Chapter 2

Ways of thinking about psychology and the media

Introduction

Having introduced the concept of media itself in Chapter 1, it is time to bring in psychology. In this chapter, I will outline some of the different positions we can adopt when studying the influence of media on human behaviour. Some of these ideas come straight from communication science, which as a discipline has worked on the problem longer than psychology, although it has incorporated many ideas from psychology along the way. Others come from fields like media studies. And then there are insights from psychology itself.

Studying the media

In Europe, and particularly in the UK, there has been a long-established tension between the disciplines of media studies and psychology. Britain is unusual in global terms because it has never fully embraced the academic discipline of communication, from which derives much of the research cited in this book. Communication has traditionally attracted many social psychologists, along with sociologists and other social scientists interested in the media.

In the UK, a different discipline altogether emerged – cultural studies – which was broadened to include media studies in the 1980s. It is this discipline which has tended to attract British academics interested in studying the media. However, cultural scholars tend to be fiercely critical of psychology as a discipline, attacking it for its focus on the individual, and its reliance on quantitative and experimental methodology. Many of their criticisms are valid. However, psychology is a diverse discipline that embraces many different methodological and theoretical approaches, not all of them preoccupied with measuring the individual.

In this book, I will try to navigate a path between these different disciplines and approaches, drawing from the most relevant research to try and answer some of the most pressing questions about psychology and media. I will begin here by outlining some of the major research traditions that have dominated thinking around media over the years.

The ‘media effects’ approach

The media effects approach is the most intuitive one for psychologists interested in the media, because it fits most comfortably with typical psychological research questions. ‘What is the effect of watching violent films on human behaviour?’ is a question asked repeatedly over the past few decades by politicians, journalists, teachers and parents. ‘What is the effect of reading magazines full of images of thin celebrities?’ ‘What is the effect of looking at pornographic images?’ These appear to be simple questions, but it has proved notoriously difficult to provide simple answers to them. For a start, it is almost impossible to isolate the target ‘stimulus’ (e.g. violence) from all the other cultural baggage that surrounds media and the way we use them. It is even harder, however, to isolate, or produce, the ‘effect’ we are interested in.

Most of the research carried out in the media effects tradition has tended to be experimental in nature, which gives researchers a chance to claim that the media cause a particular effect, but in very few cases have the media and the effects resembled the real-life media and effects that inspired the research in the first place. For ‘violence’, researchers have often had to make do with short, unrepresentative and decontextualized clips from films; for ‘effects’, ethical considerations have meant simulating aggression, such as delivering loud blasts of noise to rival participants, or inferring it from ‘hostile’ questionnaire responses.

/ The Taylor Competitive Reaction Time Test (TCRTT) is a frequently used means of simulating aggression in the laboratory. Participants complete a pre-test phase during which they play a video game (either violent or non-violent), or watch a film, and then take part in what appears
to be a game where the participant and a fictitious opponent have to respond as soon as they hear a tone. The 'loser' in this game receives a blast of noise whose volume level can be set either by the participant or automatically. The participant's settings for the blasts of noise are taken as a measure of aggression (see, for example, Anderson and Murphy, 2003).

Media scholars are hostile towards effects research because they see it as removing all context from media, reducing them to mere stimuli, and because they argue that the laboratory setting, and the tasks used to measure aggressive behaviour, are so divorced from real-life media experience that the results cannot be used to make meaningful statements about the everyday relationship between media use and behaviour (Barker and Petley, 2001; Gauntlett, 2005).

This rift in understanding stems as much as anything from the different perspectives of psychologists and media scholars. A psychologist is primarily interested in understanding why human beings behave as they do, and media constitute just one of several influences that contribute to the overall picture. A media scholar, however, is primarily interested in media and their products as cultural objects. So chopping them into 10-minute clips of violence (with the narrative context edited out) makes little sense. It turns cultural material into meaningless chunks of information (or stimuli).

However, the psychologist is unlikely to have the time or resources to screen an entire film to their participants. It would also be far too complicated, and indeed ethically questionable, to examine the effect of the film by tracking their participants' every move in the hours following the screening. So the psychologist settles for a compromise: a segment of film, followed by a laboratory simulation exercise. The result is a tightly controlled study, but one that has low ecological validity. To what degree can we sacrifice ecological validity? What is more important: experimental rigour, or meaningful results?

One solution to the ethical problems of generating aggression, or something similar, in the laboratory has been provided by advances in neuroscience. The increased availability of brain-imaging technology has enabled researchers to study neural activity in response to experimental stimuli, which neatly avoids the problem of devising ingenious tasks for simulating behavioural effects. It does, of course, mean that one can only study thought patterns, and, even then, one has assumed that activation in a particular region of the brain directly corresponds to certain types of thought process. It is also a challenge for researchers to have to sift through lots of random electrical activity in order to clearly identify patterns of firing in selected areas.

Nevertheless, brain imaging offers at least some evidence that the presentation of certain media is associated with certain neuropsychological responses. For work carried out in this area, see Anderson et al. (2006a).

