'Impact of the Internet on the Mass Media'. For many of us, this did not seem a propitious beginning, but to the surprise of many, it developed into a most fruitful co-operative venture. Through it, a group of people from different countries were able to meet and, perhaps of equal importance, people from different disciplines met regularly to exchange intellectual viewpoints on what was clearly a very difficult topic to analyse. Every time we met over a five-year period, things 'on the ground' had changed and had to be interpreted. It has been a unique experience and challenge for all concerned.

From the outset, it had been planned by Professor Colin Sparks, the moving force behind this initiative, that there would be three Working Groups: (1) newspapers and print media, (2) television and film and (3) music and radio. This last group began to find itself mainly discussing questions on changing technologies for music distribution and the associated business models alongside the regulatory regime, particularly copyright law, and realised that these were issues that affected all media in some degree or the other and, moreover, could be expected to impact on all media eventually as the Internet developed and spread. Hence, the Cross Media Group was formed, and the authors of this book took part in its activities. We have met in various locations in Europe over the period of the COST A20 Action and got to know and value each others' ideas and insights. What we all agreed on is that there is no one way to study the impact of the Internet on the mass media, and that whatever we produce will, in one sense, not be contemporaneous by the time it is published. Nevertheless, we also concluded that we did have a lot to say about how independent academic observers approach the question and try to cut through the hype that has surrounded this subject to find long-term trends. This book is the outcome of these deliberations. It has been written by many of the people involved in the Cross Media Group, who have co-operated magnificently with the editors to ensure its successful production. We felt (and still feel) that our research can be put to the service

of teaching students and informing policy-makers everywhere. Accordingly, we hope this book will be read in the spirit in which it is intended – as a statement of our interpretation of the results of our researches as they stand at the present time.

We would like to acknowledge our great debt to Colin Sparks, chairman of the COST A20 Action, who lead the whole project through good times and bad, and also to the officials responsible for the project at the European Science Foundation for financing our meetings.

Finally, we would like to thank everyone who has contributed to this book – directly and indirectly – for their ideas, hard work and support. Some firm friendships as well as academic connections have been formed through its conception and realisation.

INTRODUCTION

Lucy Küng, Robert G. Picard and Ruth Towse

Aims, objectives and audience

The Internet has established itself with remarkable, perhaps unprecedented, speed as an integral part of everyday life for many people all over the world, at work and in the home. This book offers a comprehensive analysis of the impact of the Internet on the production and consumption of the mass media. It explores and discusses the changes this evolving communications platform is bringing about in the media and mediated content industries, and the implications of those changes. The book is written by a group of experts who have been involved in research and analysis of these issues over a period of five years.

During this period, perceptions and experience of the Internet have changed considerably. To take the example of the music industry, five years ago P2P and MP3 had only just become established. At that point, the music industry perceived file-sharing as something likely to precipitate a crisis for the industry – customers would be reluctant ever to pay for music again, artists would not get paid, the industry would not survive and so forth. Now online licence fees are growing faster than sales revenue streams. In the meantime, copyright law has been changed to counteract the effects of the Internet.

Five years ago, it was predicted that electronic books would displace paper book sales but barely anything has materialised in that sector (yet). Indeed there are dozens of examples to be found that illustrate the effect of the Internet on the mass media, but examples quickly date: what is attempted in this book is an overview not so much of the outcomes of the use of the Internet but more of how social scientists set about analysing the processes involved in the adoption of, adaptation to and acceptance of the Internet in the context of the media industries.

When technological changes take place, they are exciting, they are destructive, they are confusing and they alter the status quo. Young people adopt them faster than old people, richer people and countries have access to them before poorer people and countries. There are many dimensions to these changes and they have to be considered from many points of view – as economic, political and social opportunities and threats. These changes impact on the whole of society both within a country and in the international context. They have had a particularly significant effect impact on the media, affecting consumers and producers, users and non-users and influencing the content of and access to information, the ways it is produced and how the firms within the industries adapt strategically and re-orientate themselves. Governments have to respond to these changes, perhaps without understanding them fully, since information about emergent developments and consumer responses to them is inevitably incomplete. Although the Internet itself is not regulated, the media industries are and governments have had to realign regulations and law to the new platform.

