

Samantha Lay

**Information/Transformation: The Structures of
BSE and the Strategic Predetermination of
Information Events**

**Submitted for the degree of Doctor of
Philosophy, School of Journalism, Media and
Cultural Studies, Cardiff University 2006**

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Abstract: Information/Transformation: The Structures of BSE and the Strategic Predetermination of Information Events

How did stories about BSE and variant CJD come to be reported? The thesis takes the approach that news stories are one information event in a chain of dissemination that stretches back to the first formulated account. Information events are the material objects constructed at each stage in the chain. They are distinct from but related to, the first formulated account of an event or phenomenon. Structures and their mechanisms guide the construction and dissemination of information events. At each stage in the process of dissemination, information events are strategically predetermined to suit the communicative goals of sources. But resistance is possible, as this research demonstrates.

The thesis explores three events: FSE in a cat in May 1990, the link between BSE and variant CJD in 1996 and the findings of a study on the prevalence of variant CJD in the UK population led by Dr David Hilton in May 2004. Through quantitative analysis I first explore two information events in the dissemination process: press releases and news reports. I then subject the 2004 event to qualitative analysis through interviews with sources and journalists, facilitating a deeper knowledge of the transformational stages posited. The study is underpinned by a realist assumption that some objective reality is being reported - the physical reality of disease - but applies a weak constructionist approach to the construction of information events. This thesis contends that *reality* is a crucial conception in the study of news but what that reality is constituted from should always remain elusive, ambiguous and open to question. I contend, however, that one has to know *where* and *how* to look for *the nearest approximation* of it. If we throw away the quest for and belief in *reality* then we have no defence against the reality constructed for us by powerful elites.

Acknowledgements

This project started almost a decade ago. Since then I have been encouraged, supported and inspired by so many people. Therefore I have a good many people to thank.

I would like to thank my first supervisor, Professor Ivor Gaber for his unstinting support of this work and its author. I would also like to thank Keith Negus for his input to the project as without it, this project may never have been completed. I would also like to thank my former colleagues and students in the Department of Media and Communications at Goldsmiths College for providing such a lively environment in which to work. In this respect I would also like to acknowledge the support of Christine Geraghty who was Head of Department during my time at Goldsmiths and who was always sensitive to the fact I had research to do as well as other departmental duties.

Although I never got the chance to thank her in person, I would like to acknowledge the support the late Sheila McKechnie gave to this research. I would also like to thank Maurice Frankel at the Campaign For Freedom of Information who in the early stages gave me documents and materials I might not otherwise have been able to access.

For the allowances he made for me in order to complete this thesis, I would like to thank Ron Southwell former Head of the BA Media Production Programme at West Herts College. In spite of the intolerable work-load he still always made sure I kept my Wednesdays as PhD day. Thanks, Ron! That wasn't easy in an FE/HE environment as I now know.

I am particularly indebted to the sources and journalists whom I interviewed for this research. The time you gave was invaluable and the data you helped me to generate, fascinating. I would like to single out Dr David Hilton at Derriford Hospital for the time he gave for this research and the materials he supplied. I

would also like to say especial thanks, too, to Kevin Maguire who put up with being interviewed *twice* - once for this project and once for another. Thanks, Kevin. In addition, thanks too, to Professor Richard Lacey for his time and the materials he gave. It was a fascinating afternoon and the interview provided some excellent contextual material.

The staff at the British Newspaper Library in Colindale were incredible. Always courteous, helpful and prompt to deal with requests, you made it such an absolute pleasure to research, I didn't even mind the headaches from reading micro-film for four hours at a time. The same goes for the wonderful staff in the library at Goldsmiths and at Trinity and All Saints College, Leeds. In the case of the latter I would like to single out Gillian Leach, the media section head of TAS Library. For all the journal articles and inter-library loans you managed to get for me, I thank you. Thanks, too, to Cheryl at Typing Express for help with transcription.

I would like to acknowledge the support of the Faculty of Media at Trinity and All Saints its Research Committee for awarding me a sabbatical to complete this thesis and for their financial support with fees and journeys to and from Cardiff for supervision.

I am not sure how I can adequately put into words what I want to say to my supervisors, Professor Jenny Kitzinger and Dr Tammy Boyce. I have thoroughly enjoyed working with you both on this project. You both ask difficult questions, and this is really what the research needed. I have learned a great deal from your supervision and I hope that I can pass on some of your enthusiasm to students after this process is complete. Thank you.

I would be remiss if I did not acknowledge the link between teaching and research. Over the years I have been fortunate enough to work with some excellent students, who through their passion and enthusiasm have helped to keep me interested in the research all this time.

I would also like to thank the following individuals for their interest in my work and their friendship in general, because this has really helped me get through some tough times: Judy Farrar, Anna Snowling, Alistair Ayres, Marilyn and Michael Howard, Sacha Roudette, Maurice Possibile, Philip Corkhill and his partner, Richard, Julian Pardoe, Mark Frennd, Rebecca Clark, Sean 'Mac' and baby Teo, Darren and Kerrie Eastwood, Rebekka Kill and her husband Nick, Carol Moonlight and Dr Jim Cross.

Special thanks go to Deirdre O'Neill and Pauline Reay for their unstinting support of this work and its author. And for helping me see that sometimes the only thing to do with a 'crisis' is laugh at it. In this category of especial thanks, I would like to acknowledge my dear friend Jonathan Almond. His ability to follow my arguments when others scratched their heads has really helped to clarify this research as it progressed. Plus, talking about *Buffy* and *Quincy* helped too - if only to stop me talking about the thesis!

And finally, last but by absolutely no means least, I would like to thank my husband Phillip Filipiak. Without his love, support and kindness this work would have been so much less pleasant to complete. Without you, the chocolate and the tea you brought me at 1am for months on end, it would have been damn near impossible.

Declaration

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

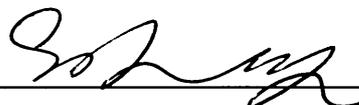
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Statement 1

This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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INFORMATION/TRANSFORMATION: THE STRUCTURES OF BSE AND THE STRATEGIC PREDETERMINATION OF INFORMATION EVENTS

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List of Abbreviations

ABSW	Association of British Science Writers
ACPD	Advisory Committee on Dangerous Pathogens
AMA	Association of Metropolitan Authorities
ASBO	Anti-Social Behaviour Order
BSE	Bovine Spongiform Encephalopathy
BVA	British Veterinary Association
BVS	Bristol Veterinary School, Bristol University
CA	Consumers' Association
CFR	Confidential Final Revise
CJD	Creutzfeldt-Jakob Disease
CJDSU	CJD Surveillance Unit, University of Edinburgh
CFR	Command Final Revise
CMO	Chief Medical Officer
CPBF	Campaign for Press and Broadcasting Freedom
CSPCSC	Civil Service Pay and Conditions of Service Code
CVL	Central Veterinary Laboratory
CVO	Chief Veterinary Officer
DEFRA	Department for Environment, Food and Rural Affairs
DoH	Department of Health
EOG	Establishment Officers' Guide
FDA	First Division Association
FOI Act	Freedom of Information Act
FSE	Feline Spongiform Encephalopathy
GCHQ	Government Communication Headquarters
GIS	Government Information Services
HSE	Health and Safety Executive
IPPR	Institute of Press and Public Relations Professionals
MAFF	Ministry of Agriculture, Fisheries and Food
MLC	Meat and Livestock Commission
MMR	Measles, Mumps, Rubella
MP	Member of Parliament
MRC	Medical Research Council
NFU	National Farmers' Union
NUJ	National Union of Journalists
OSA/s	Official Secrets Act/s (1911) 1989
PCC	Press Complaints Commission
PFMA	Pet Food Manufacturers' Association
PRO	Public Records Office
SBO	Specified Bovine Offal
SEAC	Spongiform Encephalopathy Advisory Committee
SIRC	Social Issues Research Centre
vCJD	variant Creutzfeldt-Jakob Disease

Introduction: How did stories about BSE come to be reported?

The course of events must assume a certain definable shape, and until it is in a phase where some aspect is an accomplished fact, news does not separate itself from the ocean of possible truth (Lippmann [1922] 1991: 340).

On the afternoon of March 20 1996 I was working in the press office at the Consumers' Association (CA) in London. The entire press office had stopped answering calls and were crowded round the television as Stephen Dorrell gave a statement to the House of Commons. He informed Parliament – and the world – that a new disease, probably linked to Bovine Spongiform Encephalopathy (BSE) in cows, had been identified in an unusually young demographic group. Once the statements were over, we resumed our work where all the calls coming in concerned BSE. The director of the press office disappeared into the Director, Sheila McKechnie's office. Around an hour later, we were faxing our response to anyone who asked for our institutional view.

The next day, leaving work after another day fielding calls on the BSE beat, I walked past an *Evening Standard* bulletin board which read: "CA Accused of Scaremongering". I had played a small part in a 'national crisis' and I had experienced the exhilaration, confusion, and sense of responsibility that involvement in events of such perceived magnitude invoke. At the time I wondered why it was only now the phones were ringing off the hook, when scientific experts and health authorities had been expressing concern to us for months prior to the Commons statements.

These events had such a profound effect that seven months later I left the CA to start a PhD on the reporting of BSE, Gulf War Syndrome, and the Arms to Iraq affair. However, so huge was the topic of BSE, I soon narrowed down my inquiry to focus on the BSE story alone.

The BSE story has been defined in mostly negative terms but there is little agreement as to what the BSE saga represents. For Leach (1998), the BSE story has been presented as a crisis but is more accurately described as an event because this latter term provides distance as well as underlining it as a media story.

Forbes (2004) debates whether the BSE story is a crisis or a drama, coming firmly down on the side of drama because of the cast of characters and their roles and the methods and findings of the BSE Inquiry further support this definition. Both Leach and Forbes eschew the use of the term 'crisis' though it is interesting how widespread in media and political discourse this definition is. For Leach, defining the BSE story in terms of a crisis frames the issue in such a way as to make the issue a political crisis (that is to say, the result of poor policy-making or governmental mistakes).

For Forbes, the term crisis limits the number of explanatory frameworks available and severely curtails the process of learning from past mistakes (Forbes 2004: 343). Organisations like the Campaign For Freedom of Information (CFOI) and CA regard BSE as an example of secrecy and enclosure by official sources who are protected by laws and regulations and who do not trust the people to make rational decisions with information so communicated to them. For example, the director of the CA, Sheila McKechnie, stated in her evidence:

There is nothing more nanny-ish than withholding information from people on the grounds that they may react irrationally to that information (BSE Inquiry 2000: 1298).

'Dissenting' scientists like Professor Richard Lacey and Dr Stephen Dealler regard the whole affair as a cover up, protecting Ministers, senior civil servants and the beef industries. The official findings of the public inquiry - often called the Phillips Report (2000) - whilst upholding these views in part, also presents the BSE 'problem' in part as a failure by government to communicate risk effectively. In their conclusions the inquiry states:

Throughout the BSE story, the approach to communication of risk was shaped by a consuming fear of provoking an irrational public scare. This applied not merely to the Government, but to advisory committees, to those responsible for the safety of medicines, to Chief Medical Officers and to the Meat and Livestock Commission. All witnesses agreed that information should not be withheld from the public, but some spoke of the need to control the manner of its release. Mr Meldrum spoke of the desirability of releasing information 'in an orderly fashion' - of ensuring that the whole package of information was put together, taking care in the process not to 'rock the boat' (BSE Inquiry 2000 vol 1:1294)

Journalists and scientists have also sought to explain what happened in the case of BSE. They have argued that it was characterised by an information vacuum. With all this in mind, then, *how did* stories come to be reported? What and who were reported and how can this be explained? Whether BSE was a drama, or a crisis, 'crisis' was perceived by the media both nationally and internationally.

Read in the context of BSE, Bennett's (1990) index model of news access might go some way to understanding how 'crises are made'. This model posits the view that during times of political consensus the media tend to be supportive of government. However, during times of crisis, journalists access wider sources and may adopt a more challenging stance (Cottle 2000: 437).

As Kitzinger (1999) points out, once a story is defined as a 'risk' story by journalists they may step outside traditional routines to raise more politically contentious questions (Kitzinger 1999: 55-69).

Events do not 'obtrude' themselves (see Lippmann 1922 in McQuail 1987: 204), they 'assume a certain definable shape'. Lippmann's claims for this definitional shaping are hardly surprising in the light of his propagandist background. But what is interesting is how little things have changed since 1922. Professional practices – of public relations professionals, sources, and journalists - all work by various means to make obtrusion invisible. That does not mean to say that what has happened in any event has been constructed. Only the account of it is a construct, but they are accounts produced as a consequence of source strategies in ways that seek to further sources' strategic goals, when combined with journalistic values, routines and practices.

This study asks *how was the BSE story shaped as a public media event?* It explores this central research question through three case studies concerning three separate, BSE-related stories. It uses content analysis for all three events, and interviews with key sources and journalists in a detailed critical case study of the most recent event in 2004 to investigate key issues relating to the existing literature on media production and source-journalist relations. In particular I address the following questions:

- Did official sources dominate as primary sources in the news reports and how far do they control the flow of information?
- Studies suggest that in order for the desired official sources to be accessed, the appropriate journalists need to be attracted to the appropriate information. Does the deployment of specialist correspondents correlate

with specific official source types used in the reports?

- If the primary definition thesis provides an accurate account of source-journalist relations, then the newspaper reports will perceive 'what has happened' in similar ways. Is this the case?
- One of the criticisms of primary definition as a concept is that it over-determines the abilities of official sources in accessing the media and defining issues of public importance. This criticism will be confirmed as valid if conflict between official source types is observed.
- If Palmer (2000) is correct and sources use the strategy of the 'appeal to news values' to get their stories covered, then there will be some correlation to values found in the press releases and news reports. Does such a correlation exist?
- Official sources in crisis will attempt to control the media agenda. But they can fail. Is there any evidence of this from my research?
- If stories appear in all newspapers sampled this will provide evidence of routine dissemination. Routine dissemination is said to encourage routine coverage of events. How far can it be said that the events analysed in the BSE story came to be reported because of practices of routine dissemination, and does this necessarily produce uniform coverage?
- News is a construct based on some reality that exists independently of our knowledge of it. Furthermore, news is but one information event in a chain of information events starting from the earliest formulated account of some phenomena to the news reports and broadcasts from media outlets. Since official sources tend to be large, bureaucratically organised institutions, there will be material evidence in some form created at every stage. Analysis of this evidence is possible and will show the influence of structures and mechanisms in their construction. How can tracing the 'evolution of a news story' in this way help to inform the sociology of journalism?

Outline of the thesis

The thesis is divided into eight chapters. *Chapter one* is a review of the literature on media reporting of BSE. It provides a brief chronology of the story and introduces the three events analysed in the case studies. *Chapter two* is a review of the literature on the structures and mechanisms of news production. *Chapter three* provides a literature review of the way structures inter-relate. *Chapter four* explains the methodology adopted in the study and discusses the project design, project sample and methods used for gathering and analysing data.

The following two chapters present my research findings. *Chapter five* presents my findings of the content analysis of press releases and news reports. *Chapter six* presents the findings of the 2004 critical case study. *Chapter seven* draws out key areas of discussion and the issues arising. Finally *chapter eight* concludes by reflecting on the thesis in the light of the findings, explains the contributions the research has made to the literature, and reflects on the strengths and weaknesses of the thesis. I suggest further areas for research and the further development of tools of analysis.

Chapter 1 A summary of the BSE story and the academic literature on BSE

This chapter presents a chronology of the BSE story and a time-line in order to facilitate a clear understanding of the key events in the BSE story. I then introduce three events from the BSE story. I also provide a context for each constructed from archival research and interviews with key figures. I then discuss the literature on BSE as it related to media studies and the sociology of journalism before concluding with a brief account of the contribution I would like to make to knowledge concerning BSE and variant CJD (vCJD).

Part 1 The Life-Cycle of the BSE Story¹

According to the BSE Inquiry report (2000) the BSE story began in 1984 when vet David Bee was called to a farm to inspect cow number 133. The cow had an arched back and had lost weight dramatically. The vet called in the experts at the Central Veterinary Laboratory (CVL) to gather their opinions. By December 1986 the head of the CVL and the Chief Medical Officer (CMO) were informed of the existence of the disease. By the summer of 1987 the Ministry of Agriculture, Fisheries and Food (MAFF) and CVL officials were touring meetings of cattle farmers, breeder societies and National Farmers' Union (NFU) members to notify them of the new disease affecting cattle.

The story made its media debut in three farming magazines in articles about a mystery illness killing cattle, most notably in *Big Farm Weekly* 23 September 1987. The national mass media 'life' of BSE however began on 31 October 1987 when broadcasters announced that there was a mysterious disease responsible for the death of cows in the UK.

The first independent advisory committee, chaired by Sir Richard Southwood – Head of Zoology at the University of Oxford – had been established in 1986 to advise on

¹ The BSE story has changed over the periods analysed. While it is increasingly a story for more and more countries as they experience outbreaks of BSE, in the UK the story has evolved and developed from the 1996 'link' event into a human health issue. Stories on the levels of variant CJD contamination of the national blood supply and findings of studies have helped to carve a new trajectory for the media life of BSE.

BSE and by the time the BSE story became a national media story, 95 cases of BSE had been confirmed across 80 farms in the UK². In 1989 the working group published its findings, known as the Southwood Report.

It was also in 1989 that another advisory body - the Tyrell Committee - was established to advise government on the growing threat of BSE to cattle industries. Drawing on the Southwood Report document an offal ban in human foods was implemented, and bovine materials banned from animal feed destined for ruminants. Scientific findings relating to the disease having crossed the species barrier infecting mink, antelope and deer were included in the report but not reported widely in the media. In addition, the report also made recommendations about the use of bovine substances in medicines and baby food but these were also largely ignored by Government, the Ministries and journalists.

In May 1990, it was announced that a cat had died from suspected (FSE). Dubbed the 'Mad Max' affair (the name of the unfortunate Siamese cat who died), this episode constituted a considerable peak of media interest. Over the coming months several more dead cats were identified.

There was little coverage of the issue again until 1996 when it was announced that ten unusually young people had died from a new variant form of Creutzfeldt-Jakob Disease (CJD). CJD typically affects people over the age of 40 years. The BSE story became a crisis, and an international drama, as European nations, one after the other, banned imports of British beef. A mass cull of the national herd over the age of 30 months was ordered and the horrific pictures of piles of incinerating cattle were flashed across TV screens and splashed in newspapers. A public relations campaign sponsored by the Meat and Livestock Commission (MLC) was planned but pulled at the last minute. Sales of beef plummeted and a world-wide ban on British beef was instituted (for a discussion of the economic impact on beef consumption see Reynolds 2003).

² source: <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/phd-bse-chronology.htm>

In the public eye, the story slowed down but failed to disappear completely. An Inquiry into the BSE 'fiasco' was established in 1997. Over the coming years a trickle of stories appeared based on occasional revelations drawn from the Inquiry and stories about dead or dying victims of the disease vCJD. In the run up to the publication of the BSE Inquiry's findings expectations of publication increased the volume of stories on BSE-related issues covered in the press. A final peak event occurred with the publication of the report in October 2000. Some considered the Phillips report to be a white-wash. However others saw the publication as an end to the controversy and the report's publication leant a certain sense of closure to the issue.

BBC News online reported on the issuing of the government's official response to the Phillips Report, published a year later. Of this response the online news channel stated: "There are no radical new ideas, since Ministers believe that many of the most important implications of the BSE crisis have already been dealt with - for instance, by establishing the independent Food Standards Agency" (news.bbc.co.uk 2001³).

BSE and its cousin vCJD have been issues in the media spotlight for nearly two decades. But for one senior civil servant it is not so much the story of BSE that has done this, but the media themselves. Pat Wilson, former Deputy Director of Information for the Department of Health (DoH) from 1984 to 1997, stated in his written evidence to the BSE Inquiry that:

As the 90s went on so media interest developed – exponentially in the final stages [1996]. Journalists ranging from those specialising in food scares, scientific, agricultural correspondents together with several investigative television teams moved in on the story and began to feed off each other (Wilson 7/5/99: 5).

This thesis seeks to understand how stories about BSE and vCJD came to be reported in the press? Who 'made' BSE news. A time line has been constructed to provide a chronological account of the BSE story from its debut in the national media on 31 October 1987 to 21 May 2004.

³ http://news.bbc.co.uk/1/hi/programmes/world_at_one/programme_highlights/1162493.stm

1989 BBC2 broadcast *Antenna* programme on BSE 4 January; Samples again refused to interested researchers; time by MAFF; *Southwood report* published and recommends Specified Bovine Offal (SBO) ban in rum February and the same day the Consultative Committee on Research (Tyrell Committee) is established; compulsory ban is instituted on bovine offal in human foodstuffs and Pet Food Manufacturers impose a ban on bovine offal in their products; 19 July BBC2 re-screen *Antenna* programme on BSE

1990 Farmers awarded 100% compensation for all cattle culled on 14 February; Spongiform Encephalopathy Committee (SEAC) established 3 April; First cases of FSE in cats confirmed April but drawn to the public attention 11 May through a press release to editor of *Veterinary Record* and forwarded to national news journalists simultaneously (subject of case study 1); Professor Richard Lacey's call for a cull of the entire national herd in the *Sunday Times* on 13 May causes controversy; some local authorities take British beef off school menus; CMO issues statement that "beef is safe" 16 May; Agriculture Minister John Gummer embroiled in 'Bury Bury' stunt orchestrated by *the Sun* newspaper in which Mr Gummer is shown feeding his daughter a beef burger; summer 3 European countries ban British beef imports only to over-turn them a month later

1991 and 1992 Nothing major to report in either of these years. However, it should be noted that 1992 was an Election year and was won by the Conservatives. However several scientific studies were under way and published in peer circles. James Erlichman writing for *The Guardian* gives a platform for Professor Richard Lacey's view that the offal ban is failing to halt the spread of BSE

1993 and 1994 Again much work going on scientifically behind the scenes in 1993 and 1994 but not necessarily reported on. A notable event in this year was the publication of Professor Richard Lacey's book '*The Hidden History of Britain*'. Despite its topicality, no bookshops will stock the book

1995 Stephen Churchill aged 18 dies from vCJD; two other young people die this year; SEAC issue a press statement about the suspected vCJD death of a farmer on 23 October

⁴ The three case studies explored in this thesis are underlined

1996 Announcement of a probable link between BSE and a new vCJD affecting unusually young demographic (**subject of case study 2 'The Link'**); *The Daily Mirror* breaks the news in an exclusive that morning, pipping the official information machine to the post; beef sales slump, Ministers are summoned to Europe and a world-wide ban on British beef is instituted; a culling policy is established and horrific images of burning cattle fill the papers and television screens for over a month



1997 and 1998 Labour Government established after General Election in May; BSE Inquiry set up under Lord Phillips of Worth Matravers, announced 22 December 1997 and set up on 12 January 1998



2000 Publication of BSE Inquiry findings October; Agriculture Minister Nick Brown states that no individuals are to be blamed; critics like Professor Richard Lacey and Dr Stephen Dealler label the Inquiry findings 'a whitewash'



2004 Hilton et als study is published in the *Journal of Pathology* and covered in newspapers on 21 May (**subject of case study 3**)

Part 2 Three BSE-Related Incidents: 1990, 1996, 2004

I have selected BSE as my focus for research for three main reasons. First, the BSE/vCJD controversy marked a key crisis in political, social and economic terms. Second, because the controversy has spanned three political administrations. And third, I have a background knowledge and interest gained as a journalist and press officer at Consumers' Association during the key period 1992-96.

I have chosen to focus on three BSE-related incidents. The events have been chosen first because of their perceived place in the 'narrative chain' of BSE spanning from 1990 to 2004. Thus, Mad Max (1990) is an example of the early part of the chronology, The Link (1996) is the mid-point and notably the biggest crisis point to date, and the Hilton study provides the most recent study of how stories relating to BSE and vCJD are reported.

The following discussion provides a snap-shot of each event and what is known about its circumstances of dissemination. These snapshots provide an essential context for understanding the research findings.

First event: 'Mad Max' 11 May 1990

The first event concerned the confirmation that a cat had died from Feline Spongiform Encephalopathy (FSE). Much was made of the fact that the disease appeared to have 'jumped the species barrier'. But this was not the first time this had happened. The Southwood Committee's report, published in 1989, had found that a range of animals had already succumbed to the disease. However, this was the first time a domestic pet was recorded to have died from the disease.

Prior to 1990 the issue had been seen in agricultural terms. The 1990 event of the cat succumbing to a feline form brought the issue into the homes and hearths of Britain's animal lovers - the issue entered the domestic sphere.

MAFF's Minister and the Chief Veterinary Officer (CVO) along with representatives from the DoH and from the Central Veterinary Laboratory (CVL) were informed of the findings by a MAFF official. The BSE Inquiry archive noted:

The following day, Mr Robert Lowson⁵ of the Animal Health Division of MAFF minuted to Mr Gummer with copies to ... Mr Meldrum (CVO), ...Mr Wells, Mr Wilesmith (CVL) and Dr Pickles (DoH). The minute noted CVL confirmation that a cat had died after suffering from SE (*spongiform encephalopathy*) (BSE Inquiry Report vol 6: 4.499).

A lecturer at the Bristol University Veterinary School, Dr Geoffrey Pearson had notified the CVL at MAFF of the results of a post mortem examination. Once these results were confirmed it was decided that a press statement should be issued and a joint press conference between MAFF and the University was planned for 11 May 1990. However, Dr Pearson said in his statement to the BSE inquiry that he received a telephone call on the evening of 9 May saying that a newspaper was going to break the story on 10 May and the press conference was to be brought forward. A leak was suspected, but according to Dr Pearson, was never found.⁶

⁵ MAFF Head of Animal Health Division, April 1989 to January 1991; Head of Animal Health (Disease Control) Division, January 1991 to April 1993; SEAC secretariat to April 1993; UK Permanent Representative to European Union (Agriculture), Brussels, January 1995 onwards (BSE Inquiry bseinquiry.gov.uk/report/volume16/whoswho4.htm#IX_L).

⁶ Dr Geoffrey Robert Pearson. BVMS, PhD, FRCPath, MRCVS,. Email response to questions on the

A press release was issued by MAFF from the CVO, Keith Meldrum, entitled Spongiform Encephalopathy in a Cat, dated 10 May 1990. The release (see appendix 3) was short and to the point merely stating that FSE had been found in a five year old Siamese cat from the Bristol area. The final paragraph states that the CVO had written to *Veterinary Record*. The letter (one and half pages) was attached. The press conference took place but did not include Bristol University, for reasons given by Dr Pearson as “probably logistical” given the need to pre-empt the ‘leak’ swiftly.⁷ MAFF’s strategic approach to communication involved working with other government Ministries and the British Veterinary Association (BVA). The minute from MAFF’s Richard Lowson stated: “We [MAFF] will . . . concert our approach with DOH and the British Veterinary Association, and recommend that they should both participate in the Press Briefing . . .” (BSE Inquiry vol 6: 4.499: 4).

Science journals also had a role to play in this event in that it was a letter to the *Veterinary Record* from the CVO that was disseminated as part of the press strategy in 1990⁸. The letter was a pivotal part of the dissemination strategy adopted in this case. This was confirmed by the minute from Richard Lowson:

After discussion with Mr Simon Dugdale (Chief Information Officer, MAFF) we recommend that, rather than wait for the story to emerge, we should take the initiative in releasing the information. This would be done by means of a letter to the *Veterinary Record*, but as the first issue in which it could be published would be that on Friday week, 18 May, it would be better to release the text in advance. If Ministers agree, this release could be accompanied by a press briefing by officials, possibly on Friday of this week (BSE Inquiry findings 2000: vol 1 1294).

Relations between administrative representatives, scientists and government facilitated the development and implementation of the strategy. The CVO described these relations as very close. He stated:

dissemination process of this particular event from Dr Pearson Monday 16 December 2002

⁷ *ibid*

⁸ This publication had been used in 1987 to announce the existence of the disease on 31 October 1987

. . . with all of these Ministers I believe I established a very close working relationship. [One] had to establish and did establish a very special relationship between Ministers and the CVO and I am sure with several other officials such as Permanent Secretaries and so forth. There was no difficulty. There was openness, frank discussion, reliance upon the judgement of each. And we worked as a team” (BSE Inquiry 2000 vol 15: 4.2).