Theoretical background to effects research

Another objection to effects research is that the theoretical rationale for many of the studies is often not fully developed: some of the findings can be explained as pure imitation (a kind of 'monkey see, monkey do' explanation); others require some physiological changes (excitation); others require some form of cognitive transformation, such that exposure to media brings about changes in thinking.

The direct transmission approach actually dates from early work on media influence, known as the hypodermic needle theory (Lasswell, 1935). This was an analogy that was created to describe the effects of radio propaganda on early audiences: the suggestion was that Hitler (or even just someone advertising toothpaste) makes a statement on the radio and this inserts itself in the listener's brain like the injection of a needle, thereby brainwashing the hapless victim. Lasswell's research was based on the use of radio in the First World War, some while before its take up as a mass medium. However, more recent research has suggested that, in a society heavily dependent on radio as a medium, propaganda can still produce spectacular effects.

Rwanda in the early 1990s was one such society. Radio Rwanda was broadcast from a station next to the presidential palace and even used the palace's generator during power cuts, while President Habyarimana provided cheap transistor radios to the whole of the country so they could listen to it (Kellow and Steeves, 1998). Foreign journalists reported that everyone in the country seemed constantly to have an ear pressed to a transistor. During the ethnic uprising of 1994, the same airwaves were used to broadcast ethnic hate propaganda, provoking Hutus by recounting alleged atrocities committed by their Tutsi neighbours. The upshot was a disastrous civil war that claimed the lives of nearly a million Rwandans.

The image of a country glued to its radios is similar to other descriptions of strong media dependencies. There are plenty of accounts of
Latin American cities that practically grind to a halt while the residents follow the latest broadcast of a popular televsion drama. Some European soaps have had this effect too: in the Flanders region of Belgium, the streets would empty while residents watched "Schipper naast Mathilde" in the 1950s (Dhoest, 2006).

There was also a remarkable incident that took place in the US in 1938, the early days of radio. Listeners to a dance music programme suddenly had their entertainment interrupted by a newsflash informing them that the Martians had landed and were making preparations for an invasion of Earth. It was nothing more than Hollywood actor Orson Welles dramatizing a scene from H.G. Wells's novel "War of the Worlds," but it sparked mass panic throughout America, with people taking to the streets to find out what was going on (Cantril, 1940). A Spanish re-enactment provoked a riot in Quito, Ecuador, several years later (Gosling, 2009).

Today, you might argue, listeners would simply have turned on the television or logged on to the Internet in order to find corroborating evidence of the Martian invasion. It would have to be a very slick operation indeed, involving the collaboration of many radio and TV channels and their websites, in order for it to have the same effect. And then wouldn't we all be a little suspicious? One thing frequently ignored by researchers is that, over time, audiences become increasingly media literate and sophisticated. We remember this kind of thing.

Lasswell's hypodermic needle theory was, of course, somewhat crude compared to later social psychological accounts of media effects. One theory that became popular in the 1970s, was excitation transfer. The act of watching violent films, or aggressive sports, raises levels of adrenaline in the viewer, without them recognizing the source of their heightened excitement, and leads them to overreact in certain social situations (Zillmann, 1971). For instance, after watching an exhilarating fight scene, a young man is jostled in the street and reacts by violently lashing out at the person who knocked him.

Later theorists have extended the effects research to examine the way that media violence might 'prime', or activate, aggressive thoughts (Berkowitz, 1984). Here, the young man still reacts the same way when jostled, but rather than explaining this by way of physiological arousal, he is said to have been primed with a violent 'script' that becomes active in a potentially aggressive situation. Of course, the more violent films he has seen in his lifetime, the more accessible the violent script will be. Bushman (1995) and others argue for the inclusion of personality variables in any theory of media effects: the impact of the violent film will vary according to viewers' different predispositions to violence.

However, media effects research is by no means confined to the study of violence. Increasingly, researchers have studied a wide range of psychological and physiological effects produced by an equally wide range of media. For example, Joanne Cantor and colleagues have run innumerable studies on the negative effects of various media on children (Cantor and Sparks, 1984; Wilson et al., 2002). Cantor's approach is largely driven by her concern that media frighten children, rather than encouraging them to become aggressive, and may put them at risk of developing psychological problems in later life. Other researchers have measured physiological responses to media, such as the electrical activity of facial muscles to measure emotional response (Bolls et al., 2001), or heart rate and skin conductance to measure changes in cognitive or emotional state (Lang, 1994).

More recently, media effects researchers have adopted the neurological approach to studying responses to media by measuring brain activity (Anderson et al., 2006a). This approach has inevitably been applied to violent media (see Chapter 3), but has also generated some interesting data that demonstrate the complexity of cognitive activity that takes place when people view television in an apparently 'mindless' way: this complexity entails the coordination of 17 separate cortical areas (Anderson et al., 2006b). The same researchers also present evidence for language-like processing of visual media, perhaps supporting the argument that narrative is an essential consideration for understanding how media are processed by their users.

