

A-Level Sociology



**A Resource-Based
Learning Approach**

**The Mass Media and Popular Culture:
Media Technology**

Introduction

In these Notes the initial focus of attention will be the way the mass media has developed historically in Britain. Although we will make reference to both the structure of the media as a whole and individual aspects of the media (publishing, broadcasting and so forth), this area will be developed in much greater detail in the "Ownership and Control" Notes that develop and complement the work we are going to do here. In addition, we will start to develop some ideas about the (political, economic and ideological) significance of technological developments.

To begin with, it might be useful to look at brief histories of both print and electronic media as a means of establishing various landmarks in the technological (and political) development of the mass media as a whole. The following list is not, of course, exhaustive or definitive, but its main purpose is simply to provide a potted historical context for the broader analysis of technological development that follows.

A Brief History of Print Media...	
Circa 800's	Chinese develop a system of block printing.
Circa 1100's	Arab traders bring papermaking techniques to Europe.
1455	Johann Gutenberg invents a movable type system.
1476	William Caxton prints the first English book.
1702	First English daily newspaper published ("The Daily Courant").
1709	Copyright Act passed by Parliament.
1712	1d (0.5p) tax on every sheet of a newsprint. (effectively pricing newspapers out of the reach of most of the population).
1772	Press allowed to report Parliamentary debates for first time.
1785	First issue of "The Times" published.
1815	Newspaper tax raised to 4d (1.5p) per sheet of newsprint.
1853	Newspaper advertisement tax abolished.
1855	Newspaper Stamp tax abolished.
1861	Newsprint tax abolished.
1896	First "popular" paper produced ("The Daily Mail").
1919	Public Libraries Act passed by Parliament.
1935	First Penguin paperback published.
1986	First newspaper to use computer production and colour printing technology launched ("Today").

A Brief History of Electronic Media...	
1774	Lesage builds first electric telegraph (friction driven).
1792	First telegraphic signalling device invented.
1820	Oersted demonstrates principles of first truly electronic telegraph.
1831	Invention of Morse Code.
1837	Daguerre invents photography. First patent granted for electric telegraph.
1844	First major electronic telegraph link (between Washington and Baltimore) established in USA.
1848	Associated Press News Agency (USA) founded.
1851	Reuters New Agency (UK) founded.
1863	UK Telegraph Act passed - the basis for all future State regulation of broadcasting.
1866	Telegraph cable successfully laid between UK and USA.
1868	Nationalization of all broadcasting in UK.
1881	First transmission of still pictures.
1897	Marconi sets-up experimental wireless stations on Isle of Wight and

	Brownsea Island, Poole.
1899	Marconi sends wireless message from UK to France.
1914	Silent films become widespread.
1919	Radio Corporation of America, (formed by General Electric, AT and T Westinghouse and United Fruit), becomes world's largest private broadcasting company.
1922	British Broadcasting Company (radio) formed. British Broadcasting Company becomes British Broadcasting Corporation.
1927	First full-length talking film ("The Jazz Singer" starring Al Jolson) released.
1934	Radio Luxembourg broadcasts for first time.
1935	Germany starts regular, filmed, television service.
1936	First BBC television broadcasts from Alexandra Palace. Regular broadcasts made until start of Second World War.
1946	Cinema attendances reach new peak - 1635 million tickets sold in one year world-wide.
1953	Independent Television (ITV) begins first regular privately-owned broadcasting in UK.
1954	Independent Television Authority (ITA) created.
1955	London ITV service begins regular broadcasting.
1961	First communications satellite (Telstar) successfully placed in orbit.
1964	BBC 2 begins broadcasting.
1967	First "pirate radio" broadcasts, by Radio Caroline and Radio London, from ships in the North Sea (outside British territorial waters).
1969	First local Radio station in UK launched by BBC.
1970's	Colour television broadcasts introduced on BBC 2. First world-wide live satellite TV link-up (the Beatles singing "All You Need Is Love").
1973	Colour broadcasts begin on BBC 1 and ITV.
1980's	Fibre optic technology developed (the technological basis for cable "narrowcasting").
1981	IBM and Apple Corporation develop "Personal Computers".
1982	First Independent Local radio broadcasts begin.
1983	Development of lightweight, portable, video cameras.
1990's	Video recording technology developed. Seven cable television systems start experimental broadcasts in UK. Channel 4 begins broadcasting and Clive Sinclair launches first "affordable" (£100) colour home computer in the UK (the "Sinclair Spectrum"). BBC 1 and ITV begin "breakfast time" broadcasts. First satellite TV stations ("Sky" and British Satellite Broadcasting) received in UK. Sky and BSB later "merge" to form "British Sky Broadcasting". British government bans sale of decoders for Dutch-based pornographic satellite station ("Red Hot Dutch"). British advertisers are also banned from advertising with the station, effectively preventing commercial broadcasts.

As I hope is apparent from the above (a small selection of "media landmarks"), the historical and technological development of various forms of mass media is a huge and complex area - one that in the time and space available we cannot hope to analyse in very much detail. Rather than focus upon a simple historical outline of various technological develops, it would be more appropriate, sociologically, to look at the social implications of technological developments in mass media and, to this end, we need to look at such developments in terms of a **political, economic and ideological** context.