As a team, the Permanent Secretary, CVO and Ministers worked closely on the strategy. The Inquiry noted the team’s emphasis on order and control of information. It stated: “All witnesses agreed that information should not be withheld from the public, but some spoke of the need to control the manner of its release “ (vol: 1 ch14). It was noted in the introduction to this thesis that key figures were concerned with information control in this case. For example, the Inquiry observed: “Mr Meldrum spoke of the desirability of releasing information 'in an orderly fashion' - of ensuring that the whole package of information was put together, taking care in the process not to 'rock the boat’” (vol: 1 ch14).

Second event: ‘The Link’ 20/21 March 1996

The ‘link’ between BSE and vCJD announced in 1996 was a major turning point in the life of the BSE story. Having avoided the label of ‘potential human health problem’ in 1990, there was in 1996 no avoiding it. On 17 March 1996 the CJD Surveillance Unit (CJDSU) based at the University of Edinburgh, appeared before an emergency meeting of (Spongiform Encephalopathy Advisory Council (SEAC) to discuss evidence of a new form of CJD affecting an unusually young age group. Classic CJD was known to be rare in people under the age of 40 but over a relatively short period ten people had succumbed to the disease. The findings suggested there was a strong possibility that this was an effect of exposure to BSE.

The statement by Stephen Dorrell to the BSE Inquiry detailed the process of disseminating the science in 1996. He stated that he was contacted at home on Sunday 17 March by the CMO (whose independence is asserted in the opening section of Dorrell’s statement) to inform him of SEAC’s findings. Dorrell recalled:

We agreed that there should be a measured consideration of how to react. I had some constituency engagements arranged for 18 March and we decided that officials should meet first on Monday morning to consider their advice and I would then meet them later that day to discuss their conclusions with them (Dorrell 1997 statement 297: 14).

From here, according to Dorrell, the decisions were made by Government in collaboration with representatives from the Spongiform Encephalopathy Advisory Committee (SEAC), the DoH (DoH) and the Ministry of Agriculture, Fisheries and Food (MAFF). The meeting Dorrell instigated included Dorrell's counter-part at MAFF, Douglas Hogg. Dorrell recalled:

On Monday [18 March] afternoon I met officials in my office. I believe that the CMO, the Permanent Secretary, Dr Rubery and Romola Christopherson (DoH Head of Press Office) were present; there may have been others. We were later joined by Douglas Hogg and his officials (Dorrell 1997 statement 297 15).

That evening Hogg and Dorrell met the Prime Minister along with Michael Heseltine, William Waldegrave and Alistair Goodlad (then Chief Whip). Dorrell gave no details of the outcome of this meeting, but the following day a meeting held by the Prime Minister made the decision to reconvene SEAC to ask "what action, if any, was necessary to protect the public health" (Dorrell 1997 statement 297: 16).

Later that same evening Dorrell was contacted by Heseltine who informed him that he would have to make a statement to the House of Commons. He was informed that this had now become a matter of public health. Dorrell recalled: He told me that in view of the human health implications, I should expect that a statement to the House of Commons would be made by me, rather than the MAFF Minister (Dorrell 1997 statement 297: 19). The day of the announcement arrived and a Cabinet meeting was held to discuss strategy. The Cabinet meeting was attended by the CMO and SEAC's chair. At 12.30pm according to Dorrell, he and his aides from the DoH prepared his statement to the House of Commons, and at 3.30pm it was delivered (Dorrell 1997 statement 297 21-22).

This event cannot be adequately understood without consideration of the headline that greeted the Cabinet as they met that morning. The headline on the front page of the *Daily Mirror* read “Mad Cow Can Kill You”. Their story told of the link between BSE and vCJD and that government announcements were imminent. On 20 March 1996, then Political Editor Kevin Maguire of the *Daily Mirror* scooped a world exclusive – that there was a link between BSE and a new variant form of CJD (*Daily Mirror* 20 March 1996: 1). His source informed him of the SEAC’s findings that there was a probable link between BSE and a variant form of CJD and that a statement from the DoH was imminent. Indeed, that afternoon, Stephen Dorrell, Minister for Health, and Douglas Hogg, Minister for Agriculture, made the statements. This pre-empted the statements, as not only did *The Mirror* have the story on the day of the statements in the Commons, but also *The Guardian* and the *Times* both carried small articles.

Clearly, *The Mirror’s* scoop was unexpected, although there was a growing fear amongst those in the inner policy circle that it would be leaked if they did not act. Whether the leak disrupted the strategic goals of the DoH, MAFF and the Government is unknown. But Maguire stated:

I think it changed the way they did it [disseminated information]. I believe they were planning to make a statement that day anyway, but I am sure it changed the nature of the statement as they had lost the initiative...the plan was a pre-briefing to a few favoured trusted journalists on the Monday. The statements would have been in a very calm atmosphere on the Monday and then after that there would have been some calmer briefings and they would have given their spin and taken whatever line they wanted. As it was, they were confronted with a headline in the *Daily Mirror* saying “Mad Cow Can Kill You (Maguire 2002: 6).

Regardless of the de-stabilising effect of Maguire’s scoop, the DoH and MAFF issued press releases and held a press conference at the Queen Elizabeth II Banqueting Suite in Westminster, after the statements had been made to The House.

Third event: 'The Hilton Study' 21 May 2004

This event concerned the publication of a two year study led by Dr David Hilton in the *Journal of Pathology*. In 1998 histopathologist Dr David Hilton of Derriford Hospital in Plymouth wrote a letter to *The Lancet* about the discovery of one patient whose tissue samples had tested positive for CJD prions⁹. From this observation, he and Professor James Ironside of the CJDSU in Edinburgh, decided to conduct a study of further tissue samples.

The study took samples of tonsils and appendix tissue to examine the prevalence of vCJD in the population. The study found that 3 out of 12,674 UK citizens could be incubating vCJD¹⁰. The results of the study were written up and presented to a steering group overseeing research on vCJD. The authors then wrote up the findings and prepared to publish it in the *Journal of Pathology*. Agreement was reached as to which of the authors would speak to which media outlets, and a press release was formulated and distributed by Wiley Interscience, the publishers of the *Journal of Pathology*. The article was published in the *Journal* on 21 May 2004.

In this section I have introduced the three events to be analysed in this thesis. The following section introduces key academic research on the media life of BSE, in order to establish what has been done before in the field and the contributions my research seeks to make.

Part 3 Researching BSE: risk and beyond

BSE has been present in British social and cultural life for nearly twenty years and has attracted extensive public, policy making and academic comment. It has become not only an issue of importance in its own right, it has also cast its shadow over many a health and food controversy since. For example, Hargreaves et al (2003) state that the 'script' of the Measles Mumps and Rubella (MMR) vaccine debate was:

⁹ Hilton et al 1998, Prion immunoreactivity in appendix before clinical onset of variant Creutzfeldt-Jakob disease, *The Lancet*, vol 352, August 29 1998, p703-705

¹⁰ Hilton et al 2004, Prevalence of lymphoreticular prion protein accumulation in UK tissue samples,

...undoubtedly influenced by the ghost of the BSE controversy. Was this another case, reporters' asked, of mainstream science and the government rushing prematurely to the defence of the status quo (Hargreaves et al 2003: 51).

However, they argue that as an issue, the MMR crisis is different to BSE because "the decline in public confidence created new public health risks" (2003: 51). Whilst this is certainly true at the moment, further confirmation of early research on the transmission of vCJD through surgery and blood transfusions, for example, might also in future carry such risks. In addition, the proposals to notify patients identified with the disease through a database of blood for transfusions and post-operative tissues recovered and stored, might also have unplanned but disastrous effects on public health.

There is a sense that BSE as an issue marks something of a watershed, a turning point in relations between government, the science community and the public. For Irwin (2001) science policy and public opinion is the subject of much debate in the UK in the light of the BSE crisis and to a lesser extent genetically modified organisms. Dickson (2000) is more strident in that he sees public trust in science policy as being severely shaken by the BSE crisis.

Overwhelmingly, BSE is approached by scholars in the field from the perspective of 'risk' and 'risk society, basing their arguments on Ulrich Beck's influential work, '*Risk Society*' (1992). Beck's approach is encapsulated well in the following quote:

Politicians say they are not in charge: they at most regulate developments. Scientific experts say they are merely creating technological opportunities but not deciding how they are taken up. Risk politics resembles the 'nobody's rule' that Hannah Arendt tells us is the most tyrannical of all forms of power because under it nobody can be held responsible. Our society has become a laboratory with nobody responsible for the outcome of the experiment (1996 cited in McNaughton and Urry 1998: 262).

In the case of BSE, whilst the Inquiry concludes that serious errors were made, no individual or organisation has been specifically held accountable. Jasanoff's work (1996,1997) pays particular attention to BSE and the social and cultural aspects of risk. In the '*Cultural Aspects of Risk Assessment in Britain and the United States*, Jasanoff examined how different decisions about risk management and risk assessment were arrived at by the British and American policy communities. Despite the fact they were fed the same information on the risks in question. She concludes:

In Britain, scientists and governmental decision makers are certain to recognise a risk only when there is persuasive evidence of actual harm, as in the case of asbestos...Consistent with its demand for tangible evidence of risk, the British policy process places much more importance than the American on studies of human populations. Without empirical proof from epidemiological studies, British risk assessments often stop short of finding that there is a basis for concern (Jasanoff 1987 in Johnson and Covello, 1987: 385).

Jasanoff's 1997 work on the BSE scare of 1996 is of particular interest as it is concerned with one of the case studies analysed in this thesis. The March 1996 crisis sparked by the announcement of a probable link between BSE and vCJD, was, for Jasanoff, a period of "civic dislocation". She defines this as: "...a mismatch between what governmental institutions were supposed to do for the public, and what they actually did" (1997:221). Furthermore, she argues that the information vacuum created by MAFF's refusal to share information facilitated "civic dislocation". Journalists as well as scientists have expressed this view. It also highlights the mistrust they had of media organisations. As Jasanoff states:

Part of the information deficit could be attributed to MAFF's extreme reluctance to disclose data in its possession to scientists, politicians or the public. Only the threat that senior British researchers might discuss their frustrations with science journalists seemed powerful enough to cut through the ministry's cloak of confidentiality (1997: 225).

Obviously, stories about BSE were published and broadcast, so what evidence might there be of this 'information deficit' or 'vacuum'? As McInerney et al (2004) point out:

From 1986 through to 1995, despite thousands of reported cases of mad cow disease, there were few articles published in the UK press. Then, in 1996, when mad cow disease was shown to severely affect people who had ingested beef from infected cows, more than 35,000 articles were published in one year alone (2004: 58).

Kitzinger and Reilly (1997) examine the media coverage of BSE, false memory syndrome, and human genetics research. They trace the origins of the BSE story and its coverage in the mainstream press, focusing on 1990 and 1996 specifically. They conclude that the crisis proved difficult for the media to cover in an appropriate way because of the conflict between risk reporting, with its emphasis on extrapolating figures to predict the future of specific potential problems, and the central unique selling point of news - its topicality and immediacy.

Almas (2000) draws explicitly from Beck in his discussion of BSE and argues that the crises that ensued represented a shift in public attitudes and a disintegration of trust in government and scientific experts. However, he is optimistic that the tabloid press will prevent government's keeping 'risk' secrets from the public: "There will be attempts at keeping the scandals secret. However, not least because food scandals sell very well in the tabloid press, these efforts will be in vain" (Almas, R 1999 - accessed 23/10/00: 9)

McNaughten and Urry (1998) also draw on Beck's conception of risk society in their work on BSE, but conclude that BSE is not a 'risk' but a 'hazard':

It is a hazard because it has resulted from an intrinsic or endemic feature of the western economy and society, predominantly organised around short term economic gain, highly localised in its temporal and spatial ordering. Such short term market forces created a hazard which operates at the expense of the long term well being of animals and peoples and of those who are geographically distant from where the short term gain is realised (1998: 265).

Furthermore, they argue that interventions by the state in such issues as BSE can make matters worse. They state:

BSE shows...that governing nature in a global context is well-nigh impossible; and that many interventions by the state or by science generate unexpected and unpredictable reactions which can escalate the issue and the problem far away from what is apparently intended (McNaughten and Urry 1998: 265).

Rowe et al also examine the issue of hazards in a comparative analysis of newspaper reports in Sweden and the UK. They found that the BSE story was the single most often reported hazard reported in both countries. However, Swedish newspapers featured much higher proportions of stories on hazards than British newspapers. Furthermore, there was a higher number of “alarming headlines” compared to “reassuring” ones (Rowe et al 2000: 59-78).

Interestingly, the hazard was presented as “unknown” or a “mystery” in the majority of British news reports, whereas, by contrast, Swedish newspapers tended to perceive BSE in terms of being an “unethical issue” (Rowe et al 2000 70-71). They conclude that BSE was covered in a far more in-depth way in the UK than in Sweden and attribute this to the proximity of the problem, and its saliency for UK readers.

Harris and O’Shaughnessy (1997) explore government communications and the failure of risk strategies in the case of BSE in the UK. Tacke (2001) sees the BSE crisis as part of a process of the globalisation of risk and argues that organisational structures construct risk. Klein (2000) seeks to contextualise the politics of risk in the case of BSE from the stance of the medical community.

More recently, Sturloni’s (2004) comparative study of media coverage of BSE and genetically modified foods in Italy, France, Spain and the UK uses a risk analysis to understand the sociological and anthropological factors that underlie the way perceptions of risks are formulated. Sturloni challenges the ‘top-down’ model of science communications and argues that it is inadequate because media outlets extend the field of debate and so undermine the mono-directional model of

information flow (Sturloni 2004). This process is reminiscent of Vasterman's (2005) definition of the news wave. He suggests that one of the outcomes of a news wave is "the media not the events are governing the coverage" (2005: 510).

Sturloni concludes that media outlets prefer a process of "risk negotiation", a process that gives media organisations considerably more influence in shaping stories than the top-down model would imply. Adam (2000) in Allan et al (2000) explores the 'time-scapes' of BSE and concludes that responses to the BSE crisis by media and public officials were quite typical in their focus on issues of nation-hood and economics rather than risk and public health.

Studies that pursue knowledge of BSE explicitly from perspectives other than risk are not as numerous as those focusing on aspects of risk. Studying audience perceptions, Reilly (1999) focuses on BSE, and how news about the disease were evaluated by audiences. Like Jasanoff, Reilly finds the 1996 event is something of a turning point in public opinion about the disease. In addition, like Jasanoff, Reilly sees a change in the way the public perceived journalists, scientists and politicians. She states:

It seems likely from our research that the crisis around BSE and CJD in 1996 produced a re-evaluation both of the media as a source of critical information and of politicians and government officials as reliable providers of health messages (1999: 137).

This thesis does not address audience perceptions. However, readers – or rather sources, journalists and the newsroom's perceptions of readers - are seen as a key component as well as an important constraint on how stories on issues like BSE come to be reported.

Brookes (1999) examines BSE/vCJD in the British press from the perspective of national identity. Brookes analyses the coverage of BSE and argues that: "A major theme of British press coverage of the BSE crisis was that it was the nation that was predominantly the community under threat" (Brookes 1999: 247-263).

Another study that seeks to explore BSE through a sense of identity is Gonçalves (2000). She explores the way the BSE crisis was “Europeanised” after the UK’s announcement of a link between BSE and vCJD in March 1996. This study also touches on the issue of risk in its consideration of political and administrative cultures (2000: 417). Identity, whilst undoubtedly important, does not form part of my overall thesis.

Wynne (1996 in Lash: 1996) also explores the issue of BSE in relation to policy making. Wynne’s chapter explores the ways political processes influenced the science and how information from government scientists was transformed before policy-makers received it. Wynne argues that the debate about BSE was framed according to a scientific reductionist stance in the UK “which excluded certain moral questions, for example, the morality of feeding mammalian-based feeds to herbivores and intensive farming methods” (Wynne (1996) cited in McNaughton and Urry 1998: 261).

A recent study to reflect on BSE is provided by Forbes (2004). In “*Making a Drama Out of a Crisis*”, Forbes analyses policy-making in the case of BSE, and the role media coverage played in amplifying the crisis. He argues that the media coverage added to the sense of “deep crisis in policy-making and in successive governments’ handling of events” (2004: 342). Forbes, then, argues that media coverage in many ways had an effect on the policy making process in the case of BSE.

Weir and Beetham (1998) also focus on policy-making and BSE. Weir and Beetham’s findings support those of Jasanoff (1997). They see the “defensive reactions of the policy community delayed effective action in the case of BSE. As a consequence, the government “placed the interests of producers over those of the general public” (1998: 1).

Miller (1999) usefully provides detailed information on the coverage of my first two BSE events in 1990 and 1996. Miller’s work is mainly concerned with the policy-making process and the definitional struggles that took place. The study also emphasises the key role media played in the way policy was formulated and

presented. Miller seeks to address media-centricism by focussing on agents involved in the policy-making process. His focus on the role of advisory committees is also important in this thesis for the understanding of the structures and mechanisms responsible for the dissemination of information on BSE. His work also provides evidence of the way press releases can transform information for strategic purposes.

In addition to academic work in the field, I have also drawn on the work of Lacey (1998) and Dealler (1996, 1998) for an understanding of the dissenting scientists' view. The *Phillips Inquiry Report - BSE Inquiry - 2000*, has proved an invaluable resource in terms of understanding the background to key events (especially 1990 and 1996) particularly that given in formal written and oral evidence to the Inquiry. This evidence has been referred to here and in the discussion chapter (chapter seven) in order to enrich understanding of the quantitative research findings for 1990 and 1996.

The chronology for this case study is taken from the timetable of events provided by the Phillips Inquiry on BSE¹¹. I have wanted to build as detailed picture of the crisis as possible. Therefore, it was necessary to consult work outside of the field. The BBC documentary series, *Mad Cows and Englishmen*¹², in four parts, proved to be illuminating. Ratzen (1998) provides a useful and concise if uncritical overview of the (then) decade long crisis.

The following chapter presents a review of the broader literature relevant to the task of understanding *how stories about BSE came to be reported* and places my work in context of journalism studies more generally.

¹¹ www.press.office@bse.org.uk

¹² produced for the BBC by Mentorn, Barraclough and Carey and aired on BBC2 1998

Chapter 2 Literature Review II Information to News: Structures and Mechanisms

This chapter discusses the relevant literature in relation to the structures and mechanisms that helped to shape the BSE story. It is argued that information produced by structures is subject to the workings of mechanisms that imprint upon its form and content. These mechanisms can be external to the structure or internally-derived. The literature review is divided into two parts. These are: Part 1 Structures and their internal mechanisms; and Part 2 External mechanisms. The concluding section sums up the purpose of this chapter and connects this with the third literature review chapter that follows.

Part 1 The structures of BSE and their mechanisms

A range of distinct entities work to obtrude events or indeed, to obfuscate them. For the purpose of this thesis the most appropriate and useful categorisation of these entities can be found in the term *structures*. Structures have distinct regulations, professional practices, social roles, and norms. Structures are not unchanging and immovable. They are, for Golding and Murdock "...dynamic formations" (Golding and Murdock 2000: 74 cited in Deacon 2003: 212).

The application of the term *structures* is also important because it recognises that structures retain their characteristics and practices regardless of the individuals who may come and go. Human agents are certainly important but structural institutions, organisations and professions do not tend to collapse because individual agents leave their employ. It is suggested that the presence of structure can be determined through the activities of their agents.

If one wants to understand how stories about any issue come to be reported, one must assemble evidence of the structures - professions, organisations or institutions - involved in the dissemination chains.

This thesis seeks to identify the structures central to my three case studies. Structures have causal powers (resources and liabilities) which in turn have tendencies to 'cause' particular effects. Structures are subject to norms, rules, laws, and professional practices. Structures contain agents whose activities are bound, shaped, and influenced by the structures they are contained within. These inform their relations with other structures. Structures can be organisations and institutions, or professions. But it should not be inferred that structures are unchanging, operating in a cultural vacuum. My conception of structure is in accord with Golding and Murdock (2000) who argue:

It is essential to avoid the forms of structuralism that conceive of structures as building-like edifices - solid, permanent and immovable. Instead we need to see them as dynamic formations that are constantly reproduced and altered through practical action (Golding and Murdock 2000: 74 cited in Deacon 2003: 212).

In line with Golding and Murdock's observation it is noted that changes in structural composition over the three events have been observed. In this section, I briefly introduce the five key structures relevant to this study.

It is argued that all the structures identified as having a key role have various generative mechanisms at their disposal that enabled them to shape the information they disseminated. Other studies that see the links between news media and power holders in terms of *mechanisms* include Cottle (2000: 428), McNair (2005: 2).

Working in a symbolic interactionist mode, Blumler and Gurevitch (1981) offer a theoretical framework for understanding the way structures interact and the role of mechanisms in regulating these interactions. They view these structures as:

...mutually dependent and mutually adaptive but role-regulated actors working in an emergent shared culture, mutually regulating behaviour and controlling the mechanisms for dealing with conflicts and divergent objectives (Blumler and Gurevitch 1981, in Larsson 2002: 22).

Drawing on Lau (2004), I argue that it is important to draw distinctions between internal and external mechanisms. External mechanisms exist outside of the direct control of any individual structure but can exert considerable influence upon their activities. All relevant structures here are subjected to these mechanisms. Internal mechanisms emanate from professional practices and organisational contexts and they are specific to that structure. Therefore they might be described as internal structural mechanisms. That said, it should be noted the internally derived mechanism of one structure can become an external pressure that may influence the output of other structures.

In this part of the chapter I introduce the structures relevant to the three case studies. The structures most evident across the three events are described as the *core structures*. *These are: Newspapers, Science Journals, Journalism, Science, Government and Administration*. Science, Government and Administration are described as *source structures* for the purposes of this thesis. Newspapers, Journalism and Science journals are *structures of public dissemination*¹. But it should also be noted that for journalists on national newspapers, science journals are also source structures.

¹ Where structures are referred to they have a capital letter to distinguish for example the structure of Newspapers from what this structure produces, that is to say, newspapers

By drawing on the literature in the field, I outline the relevant internal mechanisms of each². For Newspapers I highlight mechanisms such as bureaucratic organisation, partisanship, and campaigns and agendas. For Science Journals I highlight mechanisms such as peer review and public relations. For Journalism I highlight mechanisms such as codes of practice, objectivity, news values and source selection. For Government I outline the mechanisms of Ministerial responsibility and collective cabinet responsibility. For Administration mechanisms of cooperation and reciprocity, enclosure and disclosure of information, codes of practice and neutrality are introduced. And finally, for Science, the mechanisms of institutional affiliation and the norms of scientific investigation are highlighted³.

1.1 Newspapers

Newspapers are distinct structures in their own right. They have their own internal practices, policies, norms, hierarchical structures. They have specific 'audiences' for their output (not just readers, but share - holders, the stock market, parent companies, and advertisers), and specific expectations mapped out for them by virtue of societal and cultural factors.

Entwistle (1992) draws clear distinctions between the different types of newspapers. In the context of health news coverage she observes: "In selection of topics, approaches and style of telling, newspapers differ dramatically. Readership profiles, the ownership, political slants and the individual journalist will all affect the way in which health is covered" (Entwistle 1992: 369).

² Mechanisms selected do not constitute an exhaustive list but are selected for relevance to the task in hand.

³ It should also be noted that these core structures do not denote their prominence or even presence in all the events, but that they have played pivotal roles in the BSE story as represented in at least one of the three events. For example, the structure of government was not evidenced in the 2004 event, but is included as a significant structure because of its central involvement in the events of 1990 and 1996. Whilst other, non-official, source structures were also present they received less coverage than the core source structures. In addition, none of these non-official source structures issued press releases on the days in question.

While this is noted in my thesis, each newspaper is viewed as a distinct sub-structure. They are not structures in their own right because, in spite of differences outlined by Entwistle (1992), as media organisations within a capitalist democracy, their policies, practices and norms are similarly articulated.

It was an important consideration in the research to ensure the sampled newspapers contained examples of tabloids and broad sheets in order to compare and contrast source use, correspondent type, levels of coverage, perceived information events and evidence of dissemination processes.

The most obvious difference is between tabloids and broadsheets. McNair (2004), Conboy (2004) and Barnhurst (2001) provide consistent features of tabloids that reinforce Entwistle's classifications in terms of 'voice', style, perceptions of readers, depth of coverage, and source use, respectively. The work of Harcup (2003) in relation to the stylistic features of tabloids and broadsheets also offers a useful guide from the field of journalism studies. In relation to the differences between tabloids and broad Entwistle and Beaulieu-Hancock (1992), provide illuminating insights within the context of science and health reporting. The mechanisms relevant to this thesis' concerns are identified as *bureaucratic organisation and hierarchical structure, partisanship and agendas and campaigns*.

Bureaucratic and hierarchical organisation

Fishman (1981) observed that news is influenced by the bureaucratic operations of official sources. He states that "Only other bureaucracies can satisfy the input needs of a news bureaucracy" (Fishman 1981: 163).

Drawing on his participant observation of a US newspaper, Fishman's study also found that journalists' own perceptions of society as bureaucratically organised structured their approach to newsgathering. Fishman states: "The journalist's

view of the society as bureaucratically structured is the very basis upon which the journalist is able to detect events” (Fishman 1980: 51 cited in Schudson 2003: 150).

Other studies to have pointed to the bureaucratic nature of news include Hallin (1986) whose research underlines the way official sources and their “timely flow of information” complement the day to demands of journalism (Hallin 1986: 71). For McNair (1998) the news bureaucracy plays a key role in determining output. He gives the example of environment correspondents. Bureaucratic decisions were made at many publications towards the end of the 1980s to employ specialist environment correspondents. Once those decisions were made then those correspondents had to establish themselves as cost-effective by ensuring environmental issues were covered. This led to an increase in reporting of environmental stories (McNair 1998: 62-63).

News organisations, like all large organisations in capitalist societies, are hierarchically structured. They function on effective division of labour and the economic use of time. Furthermore, there is a chain of responsibility and accountability built in to the hierarchy. In addition, the editor and news editor perform important gate-keeping functions (Manning-White 1955) and, working in tandem with their expectations, the sub-editor re-works and makes journalistic copy ‘fit’. The journalist is thus separated from his or her copy by the processes of the news production hierarchy. News production hierarchies work as mechanisms that shape what stories are covered when and from what angle. Franklin (2004) observes how the hierarchical organisation of politics and news organisations are similarly structured and how this can allow for “pairing” between sources and journalists. He argues: “These two parallel hierarchies structure relationships between politicians and journalists by matching and pairing politicians with appropriate media partners” (Franklin 2004: 19).

In their comparative study of newsrooms across the world, Golding and Elliott (1979) found that news hierarchies remain even when individuals within it are replaced or absent. For Paletz and Entman (1981) news organisations are like any other capitalist institution in that they are hierarchically organised through the structured division of labour. They operate on a day to day basis within an organised and routinised framework to maximise efficiency and profit.

Partisanship

In addition to the organisational mechanisms of bureaucracy and hierarchical structuring, newspapers as 'structures' can shape daily news content through partisanship. Studies that explore this issue include Gorman and McLean (2003) who give an interesting historical perspective on the building of partisan relations in Britain. McNair (1999), Dahlgren and Sparks (1991), Page (1996), Curran and Seaton (1997) and Meech (in Fleming 2000), all provide interesting accounts of the political allegiances of the British press in the late twentieth century. Franklin (2004) extends Seymour-Ure's conception of 'press-party parallelism' in order to explain the complexities of partisanship in a contemporary context (Franklin 2004: 20-21). He also develops this extension in his research on general election coverage in local newspapers (Franklin 2004: 171-176) while Firmstone (2003) focuses on the issue of partisanship in her study of the Euro and the British press.

Agendas and Campaigns

Newspapers as structures are capable of setting news agendas. The work of McCombs and Shaw (1972) is a key text in this field. Coupled with studies that highlight the media's 'gate-keeping' role (see Gans 2004 for consideration of these two issues), research suggests that newspapers are themselves powerful players in their abilities to seize the news agenda. This influences what appears between their covers. In addition to that, newspapers can and do force debate by mounting campaigns. Newspapers actively campaign, like politicians and interest

groups. For example, Colin Brown⁴, Chief Political correspondent with the Independent, (1997) says:

Newspapers have their own agendas they attempt to set those agendas. You could say that on the Indy, we have now become a campaigning newspaper. We are setting our own agendas...you cannot be totally driven by your own agendas and like governments, you can be blown off these agendas. But, like governments, newspapers set agendas...(Brown 1997).