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The Bobo doll and its arguable relevance to media effects

Perhaps the most famous and most controversial research in the effects tradition was the series of 'Bobo doll' studies conducted by social psychologist Albert Bandura and his colleagues in the 1950s and 60s. The Bobo doll was a giant inflatable object shaped in such a way that, after a blow to its head, it would simply bounce back up into its original position -- ideal, then, for kicking and generally duffing up. Bandura was primarily interested in the transmission of human aggression -- particularly from adults to children -- and was interested to see to what extent children would copy adult 'models' (Bandura et al., 1961).
In the experimental condition, children watched an adult model bashing around poor old Bobo and in the control condition, they watched an adult playing quietly with other toys; then, both groups of children were observed during a set time in the playroom. Unsurprisingly, the experimental children spent significantly more time bashing Bobo than did the controls. Indeed, some authors (e.g., Gauntlett, 2005) have argued that, given Bobo's properties, it was unlikely that children would have been unable to resist having a pop at him once they had seen what the effect would be.

What's all this got to do with media, you might wonder? Well, the connection is tenuous and yet, for decades, the Bobo doll studies have been cited, by developmental psychologists in particular, as hard evidence for the negative effect of cartoon violence. This is because, in addition to variations of the basic experiment where children watched the adult 'models' bashing Bobo on video, there was a variant that Bandura, perhaps mistakenly, called the 'cartoon' condition, in which the adult model wore a cat costume, intending to resemble the appearance of a cartoon. That the cartoon cat also encouraged significantly more of the experimental group to bash Bobo has been upheld, for decades, as evidence that Tom and Jerry can be held responsible for sowing the seeds of homicide.

Perhaps the biggest criticism of all those levelled at media effects research is that it reduces the media user to a state of complete passivity. Ecologically, these experiments could only be valid if participants' actual experience of media consisted of brief, controlled exposure to media whose content was dictated by either the hardware or its operator, for example a parent selecting viewing for a child. In reality, though, it is the viewer who decides what channel to select, down to the specific show itself, and the viewer is usually well aware of the possibility that the content will be violent or sexual, or whatever effect is under investigation.

Returning to the ideas discussed in Chapter 1, we might argue that the media effects tradition works in direct contrast to McLuhan's theory of media. It assumes that media through the ages are simply different technological vehicles for broadcasting the same material to their audiences, and that violence, as a 'message', has the same meaning in any context, whether it is CCTV footage of a pub fight, or a slapstick sequence in a Tom and Jerry cartoon.
Cultivation theory

The cumulative effect of media is sometimes referred to as the 'drip drip' hypothesis of media influence. This approach is known as 'cultivation theory', because it argues that media gradually cultivate certain views and values in their audiences over time. Cultivation theory is rooted in the work of George Gerbner and colleagues, who have been tirelessly collecting data since the 1970s to illustrate the type of influences that TV audiences are exposed to in America.

Gerbner's methodological approach is called content analysis, and has been extremely influential in communication and media studies. It involves the analysis of hours and hours of television material, recording each instance of a particular phenomenon (e.g. violence) following an elaborate coding scheme. At the end, the researchers can conclude things like '89% of programmes between 9 and 10 p.m. contain at least one violent scene' from the evidence of weeks and weeks of painstaking records (e.g. Gerbner et al., 1978).

Cultivation theory has been applied at a global level to try and account for the popularity of certain media across the world. The gradual convergence of world views among different cultures is called 'mainstreaming',
and has often been cited as an explanation for the way that American values seem to have been absorbed by different cultures in the world due to the transmission of US programmes on various overseas TV networks.

These effects can be intensified through the process of 'resonance'. Audiences do not simply take on trust everything they encounter in the media; it needs to 'resonate' with them in order to have a serious effect on their beliefs. If we live in a crime-free area, repeated viewing of crime shows is unlikely to contribute to our level of fear when we step outside the front door. If, on the other hand, we have experienced one or two unsavoury incidents in the local area, frequent viewing of crime drama should make us more anxious still about the potential of becoming a victim.

The 'drip drip' effect of media violence, according to cultivation theorists, has not necessarily made us more aggressive, but instead has made us more fearful about the world. Signorielli (1990) calculated a 'mean world index' based on various factors such as 'heavy' viewing of violence and level of education. However, it has produced inconsistent results across different cultures, and may be useful only for explaining the effects of US media.

On the surface, cultivation theory seems to have addressed some of the criticisms levelled at effects research, particularly its low ecological validity. Certainly, cultivation theory takes into account individual media histories and does not assume that media have a direct transmission of its messages to subsequent behaviour. However, it has been criticized for treating the audience as passive recipients of media – fundamentally it is the same dose–response logic in operation, only on a grander scale – and also for making assumptions based on content rather than on actual behaviour. Gerbner et al. (1978) may have done a thorough job of cataloguing what viewers can watch at any given time, but have provided rather less information about what and, crucially, how they've watched.

Nor would McLuhan have much time for the Gerbner approach. In the 1960s, he was already scoffing at communication researchers' fondness for content analysis. After all, if the medium is the message, then its content is largely accidental. Cultivation theory assumes, like effects research, that TV – and it is largely TV that has been studied in this tradition – is a convenient, though sadly inadequate, means of representing reality to audiences, and is therefore constantly guilty of misrepresenting reality.