In effect, therefore, rather than focus upon the development of technology itself (something that's probably best left to engineers and train-spotters), we need to understand the social significance of technological development - such ideas as how and why it can be exploited, who is able to exploit it and, of course, to what end is it exploited...

These are questions that, of necessity, will be explored in greater detail throughout this series Notes since the mass media is a particularly difficult area to split neatly into nice little compartments (one dealing with technology, another with ownership, a third with ideology and so forth).

To begin the serious business of analysis, therefore, we can note the following:

Firstly, in order for a mass medium to develop it is evident that the technology to reach a mass audience, spread over a wide geographic area, must exist. However, whilst the technological means to do something is clearly significant (since, to be blunt, it would be fairly pointless trying to attempt the analysis of a phenomenon that did not exist), we need to understand the fact that technology does not develop inside a cultural vacuum (in simple terms, the absence of a social context against which developments in media technology can be placed and explained). All kinds of political, economic and ideological factors surround both the fact of technological development and, most importantly, the use to which it is put.

For example, "technology" doesn't just invent itself - people have to invest time and (mainly other people's) money. There has to be a social use for the technology (or advertisers have to work overtime trying to convince people of their need for something). Technology is regulated, both by producers and governments and, finally, the consumer has to adopt the technology. History is littered with "technological developments" that failed to make the grade (regardless of the best efforts of advertising agencies) - 3-Dimensional cinema, Quadraphonic speakers, Betamax video recorders (the list is endless, or at least quite long...).

Secondly, the use to which technology is put (its exploitation) takes place within a political context. Governments regulate media industries, they censor and, of course, they are frequently players in the media game (Iraq, for example, has a Propaganda Ministry, Britain has the BBC...). In addition, technological developments that have a potential military use may be banned, exploited by the military but not commercially and so forth.

If you refer to the "Brief History of Print Media" chart, all the stuff and nonsense in the early 19th century over "newsprint taxes" was part of a concerted attempt by governments to suppress information - not by the crude methods of banning and censorship (although this was tried), but by the really quite clever method of making newspapers so expensive the working classes could not afford to buy them (and the generally revolutionary, radical and anti-government views they contained).

In this respect, the development of the mass media is not simply a question of the technology being available, therefore it can be exploited. Not only do political, economic and ideological struggles determine the way in which technology is allowed to develop and be exploited, they also determine the form of this development / exploitation (for example, in relation to questions such as whether the media should be State owned, privately owned or, indeed, a mixture of both...).

Although, as I noted earlier, the term mass media is applied to all media that reach a mass audience (which is not too surprising really, when you think about it), we are going to concentrate mainly on just two of the many media available in our society:

- a. Newspapers / magazines.
- b. Television / radio.

Aside from the important time and space considerations I keep mentioning (perhaps we would have more of them if I didn't keep using valuable time and space to say why we can't have any more of them), these two general areas are probably the most significant in terms of overall audience size in Britain and, for this reason, are perhaps the most interesting in terms of various forms of sociological analysis.

As you will, no-doubt, be aware, our society is one in which the pace of technological change is extremely rapid. Over the past 30 years, for example, we have experienced technological change on a vast scale:

In 1963, for example (admittedly before I was born, but I've read the books), television was valve-based (you had to wait five minutes after switching the television on for it to "warm-up") and newspapers were produced using traditional type-setting techniques and machinery. Computers, on the other hand, were machines that filled whole rooms.

Over a period of 30 years we have seen the widespread introduction of, first, transistor technology (the technology that allowed you to unplug the "wireless" from the mains and carry it around in your hand - so I've been told) and, more-recently, silicon chip technology (the ability to "print" electrical circuits on wafer thin slices of silicon).

These technological developments have lead us into colour broadcasting, stereo and quadraphonic wide-screen television; video recorders and cameras are now commonplace (about one third of all homes in Britain own a video recorder, which is a strange and baffling fact, since its fairly common knowledge that only children under the age of 12 actually know how to operate the things). Compact disks, digital tape recorders, personal computers and so forth are all widely-available as affordable, mass produced, consumer goods.

Silicon chip technology has revolutionized the way newspapers are produced (both in terms of their physical production and the way in which journalists are able to produce their copy for printing, etc.) and both satellite and optical cable television are becoming well-established...

We can compare this with the situation 150 - 200 years ago, when, as Anthony Smith ("Technology and Control: the interactive aspects of journalism", 1977) notes in relation to the lifting of various legal restrictions on publishing (the only true mass medium at the time),

"...nonetheless, the actual techniques of printing remained relatively static and Caxton would have recognized his converted wine press in any newspaper office until the end of the 18th century".

Smith also makes the point that between the founding of the "Mercurius Gallo-Belgicus" - a Latin news periodical circulated throughout the Holy Roman Empire - in 1594 and the founding of The Times in 1795,

"...nothing fundamentally changed in the method of producing news periodicals. It was extremely heavy work and each sheet of paper required an immense muscular effort on the part of several men...circulations were limited by the sheer limitations of human physique".