Newspapers can and do develop their own campaigns and their own interests.

1.2 Science Journals

Science journals as structures have different norms, rules and regulations. They have different audiences to newspapers and they are subjected to quite different cultural and social expectations. Science journals should be distinguished from science magazines, which are more similar to newspapers than are science journals. Science journals are the 'nurseries of ideas'. In relation to AIDS and its representation in the press, Preda (2005) describes journals as the "centre of medical knowledge production" (Preda 2005: 41). At the same time, they are commercial institutions and need to promote themselves in an increasingly competitive market.

Science journals as structures have played a key role in the BSE story. Increasingly their press releases – made readily available at the click of a mouse through alerting services like Eurekalert – are being used by journalists without looking at any other document (see Smith 1996).

⁴ Interview with Colin Brown conducted by the author for Barnett S and Gaber I, Westminster Tales, 2001

Peer review

One of the key structural mechanisms of science journals is the peer review process. The characteristics of the peer review process are defined usefully in the *Interim Report on Peer Review in the Departments of Energy, Office of Science and Technology* (1997). Peer review is characterised by the expert and independent status of reviewers and by the process being conducted external to the publication (Dept of Energy 1997: 9).

As a mechanism, peer review intends to facilitate public trust in scientific endeavour. Matthews et al (2000) note how peer reviewed journals must deal with any conflicts of interest because evidence of this would severely undermine public trust in science (Matthews et al 2000: 223). The authors detail the various elements contained within the structure of peer reviewed journals that serve to protect from conflicts of interest. These include the 'Instructions to authors' that set out in detail the requirements for submissions and the reiteration of externality and independence of peer reviewers.

In spite of the supposed benefits of the peer review system, it has been criticised by some researchers on the grounds that it supports and maintains the scientific status quo (Abdallah and Geisler 2000, Chubin and Hachett 1990). The latter study by Chubin and Hachett argues that peer review in science operates as a kind of "flywheel". They state, that as a flywheel peer review lends, "...stability to an enterprise that is buffeted by shifting external demands, variable resources and strong competitive pressures" (Chubin and Hachett 1990: 5).

Braben is also critical of the peer review process in the way it can sometimes stifle new ideas. He argues: "Human ingenuity has infinite variety, but the peer review bureaucracy rarely allows it to flourish" (Braben 2004: 71).

On a similar point, Ford also points to the weaknesses of the peer review process. For Ford, peer review is not perfect because it has a self-confirmatory

bias. In other words, one would rather explore what one knows than what one does not know. In addition, Ford points out how peer reviewers form part of a close community where authors are known to each other. He does not suggest plain nepotism. On the contrary Ford sees the process as rigorous in this respect. However for Ford, these relations can foster an environment where fundamentals are not challenged sufficiently (Ford 2000: 30).

Peer review is also important to journalists in the sense that a press release from a peer reviewed journal carries a certain degree of credibility (though it depends on the reputation of the journal in question). Furthermore, the strategies journals employ in promoting their articles to journalists have a direct impact on the stories journalists report.

Strategies of attraction and in-house public relations

It has been argued that 'serious' science journals, as structures play a central role in the dissemination of research to the science community. But as publications within capitalist frameworks, they, like newspapers must survive in a competitive market, even if they are published by academic or non-profit institutions. The routine issuing of embargoed press releases by journals near their publication days underlines the organised level of publicity sought for the contents of the journal. This level of 'attraction' devolves the audience for science news, from the world of science to the world of mass consumption whilst imposing strict time constraints on dissemination (see Kiernan 2000).

For Salter (2005), in-house public relations and press departments are problematic as there is what he describes as "absolute dependence on the client" (2005: 102). According to Salter there is a difference between the press officer and the public relations agent. He states:

The good press officer transmits official information, usually limited and partial, to the media via journalists who are (or should be) aware of such

limitations and partiality. The public relations agent proper, in contrast is, by definition, more apt to deal either directly with the public without necessarily passing through the interpretive filter of the good journalist (Salter 2005: 103).

Salter (2005) examines the code of conduct of the Institute of Press and Public Relations Professionals (IPPR). The code asks that their members “deal honestly and fairly in business with employers, employees and clients, fellow professionals, other professions and the public” (Salter 2005: 99). Furthermore, members should “respect the customs, practices and codes of clients, employers, colleagues, fellow professionals and other professions in all countries where they practice” (Salter 2005: 99). The problem then for public relations professionals is, according to Salter: “...apart from dealing ‘honestly and fairly’ with the ‘public’, the public relations agent must work for the interests of clients” (Salter 2005: 99).

Public relations professionals’ own code of conduct contains a paradox that is not made explicit to members. Salter puts the problem concisely. He states:

We might concede that the public relations agent is oriented towards reaching a private understanding of the reality of a situation...from which a particular interpretation will be communicated. However, this understanding cannot be reached or communicated, rather the agent will attempt to impose this pre-defined private understanding on the public (Salter 2005: 101).

Salter also notes how journalism differs to the work of public relations professionals in the way the latter is concerned primarily with perceptions, and the former with ‘reality’.

Kiernan (2000) explores another key mechanism at the disposal of public relations professionals: the embargo system, which serves to enclose information until a specified time. Kiernan explores the debate concerning the use and purpose of the embargo system. He notes how, for publications like *Nature* magazine, the system works to help journalists prepare their reports. Kiernan's research in his study of the Mars Meteorite event, refutes this. He concludes:

The incident of the Mars Meteorite provides little support for the central legitimating argument for the embargo system...Although early reports...were lacking in detail, they were accurate in reporting that scientists believed they had found microfossils in a chunk of rock from Mars (Kiernan 2000: 35).

1.3 Journalism

The structure of Journalism has been devised here as separate to the structure of Newspapers. Distinguishing between the two structures allows for an analysis of their inter-relationships, whilst acknowledging that, on a day to day basis, journalism's concerns and interests often differ from those of the publications journalists work for. Furthermore, it is argued that it is possible to distinguish between different structural concerns and different mechanisms.

Journalism as a structure has norms, rules and regulations, and professional practices that are unique to it as a structure. It is also subjected to the expectations of society and culture and plays a key role in the structure of democracy, against which its operation is frequently measured (see Curran and Seaton 1997, McQuail 2000, Herman and Chomsky 1988, Keane 1991, Schudson 2003 for examples).

Journalism is of course a key structure in the chain of events that lead to newspaper reports. Two particular sub-structures or types are evident from the

structural analysis of the three case studies: political journalism and science journalism. Frequently political news has been seen by journalists and their editors as of key importance. This is exemplified by one editor in the Watergate era. Schudson cites the former editor of the *Washington Post*, Howard Simons, who in spite of being interested in non-political news dubbed everything else in the newspaper as S.M.E.R.S.H - science, medicine, education, religion, and all that shit" (Simons cited in Schudson 2003: 212).

The rise of science and health reporting from the 1980s onwards and particularly in the wake of the BSE crisis has perhaps now altered this perspective somewhat - not least because, as BSE clearly demonstrates, there are no contentious science issues that do not have political dimensions. That said, it is worth distinguishing between science coverage and political coverage. Not least of all because of the significant differences between science correspondents and political correspondents in terms of their relations with sources.

It is concluded however that in broad terms there are similarities enough to describe science and political journalism as sub-structures of journalism, rather than structures in their own right. This can be seen in shared conceptions of news values, and in the principles of source selection and objectivity pursued through balance. They share the same pressures and constraints in news production. They share the same institutional regulations through the *National Union of Journalists (NUJ) Code of Practice* (Salter 2005). They also share a dependency on official, authoritative sources (see for examples, Gans 1979, Gieber 1964, Sigal 1973, Palmer 2000, Hall et al 1978, Deacon et al 1999).

In this section I explore the mechanisms identified as relevant to this thesis' concerns. These structural mechanisms of journalism are *NUJ Code of Practice*, *news values*, *objectivity* and *source selection*.

National Union of Journalists Code of Practice

The NUJ Code of Practice provides an internal mechanism that sets out appropriate professional practices. This mechanism attempts to guide, shape and form the work journalists do.

The NUJ code emphasises the responsibilities of journalists in “eliminating distortion”, and fighting censorship and the suppression of news. The code also cautions members against “falsification through distortion, selection or misrepresentation”. Furthermore, journalists “shall at all times defend the principle of the freedom of the press and other media in relation to the collection of information and the expression of comment and criticism” (Salter 2005: 98-9).

It is not suggested that direct evidence of this mechanism can be distinguished in news reports. But this thesis notes that by and large national newspaper journalism generally adheres to these rules in constructing reports. To reiterate, mechanisms are *tendencies* and journalists *tend* to adhere to the principles.

News values

News values are important internal mechanisms that not only shape the coverage but also, in large measure, help to determine if a story is worth reporting at all. Journalists use these informal, unwritten values to determine the newsworthiness of stories. The classic study of news values is provided by Galtung and Ruge (1965) and is comprised of frequency, amplitude, clarity, meaningfulness, consonance, unexpectedness, continuity, composition, negativity, elite persons and nations. *Eventalisation* and *personification* have been added by Gitlin (1979) and *good news* and *human interest* by Harcup and O'Neill (2001). They also combine *elite persons* and *elite nations* into *elite institutions*.

Smith (1996) identifies “drama” as a key news value (Smith 1996: 207). Evidence of news values draws on Galtung and Ruge’s taxonomy and Allan Bell’s

additions, as described in Harcup and O'Neill (2001). Following is a description of the values I use in my content analyses of press releases and news reports.

Frequency – unfolds at a similar frequency as the news medium, shorter time frames will be more successful in obtaining coverage.

Amplitude – What made the story seems reportable ie the bigger the impact the more likely it is to be reported.

Clarity –The less ambiguous the event the clearer it is the more likely it is to be covered.

Meaningfulness – To Galtung and Ruge, the more culturally similar or familiar the matter is the more likely it is to be selected. As Harcup and O'Neill suggest, this is a slippery concept (2001: 268). Here, it is taken to mean important to readers.

Consonance – Another difficult category but applicable in the sense that coverage will reflect the views of reporters and editors and the stance of the paper as a whole – the 'pre-image' of an event and where it fits in with the paper's view of things.

Unexpectedness – The most unexpected or rare events are more likely to be reported. Note, unexpected in terms of consonance and cultural familiarity. Also note the need to be aware that it might be difficult to assess this because journalists might take an unexpected angle on a story.

Continuity – Once an event has been in the headlines it tends to stay there in spite of its loss of "amplitude".

Composition – I have discarded this factor because it is not possible to know what is in the editor’s mind when selecting a story.

Elite nations – The actions of elite nations are seen to be of greater consequence than those of other, less powerful nations. In my application, the UK is the primary elite nation. Therefore if ‘Britishness’ or British qualities are invoked in coverage this will be recorded under this category.

Elite persons – This factor tends to argue that stories about famous or high profile people will more likely receive coverage. I have extended this to mean those groups whom might be seen as ‘elites’ or are presented as such. So this includes politicians, leading scientists, leading educational establishment figures.

Negativity – As Harcup and O’Neill argue, this category is difficult to apply because for whom is a story negative? The public, the government, the beef industry, all three? Therefore I take negativity to mean that which is negative for the primary source of each matter in each instance.

Competition - My research for Barnett and Gaber (2001) and the work of Allan Bell (1991) suggest that competition is an important news value.

For Bell, the term refers to the desire for a scoop. I include this but extend it to mean a story has to be covered because all the competition are covering it. This is considered to be evidence of the external mechanism of the competitive environment (see part 2 of this chapter).

Co-option - This factor is used to describe how news might be selected if it is in some way “tangentially related” to another important story.

Predictability – Bell argues that events that can be pre-scheduled for journalists are also likely to prove successful in terms of being selected.

Prefabrication –In addition to the above, if materials can be provided, like press releases, abridged reports and summaries, for example, then this will also increase the likelihood of a story being reported.

Reference to persons – mention of individuals in a human interest context, personalisation of the story.

Objectivity

McNair's (1998) work provides a helpful overview of journalistic objectivity. He argues that there are three characteristics of journalistic objectivity: the separation of fact and opinion; provision of a balanced account of a debate or issue; validation of journalistic statements by reference to authoritative others (McNair 1998: 68). The mechanism of journalistic objectivity is not without its critics.

In *the Politics and Poetics of Journalistic Narrative*, Frus (1994) states: "The latest practice of objectivity, rather than working to ensure separation of value from fact, produces a set of practices for hiding how news stories are actually constructed" (Frus 1994: 113).

Frus' point is central to my thesis' concerns. This thesis is concerned with *how stories come to be reported*. My findings suggest that following a chain of dissemination from news report backwards is an extremely difficult task.

Objectivity in terms of reporting 'facts' and objectivity through balancing opposing views in news reports are partially responsible for this. Combs et al (1996) are in accord. They state: "As practice, journalistic objectivity does not inhibit partisanship, it masks it" (Combs et al 1996: 94).

Hackett and Zhao (1996), provide a more subtle discussion but come to more or less the same conclusion. For McNair (1998) objectivity also acts as a mask that conceals "the value-laden, selective nature of news and journalism and its deeply

pro-systemic bias” (McNair 1998: 72). McNair cites Hallin (1986) who also supports this view:

Freedom from ideological bias is an essential principle of the ethic of the professional journalist. What this means in practice, however, is that journalists are loathe to take sides when explicit political controversies develop. Where consensus reigns, they rely as heavily as anyone else on the symbolic tools that make up the dominant ideology of their society (Hallin 1986: 50 cited in McNair 1998: 72).

For Soloski (1989 in Tumber 1999) objectivity is part of news journalism as a profession and as such, it plays a key role in controlling journalistic behaviour. Because journalists’ claims for objectivity partly rest in their focus on reporting ‘facts’ they essentially take no responsibility for the veracity of such facts since these facts came from sources (Soloski 1989 in Tumber 1999: 308).

Source selection

Source selection is an internal mechanism that contributes to ‘who’ and ‘what’ is reported. Patterns of source selection have been well studied in the sociology of journalism. Most studies conclude that official sources are over-accessed (see Gans (1979), Gieber (1964), Sigal (1979), Hall et al (1978) for example). Rock (1973 in Cohen and Young 1981) argues that the dependency on sources is a consequence of news production processes (space and time) that act as constraints on journalistic enquiry. The result is journalistic reliance on sources that can supply quantities of reliable and regular information. Rock states: “In the main journalists position themselves so that they have access to institutions which generate a useful volume of reportable activity at useful intervals” (Rock 1973 in Cohen and Young 1981: 68).

In political reporting this has been explained in part by the functioning of The Westminster Lobby (Tunstall 1970, Cockerell et al 1984, Barnett and Gaber

2001, Franklin 2004). In science reporting, according to Dunwoody et al (1992), there are several criteria that establish a scientific source as a 'good source'. Sources tend to have a solid reputation, with a proven track record as a source and a clear position on issues whose statements are predictable (Dunwoody et al 1992: 216).

Entwistle (1995) found in her study of science and the British press that journalists "preferred to quote respected leaders in the field and trusted contacts who had previously supplied lively comments" (Entwistle 1995 cited in Conrad 1999: 286).

Conrad (1999) examines how journalists select their sources and how they use these sources. He found that good sources were "...knowledgeable, are connected to prestigious institutions, are direct and articulate and don't over-qualify statements, and they return phone calls" (Conrad 1999: 285).

But he also observes how journalists seek out authoritative high status science sources: "While younger scientists are often most willing to talk to reporters, experts with recognisable names, titles, or affiliations are prized sources. The journalistic ethos suggest a source should be a "top guy in the field" to safeguard credibility" (Conrad 1999: 291). He also notes how the external mechanism of the news environment can impinge upon the selection of sources. He notes how the lower the word count of the story is, the fewer sources the journalist will use (Conrad 1999: 290).

Eide and Hosen (1994) observed that in Norway – with no long established tradition of science journalism -science journalists liked sources to be unequivocal. They state: "Journalists seem to prefer sources who can provide clear-cut findings and express clear-cut points of view" (Eide and Hosen 1994: 428). A 'liability' of source selection practices for journalists is source dependency. As Shoemaker and Reese (1991) observe that: "Sources have a

tremendous effect on mass media content because journalists can't include in their news what they don't know" (Shoemaker and Reese 1991: 178 in Shin and Cameron 2003: 255).

Dunwoody et al (1992) are in accord. They see journalists as the more dependent of the two in the source-journalist encounter. They state:

Interactions between these two groups are governed by their mutual dependency: journalists need information and can offer visibility; sources often need visibility and can offer information. But it has historically be the case within science reporting that scientists have been much less dependent on journalists (for visibility) than journalists have been dependent on scientists (for information) (Dunwoody et al 1992: 217).

In his article on the selection and use of science sources by journalists, Conrad (1999) sees journalists as largely dependent on sources. He states:

In theory, journalists and sources have a symbiotic relationship: sources require journalists to get their views or ideas into the news while journalists require sources for direction, classification, context, perspective, and commentary. In reality, because reporting news is their job, journalists rely more on sources than vice versa (Conrad 1999: 286).

Conrad also notes how science journalists might be specialists at their newspapers but they are generalists on science. This puts them in a situation of dependency in that they need their science sources to provide context and to explain complex issues (Conrad 1999: 288).

The kinds of sources selected by journalists – authoritative, attached to prestigious institutions and repeatedly used by the journalist themselves or others – help to shape news in two ways for Conrad “...indirectly by providing information, interpretation and perspective, and directly by providing the quotes that enrich the story” (Conrad 199: 300). He concludes by explaining the significance of this finding. He states that: “Although quotes are selected by the journalists, they are uttered by the experts and can have a significant impact on how the news is written and read” (Conrad 199: 300).

Cottle (2000) discusses how Becker (1967: 241) can be useful in understanding this dependency on official sources. He cites Becker:

In any system of ranked groups, participants take it as a given that members of the highest group have the right to define the way things really are. And since...matters of rank and status are contained in the mores, this belief has a moral quality...Thus, credibility and the right to be heard are differentially distributed through the ranks of the system (Becker 1967:241 cited in Cottle 2000:241).

It could be argued that sources and journalists share this conception. Hornig-Priest (2001) explores the effects of source dependency in the construction and definition of an event. In relation to the study of cloning in the US press she argues: “...journalistic practices such as reliance on available expert sources created the opportunity for institutional interests to frame the issue in ways that played upon ambient cultural predilections” (Hornig-Priest 2001: 68).

I have introduced the structures of Newspapers, Science Journals and Journalism and their mechanisms⁵. The following sections introduce the structures of Government, Administration and Science.

⁵ relevant to the concerns of this thesis

1.4 Government

The structure of Government has its own norms, rules and regulations, as well as its own professional practices derived from law, regulation, tradition and convention. For this research the structure of Government is represented by Ministers. Constitutionally, the Minister is responsible for every decision in his or her domain. In practice, this is impossible. This would mean, for example, the Minister of Agriculture being responsible for, and aware of, all decisions made in agriculture, horticulture, and the fish, meat and livestock industries - an impossible task in the modern state.

Ministers are crucial players, then, not just because of what they do, but what they are also perceived to do. They are of key importance because they have a high degree of access to all official information, they can control timings of information release, and the manner in which it is released or disseminated. Two aspects of the Minister's roles and responsibilities can be seen as mechanisms, that is to say, they are structurally unique and have an influence on the construction and dissemination of information. The mechanisms are *collective Cabinet responsibility* and *Individual Ministerial responsibility*.

Collective Cabinet responsibility

The literature review revealed that there was some confusion and contradiction as to whether collective Cabinet responsibility and Ministerial responsibility are the same thing. According to the most recent House of Commons Library Research paper (04/82) published on 15 November 2004, they are the same thing. Its introduction states: "This paper offers an introduction to the convention of collective Cabinet, or Ministerial, responsibility and explores in general terms this important constitutional topic" (Gay and Powell 2004: 1). There is quite rightly some confusion. The source of the problem could be the concept of Individual Ministerial Responsibility that describes the over-seer role Ministers take on when they take up a Ministerial post. collective Cabinet responsibility involves all

Ministers getting behind the party line and has in recent years been extended to include junior Ministers. Not only can it mean that Cabinet Ministers have to tow the line and agree with the majority of their colleagues, but it also can mean Ministers within the Cabinet endorsing policy decisions of which they are ignorant.

Whilst there are options for those members of Cabinet who do not want to agree to a policy decision, for example, the general rule is that a united front must be presented. According to Gay and Powell (2004) the purpose in the development of collective Cabinet responsibility was so that government could be bound together in order to face Parliament, the Monarch and the public (Gay and Powell 2004: i).

Individual Ministerial responsibility

The second aspect of constitutional convention is Ministerial responsibility. Ministerial responsibility was originally intended to ensure that Ministers were accountable to the public for the work of their Ministries. Ministerial responsibility is not legislated in any way. However there is a voluntary code of conduct: the *Ministerial Code*. The Code provides some guidance on Ministers' roles and responsibilities, most notably that they need to ensure they separate out their roles and duties as Members of Parliament (MPs) from those of being a Minister.

The most salient criticism of this mechanism for this thesis comes from Weir, Beetham and Boyle (1999) who argue that Ministerial responsibility as a mechanism conceals the true workings of power. They state: "[But] the officials who man the machines of government are in effect rendered invisible by the doctrine of Ministerial responsibility" (Weir et al 1999: 367). With this in mind I now turn attention to these invisible officials who 'man the machine' of Administration.

1.5 Administration

Administration is a general term used to identify the civil service largely by virtue of its institutional goal of administering policy on behalf of Ministers (see Heclo and Wildavsky 1991). That said, it should be noted that it includes two sub-structures that require careful delineation. First, there is the sub-structure of 'policy-making'. This sub-structure contains agents who are senior civil servants responsible for putting policy options to Ministers and ensuring their implementation. They have different norms, regulations, rules and professional practices to the second key sub-structure in the BSE 'story'.

The second sub-structure consists of 'policy implementers'. Among this type of civil servant, there can be determined a group - 'policy promoters'. Each sub-structure has different mechanisms that in one way or another have an impact on information events constructed in the dissemination process. First I discuss the Higher civil service and its perceived mechanisms, before going on to discuss policy promoters.

The Higher Civil Service: policy makers: co-operation and reciprocity

The Higher civil service is the crucial point of contact between officials of administration in departmental Ministries, and politicians. Departmental Permanent Secretaries are the principle interface and it is through them that most departmental business is filtered. Therefore, Permanent Secretaries have regular access to Ministers, and are also in contact with other departments' Permanent Secretaries. Butcher and Drewry draw on the work of Dale (1941) who noticed the change in behaviour of those promoted from the lower ranks up: "...he begins to breathe a rather different air" (Butcher and Drewry 1991: 22). These individuals according to Butcher and Drewry (1991) have a "real and distinct influence in important matters" (Butcher and Drewry 1991:22).

The civil service, then can be arbitrarily divided into two functions: administrative, and policy-formulation. Its employment grades reflect this distinction: by far the

largest number of staff are graded in the administrative group, with job titles ranging from clerical assistants and cleaners, to higher and senior executive officers. The second grades are listed under the heading of Open Structure level and contain the senior roles, from grade 7 principle (the lowest senior official) to Permanent Secretary (grade 1) - (see Butcher and Drewry 1991: 64). The Higher civil service has its own professional body, the First Division Association (FDA). The Association has some 16,000 members comprising of a range of senior civil servants including Whitehall policy advisers and senior managers, tax inspectors, economists, statisticians, government lawyers, crown prosecutors, schools inspectors, diplomats and accountants and NHS managers (FDA.org.uk 2005).

The Higher civil service are vital players throughout the BSE story, and consequently, in my case studies. Unfortunately, their lack of visibility is constitutionally inscribed. And yet these players have unparalleled access to Ministers. They help formulate policy and direct others in the main stream civil service to implement those policies. They are a vital link between the Minister and his or her department, and since as we have seen, Ministers have such a varied set of responsibilities at the departmental level, it is the place of Higher civil servants to draw the Minister's attention to specific issues (or not).

There are two specific 'codes' civil servants must adhere to: Civil Service Pay and Conditions of Service Code (CSPCSC) and the Establishment Officers' Guide (EOG). Both codes set out a number of basic principles. Maurice Wright (1991) has distinguished eight specific principles and values that appear to be common to civil servants of all ranks and departments, based on these codes. These are⁶:

⁶ source: Wright M cited in Butcher and Drewry eds The Civil Service Today 1991: 132

- Wide acceptance of the principle of reciprocity in everyday relations with fellow civil servants;
- disposition to reach agreement with colleagues;
- avoidance of political embarrassment to Ministers;
- 'fairness and honesty';
- mutual trust and confidence;
- formal and informal rules regarding accessibility;
- the importance of precedent; and
- the ethic of secrecy and confidentiality

I suggest that this reciprocal and co-operative ethos has an impact on the way events are constructed and presented in the dissemination processes under study. This mechanism is discussed further in chapter three - Source Inter-relations. Wright also highlights the issue of secrecy and it is to a related mechanism. This in my view, is an element of the second mechanism identified: *enclosure and disclosure*.

Enclosure and Disclosure

The Higher civil service not only have access to Ministers but also to all information coming into the department, furthermore, they store that information. It is a powerful resource and this is, fundamentally, their greatest strength. In addition, as part two of this chapter notes, the right of such agents to this access is reinforced by statutory instruments. Secrecy is an extreme form of enclosure (see Palmer 2004). Weber argues that this secrecy is structurally specific:

The concept of the 'official secret' is the specific invention of bureaucracy, and nothing is so fanatically defended by the bureaucracy as this attitude, which cannot be substantially justified beyond these specifically qualified areas. In facing parliament, the bureaucracy, out of a sure power instinct, fights every attempt of the parliament to gain knowledge by means of its own experts or interest groups (Weber 1941 in Gerth and Wright Mills eds 1991: 233-234).

The work of Ericson et al (1989) has helped to underline the importance of enclosure as a mechanism of administrative control by emphasising the way information is closed off from those not entitled to access it. For Ericson et al, information is enclosed in the back regions of organisations and institutions therefore only those with access to the back regions - and who are authorised to do so - may access information. Even where information is disclosed Palmer (2004) suggests that there are strategic reasons for this. For Palmer, enclosure can be seen to involve two strategies: the right to silence and the choice of forms of communications (Palmer 2004: 3). Thus if disclosure has to be made, for whatever reason the information can be enclosed by the form in which it is communicated. For example, a press release concerning a scientific finding from MAFF might summarise the findings but provide no documentary evidence for what they have said. Enclosure can mean the provision of official interpretations of information but not the information itself. As mechanisms, enclosure and disclosure are two different sides of the same strategic coin.

Policy promoters: the Government Information Service Guide for Information Officers and neutrality

Policy promoters are increasingly skilled and trained press and public relations practitioners and, as a sub-structure in the structure of Administration, have increasing influence. Schudson (2003) describes this public relations 'layer' as parajournalism (Schudson 2003: 3).

Davies' (2000) research focuses on the increased influence of public relations professionals in news production. He identifies three key trends. First, an increase of public relations professionals employed by institutional sources. Second, an increased range of non-institutional organisation employing public relations strategies. And third, a growing media dependency on sources and the reduction of editorial resources, leading to increased influence of public relations professionals in news production (Davies 2000: 39). Davies states: "These trends indicate that the business of news production is this becoming ever more absorbed into the British political process and that at the centre of this transition is an increasingly powerful class of professional communicators" (Davies 2000: 39-40).

Franklin (2004) sees politics as being increasingly 'packaged'. He suggests that three factors have contributed to this development: growing commitment by politicians in the marketing of their policies and themselves via media outlets; increasing use of and expenditure on packaging policies and politicians. Franklin is concerned about the implications of this packaging of politics for democracy and media operations as part of democratic processes (Franklin 2004: 6).

The policy promoters within the civil service have their own regulations as well as having to adhere to the regulations of the rank and file civil service which seek to package politics in a different way: as distinct from Administration, which is not political but neutral.

The Government Information Service (GIS) guide pertains to the work of those employed in the information divisions of government agencies. In each Ministry there are departments dedicated to dealing with the Ministers and journalists. Civil servants work in specific government Ministries on specific tasks. Each Ministry has a communications division that in turn contains specialists who deal with specific 'publics': press and broadcasters, public relations, pressure group

liaison. In addition, these divisions are overseen by the GIS - of which all departmental information officers are members. In the introduction to *the Information Officers Guide*, it states:

The GIS is made up of about 1,300 media specialists employed in government departments and agencies to disseminate information by various means. They are professional publicists, embracing a wide range of disciplines, but first and foremost they are civil servants recruited through the same system of open competition which governs the rest of the Civil Service (*GIS Information Officers Guide* 1998: 4).