The authors of this book are social scientists from all over Europe, doing research in the field of media industries, who specialise in a range of disciplines – media and business economics, communications, cultural economics, cultural studies, media management, media technology, political science and sociology – and who share an interest in the impact of the Internet on the mass media. This interest is both ‘academic’, in the sense that we want to know the what, why and how of its impact, but we also share a concern to provide a basis from which to objectively assess policy. Each of the disciplines represented by the researchers who have contributed to this book offers a different perspective on the developments under review. We are not, however, concerned with attributing the analysis to any particular one. Some of the topics covered in the book fall naturally into one field or another, but the main point is that they all have a contribution to make: how media firms have reacted to the Internet can be looked at by analysing the change in content and how users (viewers, listeners, buyers) respond, how firms have changed their business practices in terms of organisation, business models, management and strategies, and by reacting to the external environment, including regulation. This is a short book, and it is not intended to provide all the answers, as much as to set an agenda for how to go about looking for them. This is important as there has been inordinate hype and over-excitement about the power of the Internet and related technologies to change our lives.

The book draws together what the authors have jointly concluded about the impact of the Internet on the media industries. Given their varied backgrounds, the book’s standpoint is simultaneously multi-lens, interdisciplinary and cross-national. By approaching a common topic and single sector from a number of different theoretical and geographical

standpoints, it generates comprehensive and universal insights, and thus provides scholars, policymakers, media practitioners and social observers with a strong explanatory and interpretive overview of how the Internet and mobile media has affected, and is affecting, media, and the implications of those effects. Thus, the aim of the book is to present, as far as is possible, a contemporaneous account of these researches arising out of objective academic investigation.

What is the Internet?

One of the points that will be frequently made throughout this book is that the Internet is a catch-all phrase for a number of technological developments that relate to economic and social changes. At the time the Internet was developing, other changes were taking place in the world of media industries that also influenced the eventual outcome, central among these are the World Wide Web and digitalisation, as well as the development of cable and satellite television and of coaxial cable enabling broadband delivery. An account of the historical development of the Internet is to be found in Chapter 3.

It is also important to make the distinction between the terms 'digital' and 'Internet' because in common usage these are often falsely used interchangeably. The term 'digital' refers to a technology that stores data in binary form. This can be information allowing the storage of text, photography, graphics, video and audio. The term 'Internet' refers to a distribution system for information. Data transmitted through the Internet and other distribution systems including telephones, television, radio and computers can be either analogue or digital, depending on the architecture of the system.

'Digitalisation' means mathematically reducing all types of information (video, still pictures, audio, text, conversations, games or graphics) into binary form. Once in this format, it can be understood, manipulated and stored by computers, transmitted by networks in perfect fidelity to the original and used immediately by another party on the network or stored for later use. In recent years, information has been increasingly converted into digital formats, from consumer entertainment products to corporate knowledge to money supply. Once information is digitised, new possibilities for new products and services result. Different forms of information – pictures, sound, text – can be combined to produce new multimedia products. When combined with the Internet, such complex information products can be compressed, stored, transmitted and retrieved instantly from any point on the globe, irrespective of physical distance.

The Internet refers to a telephony-based system that links computers and computer networks worldwide to permit distribution of data, e-mail,

messages and visual and audio materials to individuals, groups of individuals and the public. What has driven many of the developments of the last ten years has been the development of the World Wide Web. 'World Wide Web' is a term indicating an Internet-based system accessed using browsers to access information, graphics, photography, video and audio materials made available to specific individuals or the public.

For many observers, it is digitalisation, rather than the Internet, which is the true enabler of convergence. 'Convergence' is one of the developments of particular interest to media scholars; however, the term can be understood in a number of different ways. In this book, convergence is understood as the technologically driven fusing of the content (that is, media), computing (information technology) and communications (telecoms and broadcast distribution) industries (Chakravarthy, 1997; Bradley and Nolan, 1988). Another use of the term convergence, this time at industry level, is 'corporate convergence', whereby companies from one sector acquire or start new ones in another of the converging industries. However, it should be noted that other scholars have defined convergence in relation to the delivery platforms used for media products, or in terms of the convergence of the devices used to 'receive' or use media products.

Previous technological advancements in the media and communications industries prior to digitalisation tended to mimic and optimise existing processes or products without altering the underlying concepts: thus, early television programmes were radio shows with pictures, and the word-processor offered enhancements to electronic typewriters. Digitalisation differs from these because it allows the development of fundamentally new products, services and processes. One might conclude, therefore, that digitalisation has had a more profound impact on economic and social change than the Internet itself.

'Cross-currents' from other changes in the world of media

As is so often the case with research in the social sciences, laboratory conditions do not exist, and it is almost impossible to isolate changes due to one cause or another that is not connected with the phenomenon being investigated. At the time of the development of the Internet, other changes were taking place in the world of media industries, which set up their own influence on the eventual outcome. Besides digitalisation, the development of cable and satellite television and of coaxial cable enabling broadband delivery strongly influenced the structure of the television broadcasting industry. These developments triggered off the discussion about the role of public service broadcasters and the use of taxes to finance them. On the other hand, developments in home copying equipment for time-shifting television

programmes that enabled eliminating the advertisements raised doubts about the role of advertising as a source of finance for television. The main aims of this book are to try to eliminate these cross-currents and to ascribe correctly to the Internet what its impact has been.