It wasn't until the early 19th century - with the gradual shift to mechanical systems of production (the introduction and application of technology developed in others spheres of the economy) that this type of production process began to change... The important point to understand here is the relationship between technological innovation and change - considered both in terms of productive development and in wider social terms (the social effect of technological changes in a productive process, for example).

In our everyday lives, with new technological developments arriving by the year (and, in many cases, by the month), there is a tendency to see technological changes as the motor of social changes, whereby the former cause the latter to inevitably occur. We talk, for example, about the "latest technological development" and the change it is likely to produce. In this respect, there is a tendency to see ourselves, as a society, at the mercy of technological innovation - once something has been invented (whether it be an atomic bomb, satellite television or a new, more-efficient and cost-effective way of publishing newspapers) it cannot be "uninvented".

Explain, in your own words, the meaning of the phrase " ...there is a tendency to see technological changes as the motor of social changes..." .

Our lives, as it were, tend to be seen as being driven by technology and technological development, almost as if the structure and pace of our lives are determined by the direction taken by the latest technological innovation...

The idea that technological development determines the nature and form of the media that exists in our society is a mistaken one, for the deceptively simple reason that only people can determine the way in which their society develops. The fact that technology enables us to do something differently or "more efficiently" (a particularly loaded concept - is one person's "increased efficiency" another person's "job loss", for example?) doesn't alter this fact since, ultimately someone has to make decisions about how technology can - and should - be developed and used.

This idea has important ramifications not just for the mass media and technological development, but also for our sociological understanding of "society" itself - we should never lose sight of the fact that, fundamentally, every decision to develop and apply technology is taken by someone - or some group - with the power to make such decisions.

The decision to use computers in the production of newspapers, for example, is not simply a matter of "progress" or "efficiency" - it is a trade-off between increased profits for newspaper owners and increased social costs for the tax-payer (since those who lose their jobs as a result of "efficiency gains" will, for some unknown length of time, have to be supported by the State).

Thus, in this we see a significant idea, in that all that really happens in the above scenario is that private companies are able, through the application of a new technology, to make (increased) profits by passing-off some of their former costs to the State (and, by extension, taxpayers). However we rationalize it, it boils down to the simple relationship between, in this instance, private employers and the State, with the latter effectively "agreeing" to the particular way in which a new technology is applied (actually, in this particular instance the British government didn't so much as "reluctantly agree" as actively participate...).

Whatever you might see as the rights and wrongs of such a situation, the inescapable conclusion is that technology itself is not the cause of change. Rather, the "causes of change" always have to be found in terms of decisions made by powerful social actors (such as, in this instance, the decision to put the pursuit of private profit above the welfare of (former) employees).

As an example of the relationship between technological development and the individual, we can note that a car is a form of technology that can be used to transport people from somewhere like Bury to Ipswich. It can also be used to injure people. It's not designed to do the latter, of course, but technology frequently has "hidden" or "unintended consequences".

Functionalist sociologists call this the difference between:

- a. The manifest function of something and
- b. The latent (or hidden) function of something.

The manifest function of a car might be to get you to work.
Its latent function might be as a status symbol...

When I get into my car I have a choice - I can drive to work, perhaps, or I can decide to run my neighbour down. Much as I may like to deliberately injure my neighbour, I tend to use my car to drive to work since I am aware of the social consequences of using it as a weapon (that is, I would probably go to prison).

We can extend the above idea across all technological forms if we had the time (or the inclination and motivation), but the important point to note is that all technology does is to give us various options and / or opportunities concerning its use. Ultimately, however obscured and distant the relationship between people and technology, it is human beings who make decisions about what - if anything - that use should be (and not the other way around).

This is a relatively simple, but nonetheless important point - one that tends to get lost amidst the "whizz-bang-wow!" of technological innovation and development. At the same time, of course, we need to recognize that technological development is significant, since if it allows us to do something more efficiently or it allows us to do something that we were formerly not able to do, then the simple fact of its existence - the opportunity to use technology in some way, shape or form - is going to be of interest.

The widespread availability of television, for example, is a good example here. The fact of its existence and development has, for example, radically changed the pattern of people's leisure activities over a relatively short period of time.

Note the ways in which television might have altered people's leisure patterns over the past 30 or so years...

The main point to note, however, is that technological development is an enabling process rather than something that inevitably changes peoples lives, behaviour, patterns of association or whatever. What is equally - if not more - significant is the way in which technology is controlled and exploited (and, of course, by whom and for what purpose).

Sociologically, therefore, we need to focus less upon technological development in relation to the mass media than upon the political, economic and social consequences of applying technology in particular ways. In this respect, the question of power comes into play (as it always seems to do at some point), since it is evident that if you own and / or control the development of technology (whether privately or on behalf of the State), this gives you a potentially huge say in how it can be developed and applied...

What I want to do in the following Notes, therefore, is to look more closely at the question of ownership and control of media technology (in all its various aspects and with all its various social ramifications), since this area is probably one of the keys to understanding the mass media.