The guide makes the point that government departments are no different to any other organisation, since all organisations employ “trained staff to cope with the demands of publicity”. The guide also claims that whilst each department has its own goals and objectives, these are “unlikely to differ greatly from the aims defined when the GIS was set up” (*ibid*).

However, its predecessor, the Central Office of Information prior to ‘agency-ising’, did not offer assurances that staff would not be used politically. In 1989, the Institute of Professional Civil Servants demanded a code of ethics to protect its 1,200 press officers from being used in overtly political ways by Ministers (Tumber 1993: 40).

The *GIS Guide* offers strict guidelines on how to deal with the dissemination of official information, journalists and Ministers. There are terms of briefings, advice on dealing with individual journalists and complex rules regarding content and release of press releases. For example, the distribution of Command Papers marked ‘confidential final revise’ (CFR). CFRs are part of the process of publishing a Command Paper and they have a strict dissemination policy attached to them. CFRs should not be available for sale, nor delivered to any department, or made available to the press before they are available to Members

of Parliament. Procedures for the distribution of CFR copies to the press “should be used with caution and discretion”, stamped with a strict publishing embargo given as a specific date and time. Specialist group correspondents, like the Lobby should sign for their copies (GIS Guide 1998: 34-37).

The guide usefully provides a reason for the privileging of the Lobby. It states (my italics for emphasis):

The Parliamentary Lobby Correspondents (and sometimes other *organised* groups of *organised* correspondents) are chosen as the channel partly because as an *organised* group with *internal discipline* they are able to give assurances against leakages (though leaks have very occasionally happened) (GIS Guide 1998: 35).

Clearly, the GIS system recognises, requires, and appreciates other highly organised systems. But at all stages, it requires to be seen as a distinct system from government. The guide emphasises that government information officers are not party political. However, it states: “It is impossible to treat party politics and the work of the information division as if they were chalk and cheese. The two are inextricably linked - not least in the minds of Ministers” (GIS Guide 1998: 8). And yet, despite this link the guide makes it clear to information officers that in order to do their jobs they must not be seen by the press as political:

To be able to do their work properly Press Officers have individually to establish a position with the media whereby it is understood that they stand apart from the party political battle but are there to assist representatives of the media to better understand the policies of the government of the day (GIS Guide 1998: 35).

As an internal mechanism these guidelines manage the relations between sources and journalists, civil servants and Ministers. Policy promoters, as shown by Ericson et al (1989) and Palmer (2004), influence the flow of information through their ability to enclose information, or even classify the information as secret. Policy implementers are under no statutory obligation to publish policy documents where competing policies are presented. Policy makers, working in conjunction with policy promoters, develop information management strategies, and in tandem, they construct information subsidies such as press releases. Press releases, as my research seeks to demonstrate, help to shape and define information for journalists. But the 'client' is always the policy maker⁷. Press releases seek to define issues, and they define the field of expertise. One of the effects of this is that, more often than not, press releases from Administrative structures also affect the deployment of journalistic resources.

1.6 Science

The term 'structure of Science' does not intend to suggest there is a unified scientific community, nor does it deny the different forms of science. What is intended to be understood as the structure of science is that, broadly speaking science as a structure has norms, rules and regulations and professional practices that distinguish it as a structure. It has specific expectations attached to it. But science as a structure is not isolated from the world. Chubin and Hachett (1990) have observed that science as an institution has become increasingly connected to the world outside and dependent on other structures in society. They argue: "In a larger sense science is not an independent institution but, as research costs have grown, one that has become increasingly dependent on society for resources" (Chubin and Hachett 1990: 5). And yet scientists see themselves as somehow disconnected from other structures and this, according

⁷ Note that as a mechanism the 'client' orientation was identified as structurally specific to in-house pr in journals. The structurally specific nature of in-house pr in the case of science journals does not mean to suggest that these mechanisms are found only in this specific example of this type of structure. They do exist in other structures (source structures and disseminating structures). It is that in the case of in-house pr and science journals this mechanism causes particular effects because of its relationship to Science.

to Nelkin (1995) affects their interactions with journalists. Nelkin states: “Defining their work as an autonomous enterprise, scientists are ill-equipped to deal with the external pressures represented by the media” (Nelkin 1995: 149).

While it is perhaps misleading to speak with any precision of a ‘science community’ from which sources emerge, Zimmerman et al (2001) point to shared conventions deployed by science sources of news. Zimmerman cites Wright (Wright 1995: 15 in Zimmerman et al 2001: 54): “...there is little room for ‘I don’t know’. Or ‘we were wrong’...why must science be portrayed as one big, happy success story?”

Owens argues that scientists have a duty to communicate their findings to the tax payer. However, she finds that relatively few scientists take part in media training workshops and cites a MORI poll commissioned in 2000 by The Wellcome Trust that showed a mere ten per cent of scientists surveyed had taken part in any such training (Owens 2002: 711).

Abrutyn (1998) observes how in the past science and medicine was almost always only discussed in science and medical journals, but notes how this has changed as the audiences for science news have broadened (Abrutyn 1998: 470). His article is a plea for scientists to treat science writers as “scribes” to better aid communication with the public (Abrutyn 1998: 471). According to Tavis (1986), the responsibilities of scientists are:

...to disseminate information, educate the public, be scientifically accurate, not lose face before colleagues, get some public credit for years of research, repay the tax payers who supported the research, and break out of the ivory tower for the sheer fun of it (Tavis 2001: 181).

Thus, engaging with the public through the media could be interpreted as one of the responsibilities of scientists as the representatives of Science. Science as a

structure and scientists as its agents have played a key role across the three cases studies analysed. They have experienced significant and highly consistent presence in all the studies presented but have come to dominate the field in the most recent case study in 2004.

Norms of scientific investigation

As mechanisms influencing the construction and definition of information, the norms of scientific investigation contribute to an understanding of the perceived gulf between Science and the world outside. It is not the intention of this thesis to explore in any detail the norms of science beyond identifying key practices that in some way influence the information events generated in a chain of dissemination.

For Scheman (2001) scientific investigation requires that a researcher adhere closely to accepted procedures to arrive at 'truth' (Scheman 2001: 28). For Gill (2002) drawing on Singleton and Straight (1998), scientific investigation as a process has three features (Gill 2002:17-19). Firstly he identifies empiricism. This feature is particularly relevant to the thesis because producing information events is, therefore, a necessity of science not a consequence of it. Second according to Gill scientific investigation is characterised by objectivity. This is not the same as journalistic objectivity (see discussion above, and White 2004: 209-10). Objectivity is critiqued by constructionists. As Button and Sharrock (1993) argue, scientific objectivity:

...is deprecated by constructionist accounts to the effect that scientists methods for establishing objective findings actually consist of the employment of rhetorical techniques for persuading others to agree and rhetorical techniques for displaying consensus (Button and Sharrock 1993: 5).

The third feature of Gill's characteristics of scientific investigation is control. This mechanism is limited in relevance to this thesis' concerns, although an adaptation is suggested in this respect in chapter seven.

Institutional affiliation and status

Affiliation and status are important to representatives in the structure of Science. It is not just a question of prestige, but increasingly, a question of funds for research. This mechanism is as important within the structure of Science as it is to structures outside (see Kleinman 2000). It was also noted in the previous discussion in this part of the chapter, how journalists perceive a good scientific source to have elite or expert status.

Part of the peer review process also supports and feeds into this mechanism. A point noted by Zuckerman (1996: 7), and one that perhaps needs wider discussion and debate both within and outside the structure of science. However some studies touch on the reasons why affiliation and status are important to journalists (see Nelkin 1995, Entwistle 1996, for example) as official, authoritative sources. Affiliation and status in Science often come with policy-making duties which in turn confers official, authoritative status on scientists.

In this part of the chapter I have introduced the core structures of the BSE story and I have argued that each of these structures possess specific structural mechanisms. It is argued in this thesis that these structural mechanisms leave *imprints* on information constructed in dissemination processes.

The mechanisms discussed so far have been structurally specific. However they are not the only mechanisms that determine how events come to be known in the press. Certain external mechanisms also have an impact on what is disseminated, who disseminates and to whom, and when it is to be disseminated. After reviewing the literature the relevant external mechanisms were determined and are now discussed in part 2 of this chapter.

Part 2 External Mechanisms Influencing Information Flow

External mechanisms are mechanisms beyond the direct control of any single structure. For Lau, these mechanisms are potentially easier to change over time (Lau 2004: 704). These external mechanisms apply to all structures and will impact each in different ways. Such external mechanisms are difficult if not impossible to 'see'. In a sense they can be "known not shown to exist" to paraphrase Bhaskar (1998: 226). In depth discussion of external mechanisms are not featured in this thesis as to do so would extend the research too widely. Consequently they are outlined briefly. The key external mechanisms are posited as *legislation and regulation, political-economic factors, and socio-cultural factors*.

2.1 Legislation, regulation and official information

In this section the relevant literature is used to explore the effects of statutory instruments and formal regulations as they pertain to the control and flow of official information. It is difficult to see the effects of such mechanisms. It is generally only possible to witness them in such cases where official information is a key issue and prosecution are either brought or threatened such as the David Shayler case, Clive Ponting and the Belgrano Affair, and the Government Communication Headquarters (GCHQ) case. The fact that this mechanism is rarely used does not detract from the overall effect that it has. Journalist David Leigh, for example argues that legislation like the Official Secrets Act (OSAs) work as "intimidation in advance" (Leigh 1982: 2). And Professor Richard Lacey has noted how as a scientific advisor to the government, his advisory group was always being reminded of the provisions of the OSAs. The point is, for government Ministers, and civil servants and journalists, legislation is part of the machinery that dictates what will be disseminated and when. In this section I outline three key statutory instruments and one set of regulatory guidelines that pertain to the control and dissemination of official information.

2.1.1 Freedom of Information Act

Secrecy in government and administration in the United Kingdom has been the subject of much criticism in the post-war era. Campaign groups have formed to bring pressure to bear on Parliament to open up decision-making processes to public scrutiny and to make public officials accountable for their decisions.

It is argued that British government is particularly secretive, by scholars, journalists, campaigners, and critics overseas. Sociologist Edward Schuls (Schuls: 1978 in Cornford 1978) noted this in his comparative study of UK and USA reactions to the Cold War and to threats of internal subversion. Schuls findings led him to conclude that the United States had a relatively open government system but one in which the wider public perceived there to be secrecy 'higher up'. The UK, however: "...was a closed system, but paradoxically, little apparent public concern about what was going on behind closed doors" (Schuls in Cornford 1978: 1).

The common consensus from my research of literature on official information seems to be that: "British government is obsessed with secrecy - fostered by the absence of a written constitution; sustained by the operation of constitutional convention as well as legal restraints" (May and Rowan 1982: 17).

In Britain there is now a Freedom of Information Act (FOI) (2002) but in addition to that there are several other key pieces of legislation I will outline briefly. I am going to focus on two main areas: OSAs 1911 and 1989 and Public Records Act 1958 since these two Acts arguably form the centrepiece of information legislation in Britain. It is interesting that in Britain, debates regarding openness often start from the restraints already in existence. Openness is defined by its lack. Larsson (2002) notes however, how FOI legislation can assimilate journalists into administrative cultures. That said, Larsson argues that Swedish journalists may not need to negotiate with sources for information to the extent that journalists in countries without an FOI regime might. He states that: "They

don't really need to 'negotiate' because they can obtain most of the material they want by virtue of the law" (Larsson 2002: 30). The FOI Act (2000) came into force in the UK on 1st January 2005. Until that date, all requests for information received by central government were covered by the Code of Practice on Access to Government Information.

Whilst often seen as of most benefit to professionals like journalists, anyone is entitled to make a request for official information under the Act regardless of age, nationality or location.

2.1.2 Official Secrets Acts 1911 and 1989

The purpose of the OSAs 1911-1989 is to punish by criminal law unauthorised dissemination of official information. Before I examine the Acts it is important to explain the existence of two Acts, that is 1911 and 1989. The 1989 Act was introduced by the Conservative government of the day. The previous years had seen some embarrassing and damaging cases and the 1989 Act sought to tighten the 1911 Act by removing two key defence positions for disclosure: the public interest defence and the defence of prior publication.

A public interest defence was used by Clive Ponting a senior civil servant who leaked information about the Falklands war and the sinking of the Argentine battle cruiser, the General Belgrano to MP Tam Dalyell. He was prosecuted under the OSAs section two for unauthorised disclosure of official information. However, he used a 'public interest' defence, that is to say he argued that his disclosure was in the public interest, particularly since Ministers had not only been by-passing Parliament but lying to both Houses.

The judge presiding over the case directed the jury to discount Ponting's argument implying that the interests of the public do not necessarily coincide with those of the government of the day. The judge was clearly saying that government interests override the public interest.

However, the jury went against the judge's direction and accepted Ponting's public interest defence. The government and the judiciary suffered severe embarrassment and criticism. Ponting was cleared but his civil service career was over. And perhaps importantly for scholars interested in this field, a jury and a judge disagreed on the definitions of public interest and national interest and the importance of one above the other.

The *Spycatcher* case was spurred by the publication of a former British intelligence operative's memoirs, bringing to the fore an issue that has plagued government officials since the mid eighteenth century - the question of achieving the loyalty of the civil servant after his retirement from the Service. The government battled fiercely with Peter Wright the author, with his lawyers and with the Australian legal system, which has a FOI Act. The government lost on the grounds of prior publication, that is to say, if the work has been published elsewhere it cannot be banned. Wright, in this case, had no case to answer. The government wanted to close the legal loop-hole that allowed this to happen. As a consequence, the 1989 Act removed the defence of prior publication. While it is an Act in its own right in effect it tightens up Section two of the 1911 Act.

The OSA1911 has two sections. Section one deals specifically with espionage. This section reflected the era of its construction as there had been many invasion scares and spy scandals. Initially, the OSA was presented as largely protecting the nation from outsiders, spies and the enemies of the state abroad. But is Section two that has caused much criticism.

Section two effectively prohibits any official information being published without authorisation. A great many documents would never be considered for immediate publication because they would be covered by security classifications or may be classified as 'commercially sensitive'. In these cases information is given a date of publication in accordance to the Public Records Act 1958, which I will come to in a moment. Section two paragraph 9904 OSA 1989, states:

...it is an offence for an officer to disclose to an unauthorised person, either orally or in writing, any information he has acquired through his official duties unless he has received official permission...There is, however, no objection to his repeating information which has already been officially made public. The OSAs covers material published in a speech, lecture, radio or television broadcast, in the press or in book form; they cover non-secret as well as secret information, and apply not only during an officer's employment but also when he has retired or left the service (OSA1989: paragraph 9904).

The 1989 Act simply removes the option for criminal proceedings in some areas, like the leaking of information on education or the environment by civil servants. Any leaker or whistleblower will now be subject to the disciplinary codes of the civil service.

Prosecutions are rarely brought under the OSAs, however. Its a heavy-handed way to run a democracy. As former investigative journalist David Leigh argues: "Intimidation in advance has proved to be a far more effective technique of censorship than revenge after the event" (Leigh 1982: 2).

James Cornford is also critical of the Acts ability to influence the work of senior civil servants:

...Section 2 of the OSA is not important to Ministers and senior civil servants. They are held to be authorised to publish or release information as they see fit and the constraints on them are political not legal - their relations with their colleagues, their chances of promotion and so forth (Cornford 1978: 2).

2.1.3 Public Records Act 1958

This Act originally stated official records should be opened to the public after fifty years. Previously there had been no laws governing publication of official documents. This was considered a major step towards a more open government. Documents are placed at the Public Records Office (PRO) and open to the public upon request.

In 1967 the period of closure on documents was reduced to 30 years, although certain categories of information can be covered by extended closure. Each department used 'weeders' to wade through documents, classifying and removing and sometimes indulging in the clandestine operation of 'shredding'. The point is there is no way of telling what information exists and what does not. What you see in thirty years time has not only been diluted by time, but has been combed and weeded before it was sent to the PRO.

2.1.4 SIRC Guidelines⁸

In the UK in 2001, the Social Issues Research Centre (SIRC) in conjunction with the Royal Society drew up guidelines in order to promote good practice in science writing and journalism. The SIRC is an independent, non-profit making research organisation that conducts research into social and lifestyle trends⁹. These guidelines were - *and still are* - supported by the UK press' self-regulatory body, the Press Complaints Commission (PCC), in spite of journalists assumptions that they had been abandoned.

In addition, the guidelines look set to become European-wide and there are plans to make them a formal part of training for science journalists. The guidelines for science journalists and writers includes advice on¹⁰:

⁸ The research in this section was presented as a conference paper, *Do We Need Science Reporting Guidelines: implications for researchers in a Pan-European context*, at the First European Conference in Communication, University of Amsterdam November 2005

⁹ See www.sirc.org (accessed 31 May 2006)

¹⁰ source www.SIRC.org 2005 accessed November 2005

1. Credibility of sources
2. Procedures and methods
3. Findings and conclusions
4. The significance of findings
5. Communicating risk
6. Anticipating the impact
7. The role of specialist correspondents and editors
8. The role of sub-editors
9. Expert contacts

The guidelines were not received well by the science writing community in the UK. And yet these guidelines are due to become European 'best practice' in the coming year or so. This is being facilitated by the Messenger Project. Messenger is a year-long project that is being funded by the European Union in accordance with the Sixth Framework Programme for Research and Technological Development in the section entitled *Science and Society*. Messenger is jointly being undertaken by SIRC in partnership with the Amsterdam School of Communications Research¹¹.

Some of the key aims of Messenger are:

- 1 To develop Guidelines produced by SIRC in partnership with the Royal Institution and Royal Society and to ensure their relevance and applicability to media reporting and communication of science, technology and health issues across Europe.
- 2 To determine through consultation with relevant actors and stakeholders, perceptions of science media coverage across Europe - particularly the communication and discussion of risks and benefits arising from research.

¹¹ see <http://www.messenger-europe.org/> accessed 21 November 2005

- 3 To establish how communication of risk and discussion of risk-related issues impacts on perceptions of scientific enterprise in EU countries.
- 4 To develop a comprehensive methodology for analysing the production and coverage of science, technology and health news.

These aims will be achieved by:

- 5 European-wide consultation with representatives within the science, technology and health communities, journalism organisations and representatives of civil society
- 6 Media analysis of science, technology and health issues across Europe to assess the cultures, roles and styles of the media in communicating science.
- 7 The production of briefing documents for EC-funded scientists and support materials for the European Guidelines. The results of the project will disseminated and exploited through two “over-lapping networks” – one internal to EC programmes and one external to EC programmes.¹²

Will this uniform approach to scientist-journalist relations yield uniform coverage? How will this new external mechanism manifest in science reporting and the way information is disseminated by sources to them?

Journalists have similar concerns. For example, when I interviewed a key figure in science journalism in the UK, Pallab Ghosh, who is Chair of the Association of British Science Writers (ABSW) and a BBC science correspondent, he raised questions. He explained:

¹² http://www.messenger_project.org 21 November 2005

The guidelines run counter to what I have been trying to do personally as a journalist and as Chair of the ABSW – to move science journalism away from sycophantic unquestioning reporting of science issues and to raise basic journalistic standards (Ghosh 2005)¹³.

Ulrich Schnabel (2003) believes the guidelines are a good model and provide useful guidance for scientists in dealing with the media. But he is pessimistic as to their possible take-up by scientists. He states that: “I don’t know how many British scientists are familiar with them, but I can definitely say that in Germany most scientists ignore them” (Schnabel 2003: 259). Whether these guidelines are taken seriously or not they mark an interesting turn of events in the battle for effective science communication.

2.2 Political-economic mechanisms

Political-economic external mechanisms can effect the existence and form of information. Studies that take a political-economic standpoint tend to focus on ownership and control of news outlets, and the constraints imposed on news and journalists in highly competitive environments.

Studies that seek to explore media production within the context of capitalist economics include Herman and Chomsky’s propaganda model (1988), Garnham (1990), Golding and Murdock (1991 in Curran and Gurevitch eds (2000), Curran in Curran and Seaton (1997) Curran (2002). McManus (1994) usefully explores this aspect in relation to news organisations. He argues that there are four trading partners in terms of those with interests in news: consumers, advertisers, sources and investors. He concludes that news does not reflect reality but rather it is “...a commodity to fit the market demands of a collection of special interests. As such news is an elaborate compromise” (McManus 1994 in Tumber 1999: 189). Conboy (2004) while not focussing on political economy exclusively does contribute to the field of knowledge in this area by expressing the view that

¹³ Interview with Pallab Ghosh for this thesis - see appendix 6 Schedule of Interviews

commercial pressures are in danger of changing and subverting the journalistic product. He argues:

The increasing dominance of this current phase of the political economy of journalism risks jeopardising the structural balance necessary for its long-term survival as a discourse which can provide something other than the voice of a commercially successful and ultimately politically conservative set of formulae. Journalism must remain distinguishable from just another commercial media product (Conboy 2004: 224).

In the context of science reporting Smith also (1996) provides an interesting account of the effects of market constraints.

2.3 Socio-cultural mechanisms

Socio-cultural mechanisms that can influence the construction and dissemination of information include mechanisms of expectation in terms of readers and democratic function. In addition, wider social templates of 'what a story means' socially and culturally, are also important external mechanisms.

2.3.1 Social expectations

Readers expect to be informed of key events that may affect their lives. It is, in Nerone and Barnhurst's terms 'a ritual'. They argue,

On the level of the polity, this means that something called the people is summoned to attention on a daily basis. It is the form of news that does this. The content, the information changes every day, and different information could be presumed to produce different effects and affect, but the news performs the same ritual function day after day because the media package it into the same form (Nerone and Barnhurst 2003: 112).

Reader expectations therefore dictate in this sense, news selection. Closely allied to this mechanism is the mechanism of democratic expectations, and this is discussed in the following section.

2.3.2 Democratic expectations

In *Power Without Responsibility* Curran (in Curran and Seaton 1997) examines further the concept of media as watchdog or 'fourth estate'. He provides a critique of what they term the Liberal Theory of the Free Press. According to this theory newspapers are indicative of a healthy democracy but Curran argues that this notion is a myth and is a relatively modern concept that has been constructed by those who created the press, whose interests it served' (Curran 1997: 7-11). Liberal Free Press Theory sees the 'hidden hand of the free market' as insuring the public interest and the private interests of newspaper proprietors correspond.' However the last two Royal Press Commissions (1962, 1977) concluded that the hidden hand of the free market tended to impede competition. They also questioned the notion that anyone was free to set up a newspaper (Curran in Curran and Seaton 1991: 5-123).

Democratic Media Participant Theory is, according to McQuail (2000: 160), an emerging concept. This approach argues that individuals and minorities have a guaranteed right of access to media content that reflects their needs. Furthermore this need should be determined by these groups in society. Media should exist to benefit their audiences and not be susceptible to pressure or influence from political or state control. The approach stresses the need to move away from mass media to smaller more participative forms where everyone can be involved. For McQuail new technologies might facilitate this participative democracy. However, a warning may be sounded by future scholars: new technologies and media organisations will fragment the market as they provide more choice for the consumer. What effect will this have on a sense of public interest?

For Franklin (2004) media democracy has been seriously affected by the packaging of politics. He argues:

Media democracy, with its packaged politics, is characterised by an absence of direct political debate; voters have become spectators rather than participants in the democratic dialogue. What should be a rousing and deafening, if necessarily discordant chorus of democratic voices, has been reduced to a carefully orchestrated silence. Amid the hush, it is just possible to hear the autocues turning (Franklin 2004: 24).

The democratic role of the press also extends into the science context. Reed states: "The public accountability of science and scientists through the media was of less salience to journalists than journalism's role in representing divergent viewpoints as part of their role in the democratic process" (Reed 2001: 294).

McQuail (2000) usefully assesses the field of normative theory in relation to what media ought to do in a democracy and what its role should be. As complex as this field may be, he argues that across the literature four broad themes emerge: media should maintain constant surveillance on power holders and events, media should provide a radical and independent critique of society and its institutions, encourage access and participation by as many different groups as possible, and should contribute to a sense of shared consciousness (McQuail 2000: 161).

2.3.3 Social templates

Social issues emanate out into wider society if an issue has been prominent enough or has affected enough people. They emerge, in general from media templates. These act as external mechanisms that can determine whether a story is covered and how it is shaped.

According to Kitzinger (1999), media templates consists of key events with an ongoing shelf life that outlive the conclusions of what played out 'on the ground'. Template events then become retrospectively referenced in relation to new stories and are used to explain current events and to determine patterns in relation to social issues or problems (Kitzinger 1999 55-59). Deacon et al (1999) note how in their study of the "natural history of a news item" that first and foremost the story in question was covered because it developed from a news framework (Deacon et al 1999: 18). Among other things of course, BSE certainly qualifies as an issue that has become a social template for journalistic critiques on a range of topics from intensive farming practices to the decline in public trust in science and politics.

In conclusion

In this chapter I have introduced the core structures in the story of BSE and their mechanisms. I have done this through a thorough review of the relevant literature. In the following chapter I underscore the contingent nature of these structures by exploring the literature relevant to an understanding of the ways in which these structures inter-relate. Chapter three concludes by discussing the contributions this thesis seeks to make to the literature on science communication and BSE as well as its modest contributions to the sociology of journalism in the field of source-journalist relations.

Chapter 3 Literature Review III Structural Inter-relations

To a great extent, the core structures outlined in chapter two are also defined in relation to other structures. That is to say, what they do is based upon what the other structures expect them to do. This mutual contingency makes structures difficult to determine and difficult at times to separate out. The sheer complexity of these structural inter-relations is underlined when one considers the spectrum of structures engaging in science communication. In *Science and the Public: a review of science communication and public attitudes to science in Britain* (2000), science communication is defined as a term that:

...encompasses communication between groups within the scientific community, the scientific community and the media, the scientific community and the public, scientific community and governments and others who influence policy, industry and the public, the media and the public, and the government and the public (Office of Science and Technology and the Wellcome Trust 2000: 137 cited in Burns et al 2003: 190-191).

This definition gives a clear idea of the structures relevant to science reporting and of the complexities involved in understanding their inter-relations. In this chapter I explore the contingent nature of structures in the case of BSE, with reference to the relevant literature. This is presented in five parts: Part 1 explores the inter-relations between *policy-makers and scientists*. Part 2 examines the *field of newspaper-journalist inter-relations*. Part 3 explores the literature relevant to an understanding of *source-journalist relations*. Part 4 looks at the source-journalist relationship in the science context. Part 5 examines the literature on source strategies. I argue that a more complete understanding of structural inter-relations can be gained from a consideration of the strategies sources employ since these strategies often involve strict rules on disclosure and publication. By way of a conclusion, I summarise the contributions to the literature this thesis seeks to make.

Part 1 Policy-makers and scientists: *The Whitehall Village*, policy communities and advocacy coalitions

It was observed in chapter two that a key mechanism of the Administrative structure was identified as co-operation and reciprocity. This section adds to the knowledge of this mechanism through a review of the key literature on their intra- and inter-relations. It is a closed system in terms of policy-making (Jasanoff 1997, Weir and Beetham 1998). The culture is intensely secretive and private. This is a view shared by Butcher and Drewry (1991). They argue: "It is a world in which government is treated as a private affair, and in which official information is regarded as government's private property" (Butcher and Drewry 1991: 172).

The argument for closed government is justified, according to Kellner and Crowther Hunt because "private debate among civil servants and Ministers produces more rational policies, freed from public pressure, which is assumed to be irrational" (Kellner and Crowther Hunt 1980 cited in Butcher and Drewry 1991: 175). The close quarters departments share in the compact London scene also helps to foster such inter-relations. In their study of the Whitehall Village, Hecló and Wildavsky ([1979] 1996) draw similar conclusions about the proximity of its inhabitants. They state:

Within London itself, the vital political living space is highly compact. Government departments may be huge but their top political and civil service leadership is likely to be concentrated within a thousand yards of Whitehall (Hecló and Wildavsky 1996 in Barberis ed 1996 36-37).