Facts about the Internet

Because the Internet is not owned or regulated, there is no responsible body that can provide information about it. In the early stages, it was hard to find reliable data on the features of the Internet of the sort that are of interest to social scientists. This state of affairs has now changed radically, with various public and private bodies collecting Internet data for a range of purposes: governments collect statistics on 'connectivity' to monitor their IT policies, international data are collected for purposes of inter-country comparison and trade and private firms are supplying market research and business information to organisations, which they make public. However, it is still difficult to establish trends over more than a few years relating to its use and content. Further, a substantial element of content such as pornography, gambling and pirated media products cannot be easily researched, because data concerning this type of activity are hard to collect. For some purposes, therefore, we have to resort to indirect measures of the scope and growth of the Internet.

In terms of sheer numbers, the most Internet users in 2007 were to be found in Asia (389 million), followed by Europe (313 million), North America (232 million), Latin America (89 million), Middle East (19 million) and Australia/Oceania (19 million). However, when these figures are standardised according to the size of population, the picture concerning the penetration of the Internet, that is, users in a country expressed as a percentage of its population, change. Then we find North America (69 per cent), Australia/Oceania (54 per cent), Europe (39 per cent), Latin America (16 per cent), Asia (11 per cent), Middle East (10 per cent) and Africa (4 per cent), according to www.internetworldstats.com (January 11, 2007).

Looking at figures on the growth of Internet penetration for a selection of Organisation for Economic Co-operation and Development (OECD) countries, Table 1.1 shows how uneven the development has been. Some countries (Australia, Canada, South Korea and USA) already had over 40 per cent of households with access to the Internet in 2000, whereas others (France, Germany, Italy, UK) had less than 20 per cent. Some 'slow starters', especially Germany, have reached very high penetration, while others (Italy) have grown only modestly. The highest flier of all is South Korea, with a head start in 2000 and nearly 93 per cent penetration by 2005. The relatively high figures for the Netherlands reflect that country's determined effort to develop IT.

Table 1.1 Households with access to the Internet as a percentage of all households

Country/year	2000	2001/2	2003	2004	2005
Australia	41.5	42	53	56	
Canada	42.3	49.9	56.9	59.8	
Finland	30	39.5	47.4	50.9	54.1
France	11.9	18.1	31	33.6	
Germany	16.4	36	60	61.6	84.4
Italy	18.8		32.1	34.1	38.6
Japan			53.6	55.8	57
Korea	49.8	63.2	68.8	86	92.7
Netherlands	41		60.5		78.3
Spain		40	27.5	33.6	35.5
UK	19		55.1	55.9	60.2
USA	41.5	50.3	54.6		

Source: OECD Key ICT indicators

Similar country differences can be seen in access to broadband: in 2006, the average penetration was 15 per cent of all households for all OECD countries, and this figure had doubled since 2003. Germany, Spain and Italy were below that average, with Finland, Netherlands and South Korea being over 25 per cent (1 in 4 households). The growth of access to broadband is an indicator of greater potential use of the Internet for uses such as downloading images and films.

Growth in the number of Internet hosts worldwide is an indicator of the expansion of the Internet: in 1990, there were 0.3 million Internet hosts and in 1995, 6.6 million; by 2000, there were 93.0 million and by 2006, 439.2 million Internet hosts. The Internet Domain Survey, <http://www.isc.org/index.pl?ops/ds/> provides data on the percentage of domain names worldwide: dot com 75.9 per cent, dot net 11.2 per cent, dot org 6.7 per cent, dot info 4.0 per cent, dot biz 2.0 per cent and dot edu 11.6 per cent. (Zooknic, Domain Name Counts <http://www.zooknic.com/Domains/counts.html>).

To assess the economic significance of the Internet, we have to resort to several indirect indicators. In 2006, worldwide e-commerce was estimated to be US\$7 trillion, with the bulk being wholesale sales. In the US, according to the US Census Bureau, e-commerce represented 2 per cent of total retail sales and 17 per cent of total wholesale sales; in terms of content, personals/dating, business/investment and entertainment/lifestyle represented 65 per cent of the dollars spent. In Europe, the numbers were about 1 per cent for retail and 7 per cent for total wholesale sales; France, Germany and UK account for 70 per cent of European online sales.