And, as with most villages, the inhabitants are also known to each other. Hecló and Wildavsky state:

Life at the top in Britain may not be warm-hearted chumminess, but it does demonstrate a coherence and continuity unknown in the United States. If co-ordination means the degree to which different participants take each other into account (if only to disagree), then British political administration is extraordinarily well co-ordinated (ibid).

Jasanoff (1997) echoes this view when she compares the policy-making systems in the US and the UK. She argues: "US policy culture is open, adversarial, formal and legalistic, whereas the UK is closed, co-operative, informal and consensual" (Jasanoff 1997: 228). Hecló and Wildavsky conducted interviews with senior civil servants and discovered that a remarkable amount of store was set in the notion of mutual confidence. They state that: "The one inescapable theme in virtually every interview we conducted is the vital importance participants place on personal trust for each other" (Hecló and Wildavsky 1996 in Barberis 1996: 36-37). In this way, as Hecló and Wildavsky demonstrate, the disparate members of policy communities act as a binding force. This force binds them and instructs them in the rules of engagement, which are based on mutual understanding, co-operation, and the avoidance of departmental embarrassment.

Policy communities are important for this thesis because the sources of the stories in all three case studies that I explore have policy-making responsibilities. While final decisions, it could be argued, are concentrated in the hands of a very small number of senior officials, the road to policy decisions are characterised by negotiation and consultation with insiders and outsiders. As Butcher and Drewry state:

It would be misleading to view government departments as organisations in which civil servants and Ministers make and administer government policy in complete isolation from the outside world. On the contrary, there is close (some would say too close) contact between civil servants and pressure groups (Butcher and Drewry 1991: 184).

MacNaughton and Urry (1998) argue that science cannot provide the firm foundations policy makers would prefer. They argue: “For governments to seek political authority in ‘sound science’ is to underestimate the structural indeterminacy involved in scientific endeavour” (MacNaughton and Urry 1998: 259).

A useful term for conceptualising the inner workings of policy making is *advocacy coalition*. This is a useful conception that can aid the in the understanding of this effect in inter-source relations. For Greenaway et al, advocacy coalitions are: “...people spread widely through a range of organisations who share similar beliefs. These advocacy coalitions act within a given ideological framework, or way of seeing the world” (Greenaway, Smith and Street 1992: 41). According to the authors, members of advocacy coalitions share three levels of belief. First they hold “deep core beliefs”, which are defined as fundamental beliefs or views about human nature, society, culture, religion. Second, they share “basic political strategies”, which have a direct impact on the third level of belief, “applications of policy in particular areas” (Greenaway, Smith and Street 1992: 41).

Miller’s study of the policy-making process involved in the BSE issue is illuminating here as it emphasises the complex inter-relationships between scientific advisors and policy makers. It is not a simple case of scientists advising policy-makers based on the ‘hard science’. Rather as Miller points out “...such simplistic distinctions between science and policy underestimate the extent to which scientific advice and research depends partly on how a problem is conceptualised” (Miller 1999: 1244).

Miller goes on to explain how advisory committees are selected. He cites Professor Richard Lacey, former advisory committee member turned (into) ‘dissenting scientist’, on his experiences of being appointed to an advisory committee. Lacey claims: “prospective members are to varying degrees vetted on their general views and philosophy of life” (Lacey cited in Miller 1999: 1244).

Advisory committee meetings are held in secret and their deliberations are subject to the Official Secrets Act. However, these secret meetings are attended by 'invisible' civil servants who are not members of the committees. This suggests a 'monitoring function'. Information arising from committees, too, is sometimes compiled and written by civil servants and findings and advice can be subtly changed. In the case of BSE, Miller cites Ballantyne and Norton-Taylor (1989) on the case of the Southwood Committee report. They state: "The Southwood report was delayed for seven months while officials reportedly attempted to change the report's emphasis. Officials also want some of the findings omitted from the version to be published" (Ballantyne and Norton-Taylor 1989 in Miller 1999: 1245).

As Miller noted, there is a difference between presenting scientific facts and forming policy said to be based around them. Parsons (2001) outlines some of the problems that scientists and politicians in Australia have in interacting with each other, which demonstrates the structural differences between the two. This, she states, can be evidenced through various controversial science and health issues:

Recent scientific controversies, such as mad cow disease, climate change, genetically modified food, and cloning are all vivid examples of the failure of effective communication between science and politics, as well as between science and society (Parsons 2001: 303).

Parsons found that there were important differences between scientists and politicians. There were cultural differences in that scientists deal with 'data' and politicians are primarily interested in perception. The preoccupation with issues of public perception and presentation has been articulated in a range of key studies including Lippmann (1922), Boorstin (1962), Jones (1995, 1999), Barnett and Gaber (2001), Palmer (2002), and Franklin (2004).

Parsons also found that perceptions of time differed between scientists and politicians. Scientists work to longer time frames than politicians. In addition to this, she also found that there were significant linguistic barriers that prevented the two source-groups from communicating effectively (Parsons 2001: 304-306).

The review of the literature in this section has sought to describe the conceptions used to understand the inter-relations of core source-structures relevant to my case studies on BSE. The next section focuses on another key area of inter-relations: between journalists and their newspapers.

Part 2 Journalists and their Publications

In this part of the chapter I review the literature drawn upon to help provide and understanding of the inter-relationships between journalists and their publications.

Breed's early study of newsroom control (1955) is a useful starting point. Breed observed how newcomers absorbed the rules of the newsroom. He states that: "Basically, the learning of policy is a process by which the recruit discovers and internalises the rights and obligations of his status and its norms and values" (Breed 1955 in Tumber 1999: 80). Breed explored the reasons journalists had for conforming to newsroom policy. These include institutional authority and sanctions, feelings of obligation and esteem for superiors, mobility aspirations, absence of conflicting group allegiance (union membership, for example), and the pleasant nature of the job (Breed 1955 in Tumber 1999: 81-82).

As already discussed in part 1 of this chapter, Rock (1973) in Cohen and Young (1981) observes that "...certainty must be built into reporting processes" as there are considerations of space and time (Rock 1973 in Cohen and Young 1981: 66-68). The journalist does not simply write press reports that end up in newspapers. Journalists are deployed as resources by publications' newsroom

hierarchies, and with varying degrees of autonomy they select events to cover. Once the journalist has written the report, it is subject to changes by those other than the authoring journalist. This is often where the structures of Journalism and Newspapers come into conflict.

In some ways the structural inter-relations of Journalism-Newspaper mirror those of Government and Administration in that both journalists and civil servants work for and are responsible to their publications and Ministries. Furthermore, the chain of accountability is the same. If civil servants and journalists make mistakes, their Ministries and publications are culpable through the figures of their Ministers or Editors, respectively.

Nelkin (1995) argues that there is a process of self-censorship where journalists internalise what the editor needs (Nelkin 1995: 110) Deacon et al (1999) note this conflict between newsrooms and their journalists in their observation on the difference between newspaper article and headline. They state: "The reason for this contradiction lies in the job delineation that is part of news production. The headline was written by a sub-editor who also cropped the journalist's original article from 1000 words to 600" (Deacon et al 1999: 18).

In her study of scientists and journalists and their perceived differences, Reed notes that the pressures of the newspaper production process has a detrimental effect on the news product and on journalists. Furthermore, there is a generational dimension. One journalist she interviewed stated:

The old journalists are let go, the ones who have the contacts and the memory. And the new journalists are not allowed to develop and grow the same way that the old guard [did], because they are totally stressed out with the "no, no, no" and the 'now, now, now' (Reed 2001: 288).

Further studies exploring the relations between journalists and their publications include Dennis and McCartney (1979) and Friedman (1986).

Part 3 Source-journalist relations

In this section I review the literature from the sociology of journalism concerning the relations between sources and journalists. It is important to understand the findings of researchers in the field firstly because the source-journalist relation is a vital component in the construction of press releases and news reports. It is important, though, ultimately because these relations in part govern the way official information is disseminated. As Schlesinger argues:

The key issue at the heart of the study of sources is that of the relations between the media and the exercise of political and ideological power, especially, but not exclusively, by central social institutions which seek to define and manage the flow of information in a contested field of discourse (Schlesinger 1990 in Ferguson 1990: 62).

This part of the chapter is divided into four sections: *journalists and official sources, structural inter-relations and primary definition, exchange relations and information subsidies* and *source-journalist relations in the science context*.

3.1 Journalists and official sources

What seems to unite the majority of studies in source-media research, is the power official sources have in terms of access to and control of official information and how journalists are ill-equipped to pursue stories in detail. These findings represent the 'dominance paradigm' identified by McNair (1998, 2005).

Gieber's (1964) classic study looked at both sources of stories and at reporters work. From his research, he suggested that both were "operating at different levels of discourse" (Gieber 1964 in Tumber 1999: 220). Gieber studied the relationship between official sources and journalists based in a small California city. Gieber discovered that sources communicated information in such a way as to reflect their own professional values and tended to assume that the audience shared those values. Furthermore, what is interesting about Gieber's research is

that whilst the journalists surveyed held similar views on issues as the sources on a personal level, they did not actually put these across in their work because of their own sets of professional codes and news values. Gieber conceived of three positions in the source-journalist relationship: reporters are independent of their sources; sources and journalists find areas of collaboration; reporters are dominated by their sources and vice versa (Gieber 1964 in Tumber 1999: 222-223).

In Gieber's view, then, journalists, by and large, tend to be passive. This is because, in his view, they had given up their independence in terms of supplying a surveillance function or check on power in favour of the comfortable situation of being in the "in-group" (Gieber 1964 in Tumber 1999: 223). Thus he states "...they moved into the area of collaboration with their sources" (Gieber 1964 in Tumber 1999: 223). Gieber's work provides a useful start point in studying the area of source-media relations, not least of all because it provides one of the earliest examples of research in the field and one which has had significant influence on the way the debates have been formulated. This is evident from the following statement:

Of crucial importance to the study of news sources are the relations between the media and the exercise of power, specifically by governments who attempt to define and manage the flow of information (Gieber 1964 in Tumber 1999: 215).

Leon Sigal comes to similar conclusions in his work on sources and journalists. In *Reporters and Officials: the organisation and politics of news-making* (1973). Sigal acknowledges that journalistic resources have to be deployed carefully since journalists could not possibly cover all events within the limited space of time available. They have to place themselves at points where they can access regular, authoritative information. Whilst Sigal's work is important it is worth noting that his research is limited to the coverage of the front pages of two American newspapers. Sigal's major contribution to the field of source-media

research is a specific set of terms he uses in his analysis. Sigal uses the term 'channel' to describe the paths via which information reaches a reporter.

Sigal (1973 in Tumber, 1999: 224-234) demonstrated that most of the coverage analysed was dominated by journalists' routine dependence upon official sources. He states: "Whatever the location of their bureau and their beats, reporters rely mainly on routine channels to get information" (Sigal 1993 in Tumber 1999: 230).

Sigal argues that there are three channels through which journalists receive information from sources. The first, *routine* refers to such events as on-the-record interviews, and press conferences organised for the specific purpose of disseminating information to the media. The second is *informal* and includes contextual briefings, non-governmental reports, other news media such as press agencies, and leaks. The third Sigal identifies as *enterprise*, and refers to individual research and analysis, personal interviews and eyewitness accounts (Sigal 1973 in Tumber 1999: 225).

Sigal notes how the majority of news stories to reach the front page were largely sourced through the routine access relationship. Sigal's approach to indicating the relation between routine channels and official dominance is to count what he calls "information transfers" which he defines as: "The passage of information from a single source through a single channel to the reporter" (Sigal 1973 in Tumber 1999: 230). Of the 2850 'information transfers' in his sample, Sigal found that official government-related sources were by the far most regular providers of front page stories¹ (ibid). Sigal also analysed the stories in relation to channels of source distinguishing between primary channels - the person quoted in the lead paragraph and/or the person responsible for the timing of the information release - and secondary channels being all other sources. Sigal concluded from his

¹ 31.4 per cent of transfers were from US officials using routine channels, whilst officials of overseas governments and international agencies using routine channels only, constituted a further 17.6 per cent (ibid: 230).

research that US officials are three times more likely to pass information to journalists via routine channels than any other type of source (ibid). Thus Sigal argues that: "The routine channels for news gathering thus constitute the mechanism for official dominance of national and foreign news in the two papers" (ibid).

Clearly, Sigal's research is useful but, as already mentioned, his research may not be widely applicable since it only refers to front page stories in two American newspapers. But there are additional issues that need attending to in relation to the usefulness of Sigal's research beyond the obvious points of wide applicability and cultural difference. Most significantly from my own research it is clear that the term official source is too broad. Furthermore, by the time an information transfer is made often that information has been subject to re-working and reinterpretation with the aim of satisfying news values and the disseminating source's agenda (s) of the day. That said, I consider Sigal's definitions and categories to be useful and they have helped to inform my own definition of the field of inquiry.

Another useful study is Herbert Gans' *Deciding What's News* (Gans 1979 in Tumber 1999: 235-248). For Gans, journalists stand between sources and the audience. Journalists summarise and refine the information they gather from sources in order to fit the demands and needs of their audiences. This might suggest journalists are passive in relation to their sources, but Gans' argues that their relationship is characterised in terms of a struggle between opposing forces or as a "tug of war". But in the final analysis he states that: "Tugs of war, however, are resolved by power; and news is, among other things, the exercise of power over the interpretation of reality" (Gans 1979 in Tumber 1999: 238). For Gans, sources perceive themselves as being important information providers who can, in the same instance, provide information that will promote the interests and agendas of their organisations. Managing the flow of information helps them to achieve their communicative goals. Journalists, according to Gans, see everyone as a potential source and are in the business of managing sources

(ibid: 239). And this is how Gans' can conceive of their inter-relationship as a 'tug of war'. He adds "...while sources attempt to 'manage' the news...journalists concurrently 'manage' the sources in order to extract information from them" (ibid: 239).

Another important contribution Gans' makes to the field and to this thesis is the determinations he makes about how sources can be successful in ensuring access to key journalists. He argues that there are four inter-related factors that help determine successful access. First, *the incentives* the source can offer the journalist to take up their information; for example accurate or early/exclusive information (ibid). Second, Gans argues that *power* is a key determining factor. If a source is in a position of power, they have access to information, and they have authority to disseminate – or not (ibid). The third factor is the ability to supply *appropriate information* (ibid). This is an important point and links to work conducted by later researchers, notably Palmer (2000) who argues that the strategy most often used by sources in getting their information across is via the appeal to news values.

Thus large organisations such as government departments have the material resources to circulate press releases and to organise launches and so on. They also have professional communicators to speak in the journalists' language and who have a working knowledge of the news cycle. The fourth factor that facilitates easier access to journalists by powerful sources according to Gans is *geographical and social proximity* (ibid). Being close at hand and being in effect subsumed in both its own culture and the wider culture is a powerful aspect in the dynamic relation between sources and journalists.

In some ways Gans credits journalists with more control in the source-journalist encounter than many theorists in the field. For Gans journalists choose to access specific sources – the power of selection rests with them. However, I would contest this point. Due to the nature of the competitive environment of the British press, the 'collectivity' of many 'press packs' and the conventions of reporting, I would argue the journalist's power of selection are in many instances

constrained. But as Gans argues, sources clearly need journalists. Sources who are difficult, unreliable or reluctant to give information to journalists (what he refers to as 'recalcitrants') are in his terms, few and far between (Gans 1979 in Tumber 1999: 240) because sources need journalists and it is in their interests to co-operate as far as possible. Gans states "...even powerful recalcitrants [including private agencies] can bar journalists only at some risk, for nothing whets journalistic hunger for a good story as much as being denied access" (ibid).

The work of Ericson, Baranek and Chan (1989) is useful in the field of source-journalist research because it opens up questions about the way institutional sources are powerful and why this is so. Rather than merely assuming they have power because they manage and control official information, the authors seek to understand how this might be done. They state "Institutional and organisational ties leave journalists in a state of dependency with respect to sources" (Ericson et al 1989 in Tumber 1999: 280).

Their work builds a useful set of terms and conceptions in order to understand the way sources maintain their power. As such their study reveals the fine balancing act between sources who seek publicity but who also want to protect their organisations from 'unnecessary' media scrutiny. Drawing on Goffman (1959) and Giddens (1984) they explore source organisations in terms of the way they can enclose and disclose information across specific regions within organisations. They distinguish between back and front regions. Back regions are the hidden areas behind the scenes where work is conducted. This area is generally strictly off limits to outsiders and even to other members of the same organisation. Front regions are the point of interface between the source organisation and its 'publics' (Ericson et al 1989 in Tumber 1999: 281). Ericson et al also discuss different terms to describe source organisations' power to make information known or not. For them, *enclosure* describes "efforts to circumscribe or extinguish the *signs* that are given off in various regions" (Ericson et al 1989 in Tumber 1999: 282 *my italics added for emphasis*).

Allied to enclosure is the concept of 'secrecy' whereby signs of activity or knowledge are deliberately kept from others. Ericson et al also argue that sources have the ability to disclose information. Disclosure means something quite specific in their view "...efforts to communicate signs in various regions. An effort to communicate to the unauthorised that which is normally communicated to the authorised and the expectation that it is not to be made known to others" (ibid).

Their set of terms are very helpful in enabling researchers to assess openness between and within source organisations. Some source organisations are more open than others, some allow access to back regions, and indeed some do not. As the authors note: "There is considerable variation in access to source regions and knowledge, depending on the type of source organisation involved, and the type of knowledge being sought within a given source organisation" (ibid).

Not only do institutional sources have the ability to enclose and disclose information, they also have the ability to control the manner, timing and form of any disclosure (see Palmer 2000). Ericson et al explain why, in their view, institutional sources have such influence in this respect. They argue: "In the interest of maximising their access while relegating the opposition to mere coverage, political interests expend enormous resources through a variety of proactive media strategies..." (Ericson et al 1989 in Tumber 1999: 283).

3.2 Structural Inter-relationships and primary definition

An influential study in the field of source-media relations is the primary definition thesis advanced by Hall, Critcher, Jefferson, Clarke and Roberts in *The Social Production of News: mugging in the media* (Hall et al 1978 in Cohen and Young 1981: 335-357). Hall et al's work on primary definition provides a useful conceptual framework for understanding source-media relations. But as I will demonstrate the approach is flawed in relation to my thesis' concerns and cannot be applied in its entirety.

Hall's arguments seem highly relevant: reports and coverage in the media tend to come from accredited sources, usually institutions of social importance. These sources provide information that is at once authoritative and seemingly 'objective'. Thus, media give unparalleled access to these socially and economically powerful groups. Hall also contends that the media are structurally biased towards accepting and using information from such sources. As Hall states: "The result of this structured preference given in the media to the opinions of the powerful is that these 'spokesmen' become what we call the primary definers of topics"(Hall et al 1978 in Young and Cohen 1981: 342). For Hall et al the media play a key role in defining what has happened in any given event. They argue:

The media define for the majority of the population what significant events are taking place, but, also, they offer powerful interpretations of how to understand these events. Implicit in those interpretations are orientations towards the events and the people or groups involved in them (ibid: 348).

As Larsson notes, the conclusions of Hall et al echo those of Lippmann (1922) over fifty years before. Lippmann states that newspapers "...can normally record only what has been recorded for them by the workings of institutions" (Lippmann 1922: 361 cited in Larsson 2002: 222). The news cycle, news values, and the quantity and quality of official information available all reflect a certain 'fit' between dominant ideas and professional media ideologies and practices. Hall et al argue that this 'fit' cannot be understood by recourse to simple economically deterministic conspiracy-style theories. But rather by the study of "...the more routine structures of news production to see how the media come to "reproduce the definitions of the powerful, without in a simple sense, being in their pay" (Hall et al 1978 in Young and Cohen 1981: 340).

Another important point raised by Hall et al is the way news is not the single-handed creation of media organisations. The media themselves do not autonomously create news items; rather they are 'cued in' to specific news topics

by regular and reliable institutional sources. Thus, Hall et al argue that time pressures and demands for impartiality and objectivity:

...combine to produce a systematically structured over-accessing to the media of those in powerful and privileged institutional positions. The media thus tend faithfully and impartially, to reproduce symbolically the existing structure of power in society's institutional order (Hall et al 1978 in Young and Cohen 1981: 341).

Palmer (2000) underlines the implications of this clearly in his evaluation of the primary definition thesis. He states "It is this structured subordination of the media to primary definers that gives media an ideological role" (Palmer 2000: 142).

Hall et al cite Becker (1972) on the hierarchy of credibility. They argue that power holders have their definitions accepted because they are understood to have access to more accurate or specialised information on particular topics than the majority of the population (Hall et al 1978 in Young and Cohen 1981: 341). This is perhaps deemed particularly necessary in the case of scientific issues, especially when combined with issues of unpredictability and risk.

There are limitations to the primary definitions thesis, in general and I have already begun to hint at where the problems lie. I am not alone. According to Schlesinger (1990) the main criticism levelled at primary definition is that it "rules out any process of negotiation prior to the issuing of primary definition" (Schlesinger 1990 in Ferguson 1990: 68). Schlesinger and Tumber (1994) reiterated this point:

...because the conception of primary definition resolves the question of source power on the basis of structuralist assumptions, it closes off any engagement with the dynamic processes of contestation in a given field of discourse (Schlesinger & Tumber 1994 in Tumber 1999: 257-266).

Allied to this weakness in the primary definitions thesis, is another: that of primary definition undermining one's ability to understand the nature of contestation over definitions. Contestation over definitions was taking place, in the science community, in Ministries, within government as well as in the media's public sphere. Is it BSE or 'mad cow disease'? Is it a bug or a virus? Did it come from sheep scrapie or organophosphates to treat warble fly? Can you eat it or drink it? Can it be absorbed via cosmetics and toiletries? Is it in the national blood supply? And so on. Despite these apparent weaknesses, Schlesinger concedes "...there is still undoubtedly a strong case for arguing that the way in which journalistic practice is organised generally promotes the interest of authoritative sources, especially within the apparatus of the government and the state" (Schlesinger 1990 in Ferguson 1990: 69).

So, from primary definition I will be taking from the thesis its structural interests in the way information becomes 'public' or media-ised and defined and perceived. I suggest that Hall et al's structural preoccupations are appropriate and useful but that its conception of structures is too broad. The concept cannot sufficiently deal with the processes by which definitions are made and disseminated. As Schlesinger and Tumber state: "It has the single advantage of directing our attention to the exercise of definitional power in society, but it offers no account of how this is achieved as the outcome of strategies pursued by political actors" (Schlesinger and Tumber 1994 in Tumber 1999: 260).

A further weakness pointed out by Schlesinger and Tumber is that primary definition cannot take into account changes in status of source organisations over time. It is too simplistic and too static. They point out that definitional struggles and the breaking down of consensus on a topic has an impact on the range of sources used by journalists. They argue: "The scope of the public sphere is not fixed for all time, and its relative openness or closure is an outcome of political struggle. Consensual times may give way to those of extreme crisis, and vice versa" (Schlesinger and Tumber 1994 in Tumber 1999: 262).

In this section I have discussed the issue of primary definition - a key theoretical approach in my research - and I have considered some of the central strengths and major weaknesses discovered in the review of the literature. The following section reviews the relevant literature on exchange relations and the use of information subsidies in that exchange.

3.3 Exchange Relations and Information Subsidies

In order to understand source-media relations beyond the structural concerns of primary definition, it is necessary to consider further conceptualisations of the way information enters the public domain. One key body of work that examines this is what Schlesinger describes as 'exchange theory'. This body of research begins from the premise that both source and media practitioners 'get something' for their efforts, in a kind of mutually beneficial way. Tunstall (1970), an exponent of this approach states "The interaction of any journalists with news sources can be seen as an exchange of information for publicity..." (Tunstall 1970 cited in Schlesinger 1990: 73).

In Tunstall's view the journalistic practices of guarding sources, the norms of *mutual trust*, *the ability to anticipate the agenda* of your source and bargaining with the source on the strength of this knowledge, are what the journalist brings to the exchange relationship. The [politician] sources, on the other hand, have their own norms and practices: they understand they need the media for publicity and they are aware of the potential usefulness of journalists as well as the potential pitfalls of speaking to the press.

Tunstall also argues that the source-journalist relationship is "a confrontation between two underlying normative structures rooted in particular sets of relations between individuals" (ibid). All of these inter-relationships rely on the norms and practices identified by Tunstall. Importantly for the concerns of this thesis, Tunstall stresses how far routine activities and collective structural concerns shape the source-journalist encounter. He states:

The routinised provision of information...is clearly not a simple exchange between an individual source and an individual specialist. There is a strong collective element here (ibid).

Larsson (2002) takes the view that a “manoeuvring space” hypothesis best describes the relations between journalists and sources (in the case of his research, politicians). This hypothesis proposes that the source journalist relationship be understood in terms of awareness of and respect for each others divergent strategic goals. He argues: “Relations – by and large – are open, but each had various strategies kept from each other but these did not create distrust. It was expected and accepted” (Larsson 2002: 28).

These relations ensure that each structure can achieve its objectives relatively unhindered. In Larsson’s words this means “...a latitude for each party to act to secure their own goals without encountering obstruction, hostility, vigorous complaints, or an attempted assertion of power from the other side” (ibid).

For Larsson, sources and journalists share a common culture that involves agents from each structure being absorbed to some extent into the other and adds how this supports previous findings by researchers in the field (Gieber and Johnson 1961, Ericson et al 1989). Larsson notes however, that the administrative environment “nourishes” this absorption more than the journalistic environment does (Larsson 2002: 29).

But there are significant differences in terms of their resources. As Larsson states: “A journalist’s assets are media space and the news arena. A politician’s or administrator’s assets are the information produced in political and administrative work, respectively” (Larsson 2002: 30). I am not as certain as Larsson that such a simple distinction can be drawn between administrative and political work - certainly not in the UK. But I agree that sources try to ensure that information entering the media space reflect their own interests while being in a palatable form for journalists.

Gandy's (1980) work on information subsidies is particularly important in this light. Gandy argued that sources had the ability to create information subsidies tailored specifically for journalists but also serving their own strategic ends. The implications are clear in terms of the impact of information subsidies on news. As Burns (1998), drawing on Berkowitz (1991) states, for example:

While the practice of relying on subsidies makes running a newsroom manageable, it also tends to limit the amount of sources relied upon. Newsrooms begin to use only a small group of sources they know have provided credible information in the past (Burns 1998: 91).

Burns notes how the size of the source organisation influences the flow and volume of information subsidy material to journalists:

When a newsroom relies on a small group of sources, the sources themselves tend to be larger organisations. These larger organisations may not offer better information, but simply have more ability to provide a consistent flow of information than the smaller source with fewer staff (Burns, 1998:91).

This reliance on a steady diet of information from so few sources serves to limit media abilities in providing a wider range of views (see also Brown, Bybee, Wearden and Straughn, 1987). Other studies noting the reliance of journalists on information subsidies include Hornig-Priest (2001) and Davies (2000).

Part 4 Source Journalist Relations in a Science Context

In a specifically 'science' context, studies have sought to understand the interrelations between scientific sources and journalists. Studies point to a gulf between scientists and journalists. The work of Nelkin (1995) is important in this respect. She states: "While the two cultures remain in tension, they are also inextricably linked" (Nelkin 1995: 158).

A scientist writing in a scientific journal on the topic of scientist-media interactions also observes this gulf. In an article on media training workshops for scientists featured in the *European Molecular Biology Organisations Reports*, Owens (2002) states:

...the wide gulf between scientists and the media is cringingly apparent. The problems start when a science story sprouts legs and walks from the laboratory to the news desk to become a hastily constructed article more about politics, health or ethics (Owens 2002: 709).

She notes however, how funding constraints (a 'liability' of scientists as sources) force scientists to approach the media. She cites Gopfert who asserts "Scientists are much more in favour of approaching the media now that funding is scarce" (Owens 2002: 710). Nelkin also makes this point in relation to the need scientists have to publicise their research. She states:

While they want their work to be covered in the press, they are constantly concerned about how it is covered, and this concern has led scientists and institutions not only to promote science through public relations, but also to control journalists' access to information (Nelkin 1995: 145).

Reed (2001) explores the differences between the goals of scientists and those of journalists. Drawing on her research she argues that journalists see themselves as being engaged in criticism, entertainment and information. They

see scientists as engaging in scholarly communication and public education (Reed 2001: 280). Furthermore Reed points out that journalists and scientists work with different conceptions of time which can cause conflict and lack of understanding between the two groups (Reed 2001: 285).

Reed agrees with Williams (1992) that journalists and scientists operate as “two sets of competing discursive practices” (Williams: 1992: 199). Scientists for Schnabel (2003) should strive to know more about the nature of journalism, its “conditions and restrictions” in order for them to communicate their findings and their ideas to the public (Schnabel 2003: 258). For Schnabel an external mechanism is recommended: the SIRC Guidelines on science communication he describes as “an extremely useful tool-kit for scientists in contact with the media...” (Schnabel 2003: 259).

Nelkin notes how scientists tend to be dissatisfied with the way the press covers science and their complaints about journalists sensationalist reporting and their tendency towards over-simplification (Nelkin 1995: 144-145). Pellechia (1997) observes how scientists tend to be critical of the way science is covered. However, she found that they had a more favourable view of reports on their own work (Pellechia 1997: 50). Pellechia also notes how Tankard and Ryan’s research found that scientists main concern with regards the coverage of science was in the lack of coverage of methods of study (Tankard and Ryan 1974 cited in Pellechia 1997: 51).

Understanding the specific conditions of the relationship between scientists and journalists is important in comprehending how science and health stories like those studied for this research come to be reported. Nelkin argues that science journalists are dependent on their scientific sources because of the complex and diverse nature of the subject area. She suggests that: “The technical nature of science encourages reliance on official sources of information - predictable sources who know how to package information for the press” (Nelkin 1995: 122).

Furthermore, as observed by Davies (2000) the centrality of public relations professionals in disseminating news is evident in science and health reporting. As Nelkin argues, scientists use public relations professionals for their own strategic ends “They exercise their influence primarily through two effective strategies: expanded public relations efforts, and increased controls over the dissemination of information to the press” (Nelkin 1995: 123). The extended public relations efforts noted by the studies presented in the science context have also been noted in relation to politics and administration as has been noted in the first part of this chapter.

Part 5 Source strategies: questions of promotion and control

In this final section I explore the question of source strategies in more detail through a consideration of the key literature. It is observed that source strategies can be pro-active and reactive. That is to say they can be designed to draw attention to an event, or can be formulated to react to events beyond the immediate control of the disseminating source. In extreme form reactive strategies can simply involve creating a wall of silence or an ‘information vacuum’. The point is that regardless of whether a story is of the *enterprise* or *routine* types (Sigal 1973) institutional sources always have strategies when dealing with questions from journalists.

Since all three BSE events case studied were published in the national press it can be assumed, therefore, that certain communicative strategies were adopted. Indeed, evidence of this was provided in chapter one through the introduction of each event studied. Therefore a more detailed understanding of source strategies through a review of the literature in the field is required. Source strategies are nothing new. As Wright states, in the context of politicians and political news:

They like to be thought well of and want to control the message and the messengers as far as possible. There is nothing new or even disreputable about this. What is new though, is the systematic and professional way in which it is now undertaken (Wright 1999: 20 cited in Gaber 2000: 508).

And yet Johnson points to something more fundamental to the nature of politics and politicians. Her comment also questions the nature of the social world and 'reality' and in this regard, it is of particular relevance to this thesis' concerns.

Johnson argues:

The belief that what happens in the political world does not matter – only perceptions matter. They behave as if politics were not about objective reality but virtual reality and therefore not surprisingly, they rely on the doctors of spin (Johnson 1999: 109).

Source strategies are conducted routinely. The most common form of press communication is the press release. Press releases pour forth from government departments on a daily basis. As Gaber observes:

...on an average day the table in the reporters' gallery at the House of Commons groans under the weight of between 40 and 50 press releases...it means that government in particular...can put out official announcements that they do not wish to have subjected to public scrutiny at a time that makes it all too easy for even the most sharp-eyed journalist to miss (Gaber 2000: 508).

This is significant, and especially so when considered in the context of findings by Eide and Hosen (1994) and Hansen and Dickinson (1989). Both studies show that almost a quarter of stories covering science issues were triggered by sources contacting journalists through calls to press conferences or the sending of press releases rather than journalists contacting sources. Shin and Cameron (2003), Curtin and Rhodenbough (2001) and Aronoff (1975) all point to the



increasing reliance of journalists on press materials. Palmer (2000) notes: “The moment of the news encounter is commonly preceded by another where the decision is taken to enter it, and how to behave while there” (Palmer 2000: 47).

Palmer draws on Ericson et al (1989) who as already discussed, distinguished between back space and front space in organisations, and their capacity to either enclose or disclose information in either space. Crucially, control over the boundary between the two spaces lies with the organisation in question, though Palmer notes that this control can sometimes fail. As previously discussed, Palmer (2004) argues that enclosure consists of two aspects: the right to silence and the choice of forms of communication (Palmer 2004: 3). Both have strategic dimensions. Indeed it could be argued that secrecy and enclosure are source strategies. Secrecy is strategic because, in Palmer’s view:

There is clearly a strategic role for secrecy: it is to further communicator interests. Legislation plays a key role but so does power and the capacity to inspire loyalty, also the ability to avoid factional disputes which may lead to competitive use of information in the form of, for example, leaks (Palmer 2004: 8).

Thus, the strategy of secrecy is reinforced by the external mechanisms of legislation. As Palmer argues: “The role of secrecy...is protected by law, in various forms, in modern Western societies: by official secrets legislation, by ownership of information and the right to confidentiality” (Palmer 2004: 3).

For Palmer (2000), sources act in the context of a particular situation using a particular technique to try and persuade journalists that their information is appropriate and useful for the journalists’ purposes. Thus Palmer defines source strategies as:

The combination of motives and techniques is strategy...More exactly, a communication strategy is usually defined as the set of communication plans and the means for their implementation which enable an organisation, to proceed, through time, to realise a specified set of communicative goals (Palmer 2000: 57).

Palmer argues that there are two elements in 'source situations': 1) source purposes, that is to say their motives for disclosure. These can be a) the public right to know which includes mandatory disclosure b) attempt to modify or improve profile of the source organisation c) building credibility in the media d) policy development e) faction fighting and f) damage limitation; 2) Source techniques, and Palmer notes the growth in journalism in the last fifty years is matched by the general growth of information officers and public relations specialists. However he also notes that recent growth in the media has not been matched by an increase in government information officers but rather the growth in private sector public and media relations personnel has been rapid (Palmer 2000: 47).

Returning to techniques, Palmer states that sources have a range of techniques they might utilise in achieving their ends. These techniques include: limiting physical access to information; the standard techniques of pr for example, press releases and their preparation, timing and targeting, press launches and conferences, personal contacts with journalists, information subsidies; techniques to direct journalists to particular aspects of a story or interpretations likely to be considered 'newsworthy' (Palmer 2000: 49-55). In many ways this is similar to the act of primary definition already discussed . Thus we might conclude that primary definition is both a description of a particular type of source-media relation as well as a well-worn source strategy - primary definers have 'motives' and use a range of techniques. For Palmer, there are many techniques for getting the journalist 'on side' in this manner. First, there is the absorption of the journalist into the culture of the source organisation. Second, sources may make appeals to journalists' consciences to get them to co-operate.

In this instance an example may be if a journalist was in receipt of information which might be deemed damaging to the national interests or those of national security. Third, making information available at certain times in certain ways “so as to pre-empt coverage” can be a determining factor in terms of how far the journalist reflects the views of the disseminating source. This latter point is connected to a fourth in that sources have the expertise, resources and reach to tailor information release to particular news values, whether they are values relevant to a specific medium, programme or title, or journalist (Palmer 2000: 53).

For Meyer (2002), however, it is the media that has the power to set frames which sources have to fit in with, rather than, as Palmer suggests, sources tailoring information to fit with journalistic news values. Meyer suggests that their organisational and technological structures “create time and space restrictions on the access that politics has to the mass media”. This leads to the logic of the media colonising the logic of politics (Meyer 2002: 103). In Palmer’s research the most used technique employed is the appeal to news values. In Palmer’s words: “This consists primarily of either creating events that conform to them or interpreting events to journalists in such a way as to give them the desired profile” (Palmer 2000: 119).

Deacon et al (1999) arrive at similar conclusions in their “natural history of a news item”. They observed how two competing sources operated in the news dissemination process. They concluded that the most successful source organisation was the more highly accredited of the two, and how it was able to tailor its message to journalists in terms of “...nature, timing and presentation...to fit with media logic” (Deacon et al 1999: 25).

Gaber (2000) has also explored the strategic aspects of source behaviours. He distinguishes between two types of activities: above-the-line activities normally associated with the kinds of activities a press officer would do, and below-the-line activities, generally seen to be tools from the ‘spin kit’ of government advisors (Gaber 2000: 510-17, also see Barnett and Gaber 2001).

Thesis' Contributions

Chapters two and three have reviewed the literature in relation to the core structures, their mechanisms and their inter-relationships in the BSE story. The thesis overall seeks to make several modest contributions to the literature on BSE in the field and to the sociology of journalism more generally. These contributions fall into three distinct areas.

First, the thesis seeks to add to the literature on BSE in media studies and the sociology of journalism. This is - as I remarked in chapter 1- a body of literature that is steadily growing internationally as other unfortunate countries join the 'global BSE community'. In addition I contribute the first study of media coverage of variant CJD in the UK.

Second the research seeks to contribute to the literature in the sociology of journalism in several areas. I explore and update primary definition. I add to knowledge on journalists' use of official sources. Through my transformational stages approach and the conception of information events I add to knowledge of the nature of the source-journalist encounter and what precedes it. As Schudson (2003) notes: "Very few studies have looked at the whole development of a news story, starting with the news source rather than the news reporter" (Schudson 2003: 135).

I contribute to knowledge of the relationship between journalists and their newspapers. I also seek to contribute to research in the field on science communication. I would also like to make a contribution to the growing body of work that seeks to address media-centricism. A final contribution I intend to make is in the knowledge generated on science journals. My literature research suggested that this was an under-researched area in the field and given the important roles science journals played in the BSE story, I feel they are deserving of more academic focus.

Third, I hope my study will contribute to knowledge on science, government and administration and their interactions. In particular I would like to see my work contribute to a wider debate on *official science* and its inter-relationships with the structure of Administration.

Conclusion

The three chapters in this literature review have outlined the fields of research in this thesis. The first chapter introduced the academic literature on BSE. The second sought to delineate the structures and mechanisms involved in the creation and dissemination of information events. The third chapter reviewed the literature relevant to a consideration of structural inter-relations. In the next chapter I discuss the methodological approach adopted in this thesis.

Chapter 4 Methodology

This chapter is divided into seven parts. *Part 1* situates the thesis within the debates between realist and constructionist approaches in sociology. This part discusses why - for this research - taking sides is important. *Part 2* takes the debates forward into the sociology of journalism and presents a model for analysing events that combines both realism and constructionism. *Part 3* outlines the multi-method approach taken and its compatibility with the stated aims and concerns of this thesis. *Part 4* seeks to define the BSE story as a 'critical case' and explains the use of the three case studies. *Part 5* outlines the project design; and *part 6* details the project sample and includes a detailed typology of sources used in the research. *Part 7* discusses the methods used for gathering data.

Part 1 Realism, constructionism and the importance of taking sides in the sociology of journalism

It is possible to discern a new (or very old) debate taking shape across a diverse range of disciplines. This debate is between those working in a realist mode and those drawing on the body of work known as social constructionism. Somerville and Bengtsson (2001) see this as less of a debate and more as a new 'turn' in sociological thought. In the context of British sociology they argue that: "Few people seem to have noticed that, in British sociology at least, a new realist 'turn' has been going on for some time" (Somerville and Bengtsson 2001: 2). The purpose of this part of the chapter is to outline the tensions between realist and constructionist approaches and to argue that both conceptions are needed to understand the way information is transformed from one form of reality to a series of new but necessarily related social realities.

Realists (social and critical) acknowledge the existence of an objective reality independent of the social world. Realism in a sociological context "...sees social reality as comprising separate layers of being..." (Somerville and Bengtsson 2001: 2). The realist's ultimate aim is to discover what lies beneath surface reality.

There is no single body of work that might be regarded as realist. However there can be determined two clear branches of realist inquiry in sociology: social realist and critical realist. The former branch draws from the work of Durkheim (see his study of *Suicide* (1951) as an example) who argued that social facts should be treated as concrete, *real* objects for study.

The latter branch is more akin to 'naturalism' and is a relative new-comer in theory terms. Exponents of critical realist thinking draw on the work of Bhaskar (see Bhaskar 1989 and 1997) who argues that ontology should be privileged over epistemology and that reality is differentiated into specific but inter-related domains. Thus for Bhaskar, reality is differentiated between the domains of the the real, the actual, and the empirical. MacLennan (1999) on Bhaskar states:

...Bhaskar outlines what he terms three domains: the real, the actual, and the empirical. The real consists of underlying structures and mechanisms, and relations; events and behaviour; and experiences...The domain of the actual consists of these events and behaviour. The domain of the empirical consists of what we experience (MacLennan 1999: 1).

Bhaskar himself was greatly influenced by Rom Harre's work on the philosophy of science (for example see Harre (1970) *Principles of Scientific Thinking*). Harre is seen as encapsulating some of the key ideas of critical realism. His approach is outlined - a little dismissively - by Frankel:

Harre, a self-proclaimed realist, claims scientists are concerned with unearthing the inner workings of ordinary things. They manifest this concern by proposing generative mechanisms whose existence is then subject to empirical investigation (Frankel 1976: 560).

Critical realists focus on the structures and mechanisms that generate phenomena or realities. Regardless of branch, both maintain a set of consistent beliefs about the social world and the nature of social reality. As Halfpenny (1997) states:

Realism argues that explanation is a matter of identifying the real mechanisms, usually beyond direct observation, which are natural kinds and whose causal powers or powers of agency operate to produce the flux of observable events...empirical regularities are to be explained by demonstrating that they are an observable manifestation of the interplay of underlying generative mechanisms (Halfpenny 1997: 3.1).

Halfpenny points to another delineation of types of realism in the social sciences. He argues that there are two forms of realism:

...the micro version which maintains that the explanatory real mechanisms are to be found in the structures of the mind and the macro version which maintains that the explanatory real mechanisms are to be found in supra-individual social structures (Halfpenny 1997: 3.2).

Social constructionism by way of a contrast argues that there is no objective reality but that social reality is "...produced entirely by human discourse and interaction..." (Somerville and Bengtsson: 2001: 2). The goal of social constructionist theory is to provide meaningful accounts of the processes involved in social construction. Thus one of the most significant differences between the approaches is that whilst both seek to understand the existence of

social phenomena, realists see 'reality' as concealed beneath layers of construction whereas constructionists view reality as another form of construction. Where realists seek to look beneath the surface at what is or has occurred, constructionists argue that there is nothing 'real' beneath that is not a product of human actions.

Berger and Luckman's (1966) work *The Social Construction of Reality* is seen as the founding text of this particular 'turn'. It certainly exemplifies the general constructionist view: "Social order is not part of the 'nature of things', and it cannot be derived from the 'laws of nature'. Social order exists only as a product of human activity" (Berger and Luckman 1966: 52).

Just as in the case of realist approaches, social constructionism is really an umbrella term for at least two forms of social constructionism. The two forms are generally referred to as *strong* and *weak* constructionism. Strong constructivism, according to Knorr-Cetina (1993) is understood to be an approach that "...shows how the world is slowly moulded into shape in ever new ways through successive generations of (scientific) practices" (Knorr-Cetina 1993: 560).

Weak constructionism on the other posits the view that some objective realities may well exist but are mediated by social processes. As Lupton (1999) states in the context of risk: "The weak social constructionist position sees risks as cultural mediations of 'real' danger and hazards" (Lupton 1999: 30).

It is my contention that weak constructionism as an epistemological concern is entirely compatible with a realist ontological underpinning. Strong constructionism has been discarded since I do not take the view that BSE as a social phenomena began life as simply that - a socially constructed phenomena. Knowledge had to *catch up* with the pre-existence of something that *has become* culturally, politically and scientifically known as BSE.

In short, it is a biological reality that pre-exists our knowledge or perceptions of it. This issue is neatly emphasised by Sismondo (1993) drawing on Giere (1988):

Ronald Giere dismisses constructionism quickly, finding it 'wildly implausible' that representations are ontologically prior to their associated objects, that scientists somehow construct the world when they arrive at consensus (Sismondo 1993: 516).

This quote is also interesting when considered in the context of BSE. The scientific-political orthodoxy sought to construct the reality of BSE stating it was a 'scrapie-like disease'. It was also said that 'beef is safe'.

The structures and mechanisms of human agency are brought to bear on events but these events are not necessarily the constructions of human agency. Analysing the layers of construction can reveal the extent of re-construction and re-presentation effectively only if a starting point is agreed. Coleman and Perlmutter (2005) are particularly insightful in this respect. They argue (my italics): "There is a *physical reality* of sickness but also psychologically, socially, politically and culturally imposed constructions of what an ailment means" (Coleman and Perlmutter 2005: 24).

Certainly even the first formulated account of a phenomenon is a construct. But the physical reality of BSE and later vCJD is only too evident in the numbers of cattle destroyed and the numbers of victims who have succumbed to the human form of the disease. This combined approach seeks to understand what was at stake in the transformation and re-presentation of the physical realities of BSE and vCJD in the UK.

Part 2 Realism, constructionism and news: information/transformation

As I have discussed, this thesis positions itself between two rocky theoretical camps: realism and constructionism. It argues that news is indeed a construct but that in the case of BSE an objective reality is discernible beneath the layers. In this part of the chapter I turn attention to the issues raised in the previous section and relate them specifically to the sociology of journalism and the study of news. I then propose an approach drawing on combined realist and constructionist approaches in order to study the transformation and representation of reality in the case of BSE.

2.1 Realism, constructionism and news

Many studies of news have taken the view that news is a construct – see Epstein (1973), Molotch and Lester (1974), Tuchman (1978, 1980), Gans (1979), Eldridge (1999), Voltmer (2000), Pietik and Hujanen (2003) and Holohan (2003). In terms of news production many studies have quite rightly focussed on the construction of news, since news is a product of human structures and human agency. Tuchman (1978) for example, states:

...to say that a report is a story, no more no less, is not to demean news, nor to accuse it of being fictitious. Rather, it alerts us that news, like all public documents, is a constructed reality possessing its own internal validity (Tuchman 1978 cited in Schudson 1991: 141).

In my view Tuchman's approach represents a 'weak' constructionist viewpoint. Tuchman does not deny objective reality as such. Rather she draws attention to the constructed nature of news. This is integral to understanding the transformational stages that enable structures to influence the construction and dissemination of information.

In spite of the perceived constructionist sympathies in their work, Molotch and Lester's view is consonant with my own. They state: "We see media as reflecting not a world out there, but the practices of those having the power to determine the experience of others" (Molotch and Lester 1974 in Cohen and Young 1981: 133). They add:

For the citizen to read the newspaper as a catalogue of the important happenings of the day, or for the social scientist to use the newspaper for uncritically selecting topics of study, is to accept as reality the political work by which events are constituted by those who happen to currently hold power (Molotch and Lester 1974 in Cohen and Young 1981: 134).

These events can be 'constituted' but there is something "out there" in their view. This is an implicitly realist perspective. Many studies take an implicitly realist view. Such studies include Sigal (1973), Gans (1979), Fishman (1980), Roshier (1973), McManus (1994), Miller (1999).

Freuer and Shepherd note why it is important to study the way realities are constructed. They argue: "Why and how the construction of realities occurs is likely to be associated with the evolution of social conflicts linked to interest and power structures" (Freuer and Shepherd 1994: 385).

That news reports, press releases, journal articles, scientific empirical data are all constructed realities is not denied. But as Searle (cited in Gauthier 2005) observes, there has to be something to construct the construction out of (Searle 1995 in Gauthier 2005: 54). There are few studies to draw on that seek to give an explicitly realist account of news. In recent years two studies with explicit realist aims have been published focussing on the production of news. The two studies are Lau (2004) and Gauthier (2005). Lau (2004) takes a critical realist stance in his discussion of news production. Lau argues that critical realism can provide new insights in debates central to the sociology of news production.

Lau begins by exploring what he describes as “factors extraneous to journalists” and those “internally derived from journalists” (Lau 2004: 693). He argues that extraneous factors are largely conceived of in implicitly realist terms in the existing literature, whereas factors seen as internally derived are often described in explicitly anti-realist terms (ibid). Lau’s work also explores aspects of news production from a realist perspective in more detail, most notably through a consideration of news values. Ultimately, for Lau, news is constructed in an open system and is a consequence of a range of mechanisms, each with specific causal powers (Lau 2004: 707). Whilst Lau’s work is useful in providing some basic conceptions upon which I draw – most notably internal and extraneous factors that have an effect on news production - his focus on the news product, news values and on journalists and sources alone limits its wholesale relevance to this thesis.

The study by Gauthier (2005) attempts to give a realist account of news journalism and as such is more useful for my thesis. He states that: “The realist point of view proposed here supports the theories that news emanates from a preliminary reality and that this reality is brute” (Gauthier 2005: 52). Gauthier argues that news is: “...never a free agent, nor is it ontologically independent...it is always linked to a state of affairs and comes forth as a representation” (Gauthier 2005: 52). In this way Gauthier accepts the “double nature” of realist research of news in that it is indeed a construct, but it is based on some preliminary reality (Gauthier 2005: 53-54).

For Gauthier the construction of social facts occurs through a process of *iteration* in that a social fact can be constructed out of another social fact, but that every social fact requires a starting point (Gauthier 2005: 54). Drawing on the work of Searle, Gauthier argues that “news is essentially a layering of constructs”. Furthermore because of this constructed nature “we come to see news as having no connection to an independent reality” (Gauthier 2005: 54).

2.2 Information events and transformational stages

In order to pursue this idea that news is based upon some objective reality but is also heavily constructed I have posited a five stage approach in the analysis of science communication derived from my research. Unlike standard transmission models, my approach seeks to understand information flow through a consideration of *what is produced* at each stage in a message's transmission that is generally facilitated through intra- and inter-structural relations.

Thus at each stage in the flow of scientific information a new but inter-related reality is constructed - in essence a new message is created and constructed to suit the needs of the intended 'audience' or 'receiver' and the source. Although classic transmission models are widely regarded as flawed, they do offer a useful starting point for researchers seeking to answer the question posed by Lasswell as being at the heart of communication studies: "who says what, in which channel, to whom and with what effect" (Lasswell 1948 cited in McQuail 1985: 94). Transmission theories according to Real (1980) are concerned with "...the process through which messages are developed, duplicated, and relayed to audiences" (Real 1980: 245).

With such clear cut and important aims it is surprising that in recent decades transmission models have become so out-dated. Certainly the popularity of constructionist studies in sociology might go some way to understanding the demise of such approaches, with their emphasis on human agency and interaction.

Shannon and Weaver's (1949) model posits a straightforward sender-receiver flow of messages. For them, a message starts with the information source. A transmitter turns the message into a signal that has been adapted for its suitability to pass along a channel. The channel is picked up by the receiver who then reconstructs the message from this signal. The message has arrived at its destination (Shannon in Shannon and Weaver [1949] 1998: 33-35). The

problems with this approach when applied to contemporary communication of BSE-related stories are many. It is not always obvious who or what the information source is and indeed what information this source has to transmit. In addition, as the previous chapter demonstrated, each structure in the BSE story has different characteristics, different professional practices, something that the simple categories described by Shannon and Weaver cannot convey.

Gerbner's (1967) model is more sophisticated. It begins with an 'event' (E) - a phone call, a tidal wave, an outbreak of bird flu, for example. The event is then 'perceived' by man or machine (M) that involves a process of interpretation. What is produced is M's perception of the event (E) that is described by Gerbner at E1. From here M produces a statement about that event (SE). What I aim to show is that there are many more 'events' than Gerbner posits and many more layers and levels of interpretation as events from the real world become news. What Gerbner hoped to demonstrate was "interaction through messages" (Gerbner 1967 cited in Real 1980: 239). This general model of communication certainly has its limitations. But its emphasis on events and the way they are translated has provided a useful starting point in my analysis of dissemination processes in the case of BSE.

Critics argue (and often quite correctly) that such models as those developed by Shannon and Weaver and Gerbner are too simplistic, that they encourage the view that 'receivers' of messages are designated as passive and 'senders' of messages are dominant and powerful. In addition, it is often argued that such models ascribe media organisations with neutrality and also that: "...messages are more than rational acts of transmission belonging to broader systems of social and cultural meaning" (McQuail 1985: 94). These criticisms may be well founded and if this thesis were concerned with audiences as receivers of messages I would discard them for much the same reasons.

However, this thesis is very much concerned with the flow of information and how it is transformed into new 'realities', distinct from but related to, the original objective event. They cannot simply be discarded because they are out of date and out of fashion.

The events presented in news reports are arrived at through a series of transformational stages wherein at each stage a new information event is created. In spite of this, few journalists, it seems, go beyond the prefabricated offerings of official sources allowing them to frame and limit discussion of events. In other words, they accept the official interpretations of what has happened without seeking out earlier information events in the chain of dissemination. As Tavis notes that: "Reporters rarely ask how sources know what they know, or what evidence the knowledge is based on, or why it differs from conventional wisdom" (Tavis 1986 in Weigold 2001: 182).

This is further exacerbated by the findings of Eide and Hosen (1994) who found that only one in ten science journalists in Norway looked at the research reports on which they reported (Eide and Hosen 1994: 431). Peters (2004) argues that mass media coverage in general is best understood in terms of the compromise "between several competing expectations and influences" (Peters 2004: 5). In realist terms, the competing expectations belong to structures, comprised of agents, and the influences Peters speaks of constitute mechanisms that enable structures to re-interpret and re-constitute reality. I argue that it is possible to determine the existence of these structures and their mechanisms by analysing what I have termed *information events*.

2.3 Information events

Information events are created as information moves from the earliest formulated account of some phenomena (Fishman 1978) to news report, through a series of posited transformational stages. Previous studies in the sociology of journalism have commented on the way information is transformed into news. In their study

of reporting genomics, Kua et al (2004) acknowledge, implicitly, that information moved between realms and that this movement will entail changes to information not least of all because each structure has different professional codes, institutional norms and competitive dynamics. They state: "...attempting to move knowledge from the world of scientists into the public sphere presents real challenges to reporters and to newspapers that have to contend with limitations on space and reader interest" (Kua et al 2004: 318).

Palmer also seems to suggest there is a process at work in the dissemination of information. He argues that much goes on in the life of an event before it is prepared for dissemination to journalists: "...everything that precedes the act of emission may be enclosed and fall outside the public realm" (Palmer 2004: 1).

Drawing on Ericson, Baranek and Chan (1989) Palmer argues that enclosure ensures that the information passing into the public space serves the interests of the communicators (Palmer 2004: 2). "Emissions" it is suggested are frequently in the form of press releases. According to a study by Entwistle (1995), 81 per cent of journal articles covered in the press were included in journal press releases (Entwistle cited in McInerney et al 2004: 64). Drawing on Woloshin and Schwartz (2002), McInerney et al offer an explanation as to why this might be the case: "Press releases afford journalists the opportunity to influence how the information is translated into news" (McInerney et al 2004: 64)

Galtung and Ruge's work on news values also suggests a set of transformations of information. They argue that selection and distortion (through the application of news values to information received) take place at all stages from event to reader. A process of 'replication' occurs and they add "The longer the chain the more selection and distortion will take place" (Galtung and Ruge 1965 in Cohen and Young 1981: 61). I would add that this chain extends far back from the moment the journalist encounters the story and I seek evidence of this through my research. Tuchman (1978 cited in Smith 1996: 207) noted how journalists and sources together created a socially constructed reality that served to meet

the needs of news work, emphasising the 'transformational' nature of the task. Manning White's study of the gate-keeping function in news production (Manning-White 1950) also suggests a set of transformational stages, if only focussing on the transformation of information received by journalists (the first gate). I contend that it is important to understand there are a series of gates prior to the information reaching the journalist as Ericson et al and Palmer both note.

Other studies have analysed news as a chain of events. Studies within the sociology of journalism that share broad methodological concerns and approaches include Singer (1990), Entwistle (1992), Hagendijk and Meens (1993), Deacon et al (1999), Kua et al (2004) and McInerney et al (2004). More recently Gauthier has argued: "A news item is [therefore] most often the last link in the chain connecting a certain number of social states of affairs, some of which are themselves news items" (Gauthier 2005: 54).

It has been established, then, that there is an interest in the way information about events is transformed into news and many studies have sought to understand this process. However relatively few studies have sought to examine these transformations beyond the transformations of press releases into news stories. While this work is certainly valid and valuable in terms of answering this thesis' central question - how did stories about BSE come to be reported - such studies only help to answer part of the question. Hargreaves et al (2003) found in their research on science coverage, that their focus – a story on the MMR controversy – left "the domain of scientific debate to become the focus of a more general discussion" (2003: 16). What my study seeks to do is to understand how events "leave" to become stories.

The work of Molotch and Lester (1974) has also helped to inform my transformational stages approach. They view events as consisting of three major agencies. There are news promoters, news assemblers and news consumers (Molotch and Lester 1974 in Cohen and Young 1981: 119). I would insert news

purveyors to include newspapers as structure into their categories as I have done in identifying the key structures of BSE. Molotch and Lester develop a typology of public events. They distinguish between routine events, accidents, scandals and serendipity events (Molotch and Lester 1974 in Cohen and Young 1981: 131-132). Routine events are exemplified by press releases and are described by the authors as such because stories based upon them appear frequently in newspaper coverage. They state: "Each day a multitude of activities is done with a view to creating routine events. [But] those intentions must complement the work done by news assemblers if a public event is to result" (Molotch and Lester 1974 in Cohen and Young 1981: 125-26).

This is an important point since I argue that using an information events approach helps to understand why one constructed reality is transformed into another. Events categorised as 'accidents' are characterised by the 'un-intentionality' of the event and that those promoting the event are not responsible for its occurrence (Molotch and Lester 1974 in Cohen and Young 1981: 130). Scandals become events through the intentionality of the disseminating source who does not share the strategic goals of those effecting the occurrence (Molotch and Lester 1974 in Cohen and Young 1981: 131). 'Serendipity events' are, according to the authors, the most difficult to determine because "effector/promoter" can disguise the event to make it appear as though it were routine. All three events analysed in this thesis fall under the category of 'routine' events although, as I demonstrate there is one very interesting exception. The following set of transformational stages seeks to understand the processes whereby routine events became news in the case of BSE. Each stage marks a moment where an information event was created:

Stage 3 Attracting: construction of information event to attract the public (or not) to a story (IE 3)

Stage 4 Preparation: from journalistic research to journalistic copy

Stage 5 Disseminating: from copy to newspaper article. Information at this stage can become stories in their own right (see Hargreaves 2003). (IE5)

Note: IE refers to the specific *information event* constructed at each stage.

The approach outlined above is a blue-print. Note how this approach stands in contrast to both Shannon and Weaver and Gerbner's models by emphasizing verbs rather than nouns. This is important because I am concerned with what is *happening to* information as it passes through these stages. At this point a detailed explanation of each stage is required.

The first stage - ***reporting*** - involves the interpretation of the phenomena observed. In science communication this stage would normally comprise the process of research. At this stage the information is enclosed within the structure of a scientific report. Science.

The second stage - **reviewing** - sees the first information event come under scrutiny within the confines of the structure initiating it and its co-related structures. It is at this stage that more information can be sought before the findings proceed along the information chain. In this instance IE1 is re-presented, it does not constitute a new information event as *the intended audience is the same*. From the reviewing stage IE1 becomes a written record of what has happened destined for a world that is (potentially) beyond the structural confines of Science. This is IE2.

In the third stage of **attraction** IE2 is transformed in readiness for its new intended audience. IE2 may still exist, but its essence forms part of IE3. At the stage of attraction then, IE2 is essentially transformed into IE3 - related to but quite distinct from IE2. It is argued that at the stage of attraction, a new audience is sought and information is transformed (once again) to suit the intended audience. IE3 is constructed but IE2 is never read by the busy journalist, more often than not. They rely instead on the official interpretation of what has happened with little recourse to understanding how sources know what they know from what they have produced.

The press release - the new information event - is picked up in the fourth stage: **preparation** where journalists find and pursue a story that leads to the submission of their copy (IE4). This stage is where most source-journalist studies focus their attention, although some also focus on the stage of attraction (see Deacon et al (1999) and Davies (2000) for examples.

The fifth stage of **dissemination** does not simply relate to a news story being published. It also includes the 'making ready' for dissemination. The information event generated here is IE5 (final copy as carried in the newspaper).

What these transformational stages allows one to do in relation to the three case studies is to really focus on the way information is transformed at different stages

for different audiences/recipients. It could also potentially allow one to explore at what specific stage stories are spun into control and where they begin to spiral out of control.

In this part of the chapter I have sought to combine a realist ontological position - BSE and vCJD existed as physical realities independent of our knowledge of them - with a weak constructionist view of the news production process. From this I have developed the notion of information events - distinct but inter-related constructed realities - that can be traced through a series of stages. At each stage information is transformed from one constructed reality into another. With each transformation the information moves another step further away from the objective reality it is supposed to represent and ever closer to the public domain. The next part of this chapter introduces the methodological approach taken and links this with the concerns already outlined in this chapter.

Part 3 Critical Methodological Pluralism: a multi-method approach

A multi-method approach has been adopted in this thesis in order to respond to the research question effectively. Each information event in the chain of dissemination requires different methods for gathering data about it. Content analysis is useful, for example, because there is a large universe of data to draw on in news reports since BSE has been an issue for nearly two decades. Other information events are difficult to determine without the aid of qualitative interviews - especially since so much of what happened in the case of BSE was enclosed.

This part of the chapter identifies and explains the research approach adopted for this thesis. Danemark et al (2002: 152) describe this approach as *critical methodological pluralism*. They distinguish between two different types of research which, broadly speaking, conform to the old qualitative/quantitative divide. Extensive research relates to constructed research that aims to deduce frequency, commonality, generalised features. Thus this kind of research aims to

give an 'extensive' view of some phenomena. Intensive research aims to focus more tightly on the phenomena and may include participant observation and open-ended interviews. It is the view of Danemark et al that critical methodological pluralism should utilise both intensive and extensive research, providing the different approaches compliment each other. In addition, they argue: "There should be congruence between the object of study, the assumptions about society and the conceptions of how knowledge is possible" (Danemark et al 2002: 150).

It was clear from my initial immersion in the field that specific questions raised could not be answered using content analysis alone. Burgess (1982 in Brannen 1992) states that researchers need to be flexible and to use a range of methods appropriate to the research problem (Burgess 1982 in Brannen 1992: 11). Indeed, writers like Hansen et al believe that methods such as content analysis need to be incorporated with more qualitative research methods. They state:

...we wish to stress that content analysis is and should be enriched by the theoretical framework offered by more qualitative approaches, while bringing to these a methodological rigour, prescriptions for use, and systematicity rarely found in many more qualitative approaches (Hansen et al 1998: 91).

More generally, critical methodological pluralism is referred to as 'triangulation'. Brannen states: "By and large researchers have taken the term to mean more than one method of investigation and hence more than one type of data" (Brannen 1992: 11). A key reason for utilising the multi-methods approach is that it can enable the researcher to obtain a more accurate, more holistic view of the object of study. As Bryman (1992) argues:

The notion of triangulation is drawn from the idea of multi-operationalism which suggests that the validity of findings and the degree of confidence in them will be enhanced by the deployment of more than one approach to data collection (Bryman 1992: 63).

Many theorists and researchers working in the field of mass communications research see the combining of different approaches to be crucial. For example, Deacon et al (1999) state: "In our view, many of the most interesting questions facing communications research are best tackled by combining different research methods" (Deacon et al 1999: 3).

Several studies have combined different methods to help explore research problems concerning the news media. For example, Gans (1979) used content analysis to complement his participant observation and interviews. Todd Gitlin (1980) used his past participant observation as a reporter on the anti-war movement to explore anti-war reporting in his study, *The Whole World is Watching*. Daniel C Hallin's work on the Vietnam war is of particular interest and relevance for my study (Hallin 1986). Hallin used historical documents, news reports, interviews with reporters, and correspondence with officials. He also used content analysis (albeit in non-tabular form) to retrace the influences on the process of coverage on the war and its dissenters.

In *Mass Communication Research: Asking the Right Questions* (1988), Halloran also promotes the combining of methods and argues that the distinction between qualitative and quantitative methods is unhelpful. He states:

The methods employed in research should also reflect [this] plural standpoint. Quantitative and qualitative approaches are both valid – one should complement the other – and the hierarchical distinction between 'hard' and 'soft' data is not a valid one (Halloran 1998: 18).

Much can be gained then from combining qualitative and quantitative data analysis. Since I am interested in structures and mechanisms involved in the transformation of events into news *across time*, some aspects of quantitative analysis are crucial. But to understand the processes through which structures and mechanisms function at different stages, qualitative analysis through interviews will also prove fruitful. As Bryman argues:

Quantitative research is especially efficient at getting to the structural features of social life, while qualitative studies are usually stronger in terms of 'processual' aspects. These strengths can be brought together in a single study (Bryman 1992: 60).

In reviewing the literature Bryman outlines three main ways that the combining of methods has been used:

1. qualitative work as a facilitator of quantitative work
2. quantitative work as a facilitator of qualitative work
3. both qualitative and quantitative work are given equal prominence or emphasis

(Bryman 1992: 23)

In this research, my approach is best defined in accordance with Bryman's third point since the data yielded from content analyses and interviews are given equal prominence. That said, it would be difficult not to use broad findings from one to inform the other - however unintentionally - and so in some respects the research conforms to Bryman's second conception.

Part 4 BSE as critical case and the case studies approach

BSE as an object of study is an example of a 'critical case'. A critical case is one that although it concerns a specific object of study - in this case BSE - it also has wider applicability. A good example of a critical case is given in Deacon et al (1999) in relation to Harris' work on the media, the government and the Falklands crisis (1983). They state:

The Falklands Crisis had one unique and beneficial side effect. Its limited time scale and crowded succession of incidents made it an experience of great intensity. It briefly illuminated aspects of British society normally hidden from view. It exposed habitual abuses by the armed forces, government, Whitehall, and the media; it did not create them (Harris 1983 in Deacon et al 1999: 54).

Whilst the BSE crisis lacks the intensity and the condensed time-frame, it certainly exposes all the "habitual abuses" Harris mentions. Deacon et al also cite the work of Paletz on the Gulf War (1994) as another critical case example. Once again, here is a study which although based on a single case, has wider implications and applicability:

The Gulf War case...reveals the clash between the mythologies of journalists and politicians in American culture, mythologies that established norms and roles that are more or less carried out in practice (Paletz 1994 in Deacon et al 1999: 54).

I have selected three case studies within the critical case of BSE. In so doing, I have paid considerable attention to the *use* and *purpose* of case studies. The problem with case studies it seems, broadly, is the question of generalisability. How can one generalise from studying one topic? Should one feel the need to provide generalisations? Some interested in the case study approach disagree

that generalisations are necessary. Others argue that case studies allow for certain kinds of generalisation. In this section I will set out how and why I have chosen a case study approach. I will describe the kinds of generalisations I will make. I will then go on to explain how I intend to break down the critical case of BSE into case studies.

In the realms of this thesis the term 'case study' is taken to mean a "bounded system" (Smith 1974). Each of the three events can be seen in these terms. Whilst there is consonance between the three as part of the "critical case" of BSE, each is also self contained. They have their own languages, their own social definitions, distinct places in the chronology of BSE, specific sets of 'actors', and highly specific concerns and issues. According to Gomm, Hammersley and Foster (2000): "The case need not be a person or enterprise. It can be whatever 'bounded system' is of interest" (Gomm et al: 2000: 23).

What generalisations can be made by the exploration of three case studies within one "critical case"? Theorists such as Lincoln and Guba (1979) question whether one should want to make law-like generalisations as in the natural sciences. This is because in their view the objects of natural and social sciences differ. The objects of natural science are naturally produced but socially determined, whereas in the case of social science, the object of study is both socially produced and socially defined (Sayer 1992: 26).

Gomm et al note that using the case study method, it is possible to make certain kinds of generalisations. First, we can make theoretical inferences. These are defined as "...reaching conclusions about what always happens, or what happens within a given degree of probability, in a certain type of theoretically defined situation" (Gomm et al 2000: 103).

So for example, source media relations are but one such type of theoretically defined situation. Second, we can make constructed generalisations drawing on

a sample of the population under study which can produce general findings. As Gomm et al state: "This involves drawing inferences about features of a larger but finite population of cases from the study of a sample drawn from that population" (ibid). As the authors note, to some degree all case study research involves constructed generalisation because cases are often too large to study all the data available: "[Instead,] parts of them are investigated and the findings generalised to the whole case" (ibid).

In this thesis I make both kinds of generalisations, that is to say, those based on theoretical inference, and those based on constructed generalisation. A further level of generalisation can be identified: generalisation *within* the case and generalisation *outside* of it. Generalisation outside of the case allows for researchers to make links with other studies, and so to add to the wider pool of knowledge. This means that whilst BSE is a 'bounded system' what can be learnt about it can be applied to similar systems like the Falklands Conflict, Arms to Iraq, Gulf War Syndrome, Anti Poll Tax demonstrations, and so on. This is related to another important issue in the question of case studies and their ability to provide generalisations. Lincoln and Guba (1979) and Robert Stake (1978) concern themselves with the transferable nature of generalisation. Thus for these theorists, the emphasis in generalisation is on the readers of case studies. It is they who must decide the degree of 'fit' between the work they intend to draw on and their own areas of study. This does not mean that the researcher has no responsibility for what they have done. On the contrary, they must describe the case study in such a way as to make the assessment of 'fit' easier for future users of their work.

As Gomm et al argue, the original researcher "...is responsible for providing a description of the case(s) studied that is sufficiently 'thick' to allow users to assess the degree of similarity between the case(s) investigated and those to which the findings are to be applied" (Gomm et al 2000: 100). The kinds of generalisations I aim to make in the case studies include those concerning

structures and their inter-relationships, mechanisms used and their ability to influence the construction of information events through the transformational stages of the dissemination process.

Part 5 Project design

Having discussed critical methodological pluralism and the purpose of the case studies approach adopted in this thesis, the remainder of the chapter is devoted to the research design and methods of data collection. As I have discussed, the nature of the phenomena I am studying requires the combination of methods. A content analysis can demonstrate the structural, routine nature of information dissemination. It cannot really get to grips with the strategic processes involved in that dissemination. That is to say, one can see an element of technique in the way papers 'picked up' the story, but the motive can only be guessed at using content analysis alone. And of course this would undermine the purpose of content analysis.

In accordance with the requirements of the research question and the range of evidence gathered, the thesis has been designed to yield both quantitative data and qualitative data, the latter being conducted in a detailed analysis of the 2004 case study.

Part 6 Project sample

Since the scope of BSE as a story extends over many years it would not have been possible to include the entire known universe of events relating to BSE. Thus sampling is required. These events were selected in line with Lindlof's conception of critical case sampling, described as:

...a person, event, activity, setting, or (less often) time period that displays the credible, dramatic properties of a 'test case'..[a] critical case should demonstrate a claim so strikingly that it will have implications for other, less unusual, cases (Lindlof 1995: 130).

The project sample is drawn from the news reports from each event studied from five newspapers. Kiernan (2000) notes how news reports provide "...the tangible product of the interactions among people groups and individuals who have influence on the contents of the newspaper" (Kiernan 2000: 16). The newspapers sampled are: *The Guardian*, *The Daily Mirror*, *The Sun*, *The Daily Telegraph*, and *The Times*. The newspapers were selected to allow for comparisons between tabloid and broadsheet papers. So-called 'middle market papers' were excluded to narrow the field of research. In total, 59 articles were sampled from the five newspapers: 11 May 1990 (eight articles), 20 March 1996 (three articles) 21 March 1996 (41 articles), and 21 May 2004 (seven articles).

Analysis of the news reports allowed for the identification of primary source structures. Having determined the primary disseminating source, the press releases in each case were obtained. In total, five press releases and their attached materials were sampled. These are: 1990: MAFF and the attached letter to the *Veterinary Record* from the CVO (see appendix 3); 1996: two press releases from DoH and one from MAFF (see appendix 4); 2004: *Journal of Pathology* press release from Wiley-Interscience (see appendix 5).

After the content analyses were completed, relevant sources and journalists were identified through the 2004 content analysis. Interviews with key sources and the journalists who wrote each report were sought, with mixed success. Of the five journalists whose work had been sampled for the 2004 event, four were interviewed¹. The fifth had left the publication in question and was untraceable.

¹ note that one reporter spoke to me initially giving me an overview of how he would have worked on the story. He agreed to be interviewed more fully and formally at a later date so he could look

The originating, primary source of the 2004 story was extremely helpful and accessible and contributed a wealth of useful material, as did the press officer of his organisation. Unfortunately, I was unable to conduct interviews with four other sources involved in the chain of dissemination. The press officer who wrote the press release had left, but I was given copies of her emails to the author of the study and copies of emails between them and the editor of the journal in question. Two of the three other sources declined to be interviewed. These were Professor John Collinge of St Mary's Hospital, London, and Professor Pat Troop of the Health Protection Agency. Professor James Ironside failed to respond to my emails and telephone calls. An interesting point to be made here – and one highly pertinent to the concerns of this thesis – is that all three were senior representatives of 'official source' structures. Furthermore, one senior representative - Professor John Collinge – was particularly accessible to journalists, but not, it seems, to this researcher.

The research uses a typology of sources in order to explore which structures were disseminating information. Understanding who is disseminating information is as important as understanding the processes of dissemination. In addition, understanding who is disseminating has a strong public interest dimension and is a key aspect of arguments relating to the freedom of the press and the integrity and operation of journalism as a profession. It is not enough to say that 'official sources' are powerful. In the case of BSE separating out official sources is of vital importance, not least of all if I am to discover the structures relevant to the events analysed and the mechanisms they deploy imprint upon information events. The following definitions of the types of sources were devised from my research and were used in the content analyses.

Official Government: Ministers and MPs, and Peers of the Government of the day

Official Advisory: Bodies formed to advise the government, or bodies used to

at his notes but he did not reply. The initial conversation is considered to be interview material.

advise in an official capacity, including SEAC, Southwood Committee, Tyrell Committee, Central Veterinary Laboratory, Bristol Veterinary School at the University of Bristol. Also includes scientists working on government funded research on BSE and/or CJD like Dr David Hilton, the originator of the 2004 research studied

Official Administration: Civil service sources like MAFF, Department for Environment, Food and Rural Affairs (DEFRA), DoH

Official Opposition: Shadow Ministers, MPs and Peers of the two main Opposition parties

Interest/Pressure Groups: Defined as those groups with a specific interest who speak on behalf of members but not those who form associations for commercial or trade purposes. The NFU, Association of Metropolitan Authorities (AMA), School Meals Campaign, the CA are all included in this category.

Commercial/Industrial: This type of source represents the interests of particular industries or trades for commercial purposes, and the advancement of commercial causes. Thus, the Meat and Livestock Commission (MLC), the Licensed Animal Slaughterers and Salvage Association, and Livestock Industrial Support Trust, are all included. In addition, individual farmers, companies like Co-op, McDonalds, Tesco, Midland Bank's Director of Agriculture are all included in this type of source

Public This type of source includes victims of CJD, families of victims of CJD, members of the public asked about the story. This category also includes any individuals asked their opinion about beef, BSE, CJD who do not speak on behalf of others

Non-official or unauthorised experts: This type of source includes those speaking on behalf of a profession or from a point of scientific, economic or industrial expertise who offer views on BSE/vCJD from a professional point of view. Largely outside the policy community of BSE, these would include 'renegade scientists' like Dr Stephen Dealler and Professor Richard Lacey, as well as economists and City analysts

International Officials: A broad category including spokespersons from EU, North America, representatives of governments from countries beyond the UK

Publications: This type acknowledges that information and research published can provide useful sources for journalists. These include the Daily Mirror – who ‘broke’ the Link story in 1996 in a world exclusive, Veterinary Record, Nature, Science in Parliament journal, as well as documents released or obtained by journalists of an official nature where the documents themselves are referred to specifically.

Part 7 Data Collection and Analysis

Having outlined the project design and the project sample, in this final section I discuss my methods of data collection. I begin by outlining the methods used in the research before going on to discuss in detail my approaches to the tasks. It is important to outline the methods used and the purposes of each in the realm of the thesis. As Brannen states:

At the very least the multi-method approach demands that the researcher specifies, as precisely as possible, the particular aims of each method, the nature of the data that is expected to result, and how the data relate to theory (Brannen 1992: 16).

Part of this thesis is based on a thorough literature review and the study of various policy documents (see chapters 1,2 and 3). But the findings presented in the next two chapters rely on two basic methods, although a third, following Gitlin (1980), that of past participant observation is also acknowledged in the formation of my research question. The methods used are content analyses of news reports and press releases, supplemented by interviews with sources close to the original information event in the 2004 case. Each will be discussed in turn.

7.1 Content analyses

The BSE 'story' spans nearly two decades. Thousands of stories about it and related topics have been written. In addition, the findings of the Phillips Inquiry along with sheer amount of data held by Parliament and by pressure groups means that the field is dense in terms of availability of data. Content analysis renders the data both manageable and relevant to the stated research problem. McQuail would support this position. For him content analysis can "...provide economically a representative picture of an otherwise unmanageably large universe" (McQuail 1977: 1).

Drawing on my previous experience of content analysis² I reviewed the literature relating to content analysis notably, Berelson (1952), McQuail (1977) and Holsti (1969).

Berelson's definition appears to be widely accepted. He states "Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (Berelson 1952: 18).

For Berelson content analysis provided a research tool with minimal subjective interpretation. He argues: "The analysts subjectivity must be minimised in the effort to obtain an objective description of the communication content" (Berelson 1952: 171).

However it should be noted that it is not possible (or even desirable) to escape subjective interpretation. In order to ensure that my approach is replicable by other researchers if applied to the same or similar coverage or topics, the research has to be systematic. As McQuail argues research must be systematic so "...that different analysts would achieve the same results with the same task" (McQuail 1977: 1).

² *World Out of Focus: Terrestrial Television and Factual Programming*, Third World Environment Project 1998, co-researched and co-authored Samantha Lay and Carolyn Payne

In spite of his concerns regarding the minimising of subjectivity I found Berelson proved to be especially useful in assessing the suitability of content analysis for this project. In terms of what content analysis can do he states: "Content analysis is often done to reveal the purposes, motives, and other characteristics of communicators as they are (presumably) "reflected" in the content..." (Berelson 1952: 18). This approach seems to be entirely consistent with the key research question concerning how stories came to be reported. Berger has contributed to my assessment of whether content analysis is indeed a fitting method to adopt in the search for structures and their mechanisms. He states that: "There is a basic assumption implicit in content analysis, namely, that an investigation of messages and communication will make possible some insight into the people who create the messages and communication" (Berger 1998: 25). Similarly Hansen et al argue that content analysis has wide application in much the same way:

Content analysis is by definition a quantitative method. The purpose of the method is to identify and count the occurrence of specified characteristics or dimensions of texts, and through this, to be able to say something about the messages, images, representations of such texts and their wider social significance (Hansen et al 1998: 95).

It is my contention, however, that content analysis alone could not in this case "say something about the messages...and their wider social significance". Thus I developed the 2004 case study into a detailed analysis of the dissemination process of one event through interviews with key structural agents.

Some researchers provide excellent examples useful to the researcher when planning and organising a content analysis. Hansen et al (1998) break down the process of content analysis into six key stages: 1) definition of research problem, 2) selection of media and sample, 3) defining analytical categories, 4) constructing a coding schedule, 5) piloting the coding schedule and checking reliability, 6) data preparation and analysis (Hansen et al 1998: 98-99).

McQuail (1977) is also particularly useful since his work applies to the content of newspapers. For McQuail categories must be: assumed to be distinct and relevant to the purpose of study; categories must be mutually exclusive and contain discreet or unambiguous subject matter; categories must be equally applicable to all titles so as to make numerical comparisons possible (McQuail 1977: 1).

Ericson et al (1991) provide another useful study. Their study of crime, law and justice reporting included the following categories: number of sources used or represented in each item; types of sources; source contexts and backgrounds; types of knowledge provided by sources (Ericson et al 1991: 204 in Hansen et al 1998: 108-109). These categories have proved extremely useful in formulating my own. Two content analyses have been formulated for this research. These are described below.

7.1.1 Content analysis 1 News reports

The aims of the first content analysis are to answer some basic questions relating to my research problem, that is to say how did the stories on BSE get into the public domain, through what channels, and from whose perspective? Therefore the aims of the content analysis is to provide meaningful data in order to answer some key questions: i) is there broad agreement in the news reports as to what has 'happened' ii) from which sources has this information come iii) from what specific 'information event' iv) which news values are present in the stories?

The nature of the data gathered from this aims to show which source(s) were identified as having generated the information events in each case and which other sources were included in the reports. The data enables me to determine if stories were the consequence of routine dissemination and how transparent the process of dissemination was in each case. It also enables me to determine any differences in interpretation of 'what has happened' in each case across the

sample. Finally, it is devised to help me to explore the core news values shared by all coverage in the samples across each case study.

7.1.2 Content analysis 2 Press releases

This aspect of the research seeks to explore the extent to which news reports relied on the press releases issued by official sources. I analyse the press releases in each case for similar indicators. This will also enable me to determine if journalists used other sources, or whether in most cases reports were based solely on the press releases. I also compare the news values present in both. Do news values differ between the two specific information events - press releases and news reports? Do journalists 'add' news value and if so, which news values do they add and what might explain this?

7.1.3 Coding frames

Drawing on the work of Ericson et al, McQuail, and also the more practical advice given in publications by Hansen et al and Deacon et al, I have developed a coding frame. A coding frame is defined by Deacon et al as comprising of two research instruments. The first is the coding schedule, which contains the categories selected against which the values for each of the variables identified are entered. The second is the coding manual. This contains the codes for each of the variables listed on the coding schedule and is in general terms, a key or legend (Deacon et al 1999: 124). The following section focuses on how I have adapted these instruments for the purposes of my research. I provide my coding schedule of categories and the indicators used in the content analysis. I then provide the coding manual that provides a key to the kinds of data each question is designed to generate.

7.1.4 Coding schedule: categories and indicators

Category formulation is the key to effective content analysis and is an issue I have paid great attention. Berelson states unequivocally: "Content analysis stands or falls by its categories" (Berelson 1952: 147).

Getting the components of a content analysis right can be difficult but it is an important aspect of the overall research design. This requires 'breaking down' the topic into components that can be measured in some way. As Berelson explains: "Quantitative analysis tends to break complex materials down into their components so that they can be reliably measured" (Berelson 1952: 126).

This is one of the primary aims of my category formulation. Before I go on to discuss the indicators I have used in my content analyses it is important here to discuss the categories used in the content analyses.

Source

Here source will provide me with a partial picture of which structures were disseminating to the press on the issue of BSE, the type of source structure, and how successful certain sources were in achieving their communicative goals. This category will help me to understand the kinds of sources used by journalists and for what purposes.

Strategy

This category will help me to analyse the coverage in terms of providing an overview of whom - type of source - was talking to whom -type of journalist. As Berelson notes these types of questions are applicable to content analysis. He argues that content analysis has been used "...to identify the intentions and other characteristics of the communicators..." (Berelson 1952: 101).

Information Event

This category aims to discover where information came from and what, specifically, triggered the story. Examples include a report, a press conference, a debate in the Houses. Furthermore, the comparison between press releases and news reports of perceived information events will enable the research to determine the level of fit between press release accounts of what has happened and those of the news reports.

News Values

News values as a category aims to see how far journalistic mechanisms shape the representation of the event. Furthermore it will be possible to see which values all stories shared, expressed, or fulfilled in order to assess how the information given might have been tailored to appeal to such values.

7.1.5 Indicators

Indicators for each category were developed. The following indicators are used:

'Source' Indicators

Name of source, type of source, sources quoted and number of times, type of source, function of source

'Strategy' Indicators

Scope of coverage, perception of information sources used, correspondents deployed, evidence of dissemination processes ('time' and 'form').

'Information Event' Indicators

Perception of information event, origin of information event, correlation of event between news reports and press releases

'News Values' Indicators

Drawing on the classic typology of Galtung and Ruge (1965), and the

subsequent contributions of Bell (1991), and Harcup and O'Neill (2001), 14 distinct news values are applied to the sampled news reports and press releases. These are: frequency, amplitude, meaningfulness, consonance, continuity, competition, co-option, unexpectedness, negativity, elite persons, elite nations, predictability, prefabrication, reference to persons

7.1.6 Coding Manual: Key to questions and anticipated evidence

In this section I will qualify each of the questions, and give examples of types of evidence that will apply.

Question 1 Word length and page number: to see if there are consistent differences in length of stories between broadsheets and tabloids, between broadsheets, and of course, between tabloids. Length and page numbers are also indicative of prominence and so of the perceived importance of the story³.

Question 2 Primary source: indication of source's power; indicates agenda for and strategy of dissemination. Sometimes the primary source is difficult to determine either because two or more sources and events are put together in some stories, or because language is used which does not pin-point specific sources (for example, "government scientists"). The primary source is the provider of the story but not necessarily the originator of the first formulated account of the event.

Question 3 Primary source quotes: indicates degrees of reliance on the primary source's material and/or views. Also indicates the prominence of source views, opinions and facts. It should be noted that quotes here do not just mean words directly quoted. It also includes paraphrasing, condensed and abridged views, answers to questions directly attributed to the primary source.

Question 4 Other sources supplying information: does not include the mere mention of a source without information in the piece being attributed to them. Indicates how far journalists cast their inquiries beyond the primary source, and types of sources selected.

Question 5: Other sources quoted: direct quotes, condensed, abridged, paraphrased information from other sources (question 4). Counts the number of times they are quoted. Assesses journalistic objectivity through balance.

Question 6: Information event: the stated event in 'objective reality' triggering the dissemination of information in/to the press. For example, the news that a cat had contracted FSE.

Question 7: Evidence of dissemination process: how the information came to be disseminated to the press in terms of time, and form. *Time* includes statements like 'last night', 'today', 'yesterday' but not last week, year or month since the focus of this research is on the event that is topical and not the way it might link to previous distinct but BSE-related events. *Form* includes statements about the way the information was disseminated, that is to say, in what form. For example, a Commons debate, press conference, press statement, speech to National Farmers Union.

Question 8: Details of evidence of dissemination process, as above.

Question 9: Elements of news value

³ It should be noted that in the case of the *Electronic Telegraph*, page numbers are not given

Having outlined the coding frame for both content analyses, a pilot study was carried out on three news reports and one press release concerning the 2000 Phillips Report publication – a peak event in the BSE story so far. The frame and indicators were subject to minor, mainly semantic adjustments as a consequence, before being applied to the sampled data⁴.

7.2 Qualitative Interviews

For this aspect of the research I drew on my experiences of interviewing political Lobby journalists for Barnett and Gaber (2001). The aim of the interviews with key sources and journalists in the 2004 case study (chapter six) is to provide a richness of data that content analysis alone cannot answer.

In addition, from the outset of the research I interviewed key sources⁵ and one journalist to provide context and background. For the 1990 event I corresponded with a key scientific source, Dr Geoffrey Pearson who was responsible for the diagnosis of the cat with FSE in 1990. Unfortunately only two of the journalists who wrote the stories were accessible and MAFF were unable to provide any details about its press release. The former CVO, Keith Meldrum, was not approached for interview. This is because of a rather high profile story in October 1998 in which Keith Meldrum refused to allow a taped interview conducted by researchers from the psychology department of the University of Surrey to be handed to the BSE Inquiry.⁶

For the 1996 event I interviewed Kevin Maguire who was responsible for *The Mirror's* exclusive on 20 March. His source still remains a mystery. Stephen Dorrell and Douglas Hogg were approached through their constituency

⁴ Most notably, the pilot identified problems with the proposed source types, and in analysis of news values. Harcup and O'Neill's human interest value was included but proved too ambiguous to apply. Competition was dropped as a value of press releases as it was too ambiguous to apply.

⁵ Kevin Maguire of the *Daily Mirror* did not attribute his story to any source as the story was based on a 'leak'. Thus I interviewed him about the source.

⁶ "Former Chief Vet Holds Back BSE Tape", 19 October 1998, BBC News http://news.bbc.co.uk/1/hi/health/background_briefings/bse/196293.stm (accessed 20 January 2001)

secretaries but both declined to be involved in the research. The fact that the research was unable to delve deeper into the events of May 1990 and March 1996 does not represent a weakness as such but rather acknowledges a frustrated desire for the kind of knowledge it would have produced.

Professor Richard Lacey was interviewed in his capacity as a scientific source with knowledge across the whole of the BSE story to date. He was also represented in the press as a dissenting scientist and his views on his role as he perceived it proved to be interesting. A full schedule of interviews can be found in appendix 6.

The quantitative elements, as Bryman states, are good at providing an overall picture of an observable phenomenon, and they are useful in showing the more 'structural' elements (Bryman 1992: 60). However, what is noticeable about the coverage on BSE is the lack of information about the process by which information came to light. In addition, the interviews provide a context which in turn helps to underline what was at stake in each case. This aspect is not 'knowable' from either of the more quantitative methods I employ. As Hammersley notes "...qualitative research identifies cultural patterns" (Hammersley 1992: 49).

In terms of linking the work with my theoretical concerns, a readjustment of primary definition is anticipated since primary definition has difficulty squaring itself with the notion of negotiation, conflict and contestation over definitions. By interviewing the originator of the event it is possible to discern in greater detail, the different information events constructed from his research findings. It is hoped that this part of the research will play a major role in the analysis of the structures and generative mechanisms responsible for the construction of information events. Mason describes qualitative interviewing as referring to "...in-depth, semi-structured or loosely structured forms of interviewing" (Mason 1996: 38).

Mason draws on Burgess who sees qualitative interviews as “conversations with a purpose” (Burgess 1984: 102 in Mason 1996: 38). She argues that they are characterised by an informal style, topic-centred areas or a narrative approach as opposed to rigid sets of questions, and that data are generated, in part, out of the interaction between researcher and interviewee(s) (Mason: 1996: 38-39). Clearly people and their inter-relations constitute the structures for analysis in this thesis. Equally, it is not possible to understand how the mechanisms worked as a consequence without speaking to key participants involved. Far from being an ‘easy option’ qualitative interviews are extraordinarily challenging.

The interviews aim to explore the processes whereby specific scientific information came to be reported. In preparing the interviews I drew on Mason’s ‘four S’s’: concerns of *substance*, *style*, *scope* and *sequence* (Mason 1996: 43). Substance and style refer to what questions to ask and how to ask them. ‘Scope’ is also a key issue. The scope of interviews was largely determined by two factors: what I needed to know, and what I did not know I needed to know. Thus my topic areas had to be broad enough to allow for unexpected information and yet focused enough to answer the questions that required an answer. Similarly, it also takes practice, discipline and diplomatic skills to rein in interviewees when they arrive at a pet topic not necessarily relevant to the research problem.

Finally, the sequence or order in which I asked questions or raised topics for discussion was an important consideration - not least of all to make the interviewee feel confident that the interview was coherent. Far from being an ‘easy option’ qualitative interviews are extraordinarily challenging. As Mason notes, they require you to do so much at the same time (listening, noting body language, staying with the subject and so on). They also require you to perform at least two different tasks at once:

...the social task is to orchestrate an interaction which moves easily and painlessly between topics and questions. The intellectual task is to try to assess, on the spot, the relevance of each part of the interaction to your research questions, or to what you really want to know (Mason: 1996: 45).

But as if listening, analysing, interpreting and orchestrating a pleasant and productive interaction were not enough there are ethical dimensions to the interviews conducted for this research. The journalists interviewed for the 2004 case study are still working in the fields of science and health reporting and still need to maintain good relations with the sources used in their stories. It was agreed with respondents that I would identify them by publication and broad correspondent type. Thus the case study offers generic types of journalist identified as either tabloid or broadsheet correspondents.

A wider ethical concern involved was the concern that my interviewees would feel they had been treated fairly and this was an interview conducted purely for the purposes of my thesis. I have, as consequence, offered all interviewees a copy of transcripts should they wish them, and to see a copy of the finished product where their names and contributions are mentioned⁷.

To conclude here, the choice of qualitative interviewing as a method for this part of my thesis, has been guided by the critical methodological pluralism discussed in this chapter. It is also appropriate to the realist ontological approach advocated in this thesis. As Mason states: "It is considered by many to be an appropriate and practicable way to get at some of what qualitative researchers see as the central ontological components of social reality" (Mason 1996: 59).

⁷ Note that the journalists interviewed for the 2004 case study, although identified by broad, generic terms only, have been offered transcripts & relevant completed chapters for information.

Conclusion

In this chapter I have sought to establish the specific methodology applied in this project. I have detailed 'what can be done' with a critical case like BSE. I have demonstrated why this approach suits the research question and the types of data my methods were designed to generate. I have outlined my project design and sample, I have detailed the methods of data collection deployed, following a multi-method approach.

I have sought to emphasise the realist underpinnings of this research. Not all aspects of the news featured in my reports were constructed, there was a starting point that occurred in reality. In each case a physical reality occurred whether anyone knew about it or not.

However it is acknowledged that what social agents do to bridge the gap between independent realities and their social worlds involves construction. Thus all that might be 'visible' in the dissemination process are social constructs. Therefore, epistemologically, I take a weak constructionist view to understanding these constructions.

The following chapter presents the findings of the content analyses of press reports and press releases.

Chapter 5 Findings of Content Analyses of Information Events: press releases and news reports

As discussed in chapter two the 'media-centricism' of many studies in the sociology of journalism has been much commented upon. In defence of such studies it is accepted that the general difficulty of access to data and to individuals beyond the transformational stages of attraction and dissemination tends to mean scholars are forced to focus their inquiries on these stages where information is more readily available. In the case of this research I am focussing on press releases and news reports in this chapter to provide knowledge about these two information events. However, in the following chapter, I present my attempt to 'go back to the beginning' of a story, including interviews with sources used and journalists who wrote the stories.

If one accepts that news stories are an end product in a chain of information events and that they do not 'obtrude' themselves, it is necessary to try and trace the path of their obtrusion and to try to isolate the structures responsible for bringing events to public attention. The comparison of news reports and press releases is key. Through such comparative analysis it is possible to understand the way events become transformed between the stages of *attraction* and *dissemination*.

The chapter is divided into two parts. Part 1 presents the findings of the content analysis of news reports. The findings in this section seek to explore a number of issues relating to how events were transformed into news across the three events studied. I look for evidence of routine dissemination across the three events and attempt to identify the sources of this dissemination in the three events studied. I explore the deployment of correspondents and patterns of source use in order to assess the degree of correlation between correspondent and source types. This is in order to isolate strategic activities of sources, publications and journalists and to understand how some stories are defined as 'political stories' while others are defined as 'science stories'. I investigate the degree of consensus *on what has happened* – perceived events

- across the newspaper reports. Were all newspapers' agreed on what had happened in each event? What might explain any differences and similarities? I then focus attention on trying to determine if direct evidence of how stories came to be reported can be found in news reports by examining them for indicators of *time* and *form*. Finally I isolate the specific news values evident in the reports to understand what made them newsworthy.

Part 2 presents the findings of the content analysis of press releases. Press releases are information events constructed at the stage of attraction. It is argued that all three events were the subject of organised attraction events by sources. Can some of the findings presented in part two be understood more clearly in the light of a comparative analysis of press releases and news reports? Who were the issuers of press releases and who what types of journalists wrote stories that related to them? How often were their representatives cited in news reports? What events have 'happened' according to the press releases and what degree of fit do they share with the perceptions of events in news reports? Is primary definition a useful concept here? Do writers of press releases use *time* and *form* indicators in different ways to journalists working for newspapers and what might account for these differences?

Finally in this section, I compare and contrast the news values contained in the press releases with those of the news reports. Is there broad agreement between the press releases and news reports in each case on the newsworthiness of events? Are values added in the transformation from press release to news report and if they are, which values have been added and what might explain this?

Part 1 Content Analysis: Newspaper Reports

In this part of the chapter I present the findings of the content analysis of news reports. The findings explore a range of issues and questions relating to the transformation of events from IE3 and IE5 – press releases and news reports. The research presented here has five distinct objectives: the first is to explore the evidence of routine dissemination across the three events and attempt to identify the sources of this dissemination in the three events studied. My second objective is to explore the deployment of correspondents and patterns of source use in order to assess the degree of correlation between correspondent and source types and to isolate strategic activities of sources, publications and journalists. In addition I also investigate the ways stories are defined as ‘political stories’ while others are defined as ‘science stories’. The third objective of this section is to investigate the degree of consensus *on what has happened* – perceived events - across the newspaper reports. Were all newspapers’ agreed on what had happened in each event? What might explain any differences and similarities? My fourth objective is to determine if direct evidence of how stories came to be reported can be found in news reports by examining them for indicators of *time* and *form*. Finally, the fifth objective of this section is to isolate the specific news values evident in the reports in order to understand what made them newsworthy.

1.1 What has been reported: levels of coverage

As explained above, it is important to begin the analysis by looking at what has been reported in relation to the three case studies. In order to do this the level of coverage of each story across the newspapers needs to be explored. Table 1 indicates first and foremost that these stories were considered to be important enough to publish in the newspapers sampled. In addition, there is a strongly competitive and yet collective drive in newspaper journalism. Providing a scoop is preferred, but it is important too not to miss out on what your peers consider to be an important story. But how do one’s peers get to hear about stories *all at the same time*?

Table 1 Coverage and word counts 1990, 1996, 2004

Title	11 May 1990	20 Mar 1996	21 Mar 1996	21 May 2004
Guardian	479	121	3063	455
Telegraph	799	0	5018	1,339
Times	665	374	4923	604
Mirror	244	1,094	3,306	166
Sun	136	0	2,090	167

The general uniformity of coverage across the sample indicates that some form of routine dissemination by sources might be a contributing factor in terms of explaining coverage patterns in 1990, 21 March 1996 and 2004. However, the lack of uniformity on the 20 March 1996 does not suggest that routine dissemination was taking place. Here it should be noted that the event of March 1996 was represented over two days but it is *the same event* – only the sources and their strategies are different. As a consequence of this I have included 20 March 1996 in the analysis. *The Mirror's* scoop succeeded in bypassing the strategies of official sources in this instance.

On the eve of the official announcement of a link between BSE and vCJD, *The Mirror's* political editor received information from a source who told him about the link and that an announcement was going to be made in the Commons the following afternoon. Two other newspapers – *The Guardian* and *The Times* – featured small stories about the imminent announcement.

As table 1 (above) shows, of the three events a peak in coverage was achieved in 1996 with the announcement of a link between BSE and vCJD. The word counts for each publication's story increase dramatically. It is also observed that one tabloid on this day competes with those of its 'quality' cousins. Characteristically, tabloids tend to use fewer words in their stories, but *The Mirror* bucks this trend in its 1996 coverage. This can be attributed to two factors: 1) it was *The Mirror* that 'broke' the story with its 'World Exclusive' on 20

March 1996. As table 1 shows, in its 20 March story *The Mirror* far exceeded the word counts and articles numbers of other newspapers 2) *The Mirror* took an oppositional stance to the Conservative government of the day and had long been covering the BSE story from that stance.

Not all newspapers carried a story on 20 March 1996. Neither *The Daily Telegraph* nor *The Sun* carried stories on that day. It might be suggested that as Conservative supporting publications, this could be explained perhaps by the effects of partisanship on editorial decisions, rather than by poor journalism. Silence is a strategy in and of itself.

The analysis has so far established that all three stories were disseminated across the sample. It has also uncovered differences as well as similarities in coverage and word counts between titles. It is suggested that already it is possible to discern strategic elements to the coverage of the three events. This assertion is evident in the general uniformity in coverage in 1990 and 2004 which suggests routine dissemination channels might have been used to disseminate information to journalists. Routine dissemination involves attracting selected journalists to information events constructed at the stage of attraction and is a widely used form of communications strategy. The two stories in 1996 reveal other strategic activities. *The Sun* and *The Telegraph* both deployed a strategy of silence on 20 March 1996, whereas *The Mirror* used enterprise journalism to break their exclusive on that day. On 21 March 1996 word counts increased suggesting all newspapers had made strategic decisions to cover BSE extensively.

1.2 Deployment of correspondents

The deployment of correspondents involves strategic decisions by publications. These decisions will be based upon operational factors – who is available to cover a story – as well as hierarchical factors – *should an editor or correspondent* cover a major political story, for example. Correspondent types are important indicators of how stories were defined and interpreted by publications in the newsroom.

Table 2 shows that in 1990 the types of correspondents deployed were quite diffuse. This could indicate that the story was not yet fully defined in the newsroom just as it was not yet fully defined by official sources. It should be noted that the majority of unspecified journalist types were found in tabloids. Not naming and/or specifying a reporter type appears to be a tabloid convention.

Table 2 Deployment of correspondents 1990, 1996, 2004

Type	1990	1996a	1996b	2004
Political	-	4	13	-
Science	1	1	4	3
Health	-	-	4	3
Agriculture	2	1	3	-
Other/Unspec	5	2	25	1

The 1996 event is clearly a matter for political journalists, although as the table shows many 'unspecified' journalists were used. This could be explained by the size and importance of the story, and with the need for newspapers to offer their readers a wide range of perspectives to distinguish their product from others and satisfy their specific reader expectations. The wide range of correspondents deployed also recognises that the link between BSE and vCJD had far-reaching implications beyond politics, science and health. Indeed, 'other' correspondents at this point included education, industry, and Scotland correspondents - though these types of correspondent appeared in the sample once in the case of education and Scotland, and twice in the case of industry correspondents. For newspapers in 1996, in spite of the link between BSE and vCJD being made by scientists at the CJD Surveillance Unit in Edinburgh this event is defined by and large as political.

In the 2004 event political journalists have receded into the background and it could be argued that news-desks see vCJD as firmly in the terrain of science and health correspondents. The only non-health and science correspondent

used was the Ireland correspondent deployed in *The Telegraph's* co-opted story about an Irish victim of vCJD.

1.3 Correspondents and sources

At this point I provide an overview of the findings presented in this section before going into more detail for each event analysed. A broad view of trends in source use by correspondent type across the events is presented.

Table 3 (below) shows the sources most used by the different types of correspondent featured in the research across the entire sample. As can be seen science and health correspondents relied mostly on official scientific advisory sources as both primary and secondary sources. The science correspondents differed from the health correspondents in that they used unauthorised scientific sources on official scientific advisory source types as secondary sources.

Table 3 Correspondents and Sources: primary and secondary sources most used by type 1990, 1996, 2004

Correspondent Area	Primary Sources	Secondary Sources
Science	Official adv	Official adv / Unauth sci
Health	Official adv	Official adv
Political	Official adv	Official gov
Agriculture	Official adm	Official adv
Other	Public	Official adv / Unauth sci

This difference in source use between science and health correspondents can be partially explained by the fact they are relative newcomers to BSE. The BSE story has at various points involved coverage of the views of unauthorised scientific experts like Professor Lacey and Dr Dealler. Science correspondents

who had long been covering the BSE story would have greater knowledge of and access to such sources. As a more recently established beat health journalism has yet to develop the longitudinal relationship with BSE and its sources that science reporters have established over the decades.

The most used primary sources by political journalists were official advisory sources. These journalists used official government sources as secondary sources most often. This is unsurprising given the political way in which dissemination of science information from SEAC, the CMO and the CJD Surveillance Unit was managed in 1996 (see chapter one, part 2 The Link). Perhaps this finding also suggests that government hid behind science since political reporters are mostly in the business of routinely talking to political figures and their advisors (for example, see Cockerell et al (1984) and Barnett and Gaber (2001)¹). It should also be noted however, that a number of reports written in 1996 were composite pieces written by science and political correspondents and this perhaps overemphasises their use of scientific advisory types.

Agriculture correspondents used official administrative sources as their primary sources and official advisory sources were their most used secondary sources, although the blurring of official source types previously noted makes analysis difficult.

The data presented in table 4 below shows the most quoted sources across the three events. In 1990 official administrative sources clearly dominated as primary sources of information. It is noted that the quotes from primary sources balances with those of the most used secondary sources. However, as official opposition sources are considered to be official sources by virtue of their access to information and power holders, this balance is questionable. On 20 March 1996 the lack of primary source data is suggestive of the convention of non-attribution for the protection of sources (the protection of *the source-journalist relationship*, actually). This is in sharp contrast to the source use

patterns the following day. On 21 March the steep increase in the use of sources is noted. The content analysis found that the most used primary sources were official advisory sources.

Table 4 Most quoted sources and number of quotes: 1990, 1996, 2004

Date	Most used primary sources	No of times quoted	Most used secondary sources	No of times quoted
1990	Off adm	11	Off op Interest	4 7
1996 20/03	Publication Off admn Unauth sci	1 - -	Off gov	1
1996 21/03	Off adv Off gov	46 27	Unauth sci Off gov	23 44
2004	Off adv	5	Off adv	21

Once again, though, the content analysis finds that not only did official sources dominate as primary sources, they also dominated as secondary sources too: the two source types who were most quoted as primary sources in news reports were official advisory types and official government types. Their dominance as primary sources in this event is reinforced by the use of official government type sources as the most used secondary sources. It is noted that official government type sources here account for nearly double those of the second most quoted source: unauthorised science.

In 2004 there is no room for ambiguity: official advisory sources dominate, although it is suggested that finding will need particular scrutiny through the

¹ It should be noted that this view has been challenged. For example see Kuhn (2000).

qualitative research presented in chapter six. Having provided an overview of the findings on correspondents and patterns of source use, I now go into more detail by exploring each event.

May 1990

In 1990 the majority of newspapers assigned the task of writing stories to correspondents. Table 5 (below) details the correspondent type for each newspaper report and the primary and secondary sources they referred to in their reports. Only *The Telegraph* draws on the expertise of the science editor. As the table shows, in spite of quite diffuse correspondent types all news reports featured official administrative types as the primary sources of their stories.

Table 5 Correspondents and sources May 1990

Title/no of articles	Corrspt. type	Corrspt. area	Primary sources	Secondary sources
Guardian 1	Corrspt.	Consumer affairs	Off adm	Interest
Telegraph 3	Desk editor	Science	Off adm	Off op Interest Off adv Unauth sci
	Corrspt.	Agriculture	-	-
	Corrspt.	Home	-	-
Times 1	Corrspt.	Agriculture	Off adm	Interest Commercial Opposition
Mirror 2	Reporter	Unknown	Off adm	Opposition
	Reporter	Unknown	-	Commercial Public
Sun 1	Reporter	Unknown	Off adm	Unauth sci

At that time the problem was less well defined and not perceived as serious, largely because it affected domestic cats and not human beings. Official administrative (civil service) sources were used to disseminate the information. In 1990 MAFF and Keith Meldrum, the CVO were very closely associated. In newspaper reports the line between Meldrum as an official scientific source (government scientist) and as an official administrative source (civil service) is distinctly blurred. In the 1990 event, the CVO and his scientists are allied to official administrative sources. This is evident in the new reports. For example, *The Daily Telegraph* states: "The Ministry of Agriculture is to make more inquiries...into their four other cats and four dogs, all of which are well" (*Electronic Telegraph* 11 May 1990).

And both tabloid newspapers sampled present the primary source in similar ways. *The Sun* describes the source as "Ministry of Agriculture vets" (*The Sun* 11 May 1990: 1), whilst *The Mirror* states: "Agriculture Ministry experts are carrying out further tests" (*The Mirror* 11 May 1990: 1).

As discussed in chapter two, objectivity through balance is a key professional strategy for journalists. Were sources used in a balanced way? Was this evident in 1990? Table 6 (below) illustrates how primary and secondary sources were used in 1990. The most cited primary sources were official administrative types. Official administrative sources account for just under a third of all quotes. The two most cited secondary sources were Opposition sources and Interest groups. When added together the number of quotes from these secondary sources equals the official administrative quotes carried by the papers sampled. This could be seen as evidence of objectivity through balance.

Table 6 Sources Used – 11 May 1990

Title	Primary source used -type	No. quotes	Secondary sources-type	No. quotes
Guardian	Off adm (CVO)	2	Interest	2
Telegraph	Off adm	3	Off op	1
			Interest	1
			Off adv	2
			Unauth sci	3
Times	Off adm	3	Interest	4
			Commercial	1
			Off op	2
Mirror	Off adm	1	Off op	1
			Commercial	1
Sun	Off adm	2	Unauth sci	1

But it is important to note that the primary sources disseminating information – MAFF and the CVO - were working together to present their views of events. It could therefore be argued that the balancing effect was undermined by the fact that the secondary sources used have no formal, strategically unified approach.

20 March 1996

The coverage of the 20 March 1996, presented in table 7 below, was interesting in terms of the types of reporters used. Two of the three newspapers that carried the story utilised the expertise of political editors. These strategic decisions on the part of publications signal the importance of the story. It can also be seen from the table that the story was in news reports as a political issue because half of those writing stories on this day are political journalists.

How far can source strategies account for this ‘fit’ between source use and the deployment of correspondents? In this case there were no complex source strategies in ‘leaking’ the story to *the Daily Mirror*. The source clearly had a strategy, however. The technique used was that of selecting one journalist from an oppositional paper to whom he or she could leak the story. And their motivation was “mischief making”².

Table 7 Correspondents and sources 20 March 1996

Title/no of articles	Corrspt. type	Corrspt. area	Primary sources	Secondary sources
Guardian 1	Desk editor	Political	Publication	Off gov Off adm
Telegraph 0	No story	No story	No story	No story
Times 1	Corrspt., Corrspt.	Agriculture Political	Unspecified	Off gov
Mirror 4	M1 Desk editor, corrsnt.	Political, unspecified	Unspecified	Off gov
	M2 Desk editor	Political	-	Off gov Off op Off adv
	M3 Unknown	Unspecified	-	Off gov Public
	M4 Expert	Science	Unauth sci	-
Sun 0	No story	No story	No story	No story

What is notable about the pattern of source use in the coverage from 20 March 1996 is the lack of concrete primary sources for the story. Thus the answer to the question: can we determine where information came from? is a resounding ‘no’. Another journalistic convention was deployed here – protecting one’s sources. The withholding of names or identifying characteristics of the key

² From an interview with author

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Guardian 1	Desk editor	Political	Publication	Off gov Off adm
Telegraph 0	No story	No story	No story	No story
Times 1	Corrspt., Corrspt.	Agriculture Political	Unspecified	Off gov
Mirror 4	M1 Desk editor, corrsnt.	Political, unspecified	Unspecified	Off gov
	M2 Desk editor	Political	-	Off gov Off op Off adv
	M3 Unknown	Unspecified	-	Off gov Public
	M4 Expert	Science	Unauth sci	-
Sun 0	No story	No story	No story	No story

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² From an interview with author

carried more than one story. In addition all newspapers on the 21 March 1996 utilised the expertise of desk editors. Table 9 also shows that the coverage was also characterised by many composite pieces with more than one author, often from different 'beats'.

Table 9 Correspondents and sources 21 March 1996

Title/no of articles	Corrspt. type	Corrspt. area	Primary sources	Secondary sources	Title/no of articles	Corrspt. type	Corrspt. area	Primary sources	Secondary sources
Guardian 7	G1corrspts	Agriculture, Education, Health	Off gov	Off adv Unauth sci	Mirror 13	M5 unspec.	unspec.	-	-
	G2 desk editor	Science	Off adv	Unauth sci, Off adm		M6 Desk ed, corrspt.	Political Political	Off adv	Unauth sci Off gov Off op Off adm Publication Offi adm Public
	G3 corrspt.	Health Industry	Interest Interest	Commercial, Commercial, Int. gov		M7 reporter	unspec.	-	-
	G5 freelance	Scotland	Commercial	Commercial		M8 unspec.	unspec.	Unauth sci	-
	G6 unspec.	Unspec.	Off gov	-		M9 corrspt.	Political	Publication	Off adv Publication
	G7corrspts	Industry	Public	Unauth sci		M10 corrspt	unspec.	-	Off adv Off gov
	X2	Political							
Telegraph 9	T1 desk eds x2, corrspt.	Science Political Home	Off gov, Off adv	Off op, unauth sci	M11 unspec.	unspec.	-	-	
	T2 unspec.	Unspec.	Off gov Off adv	Off adm Off adv	M12 unspec.	nsec.	-	-	
	T3 corrspt.	Agriculture	Off gov Off adm	-	M13corrspt	Health	Publication	Off gov Off adv	
	T4 desk ed	Political	Off op	Off gov Off op	M14corrspt	unspec.	Public	-	
	T5 unspec.	Unspec.	Public	Off gov Off adv Public	M15 unspec.	unspec.	Commercial	-	
	T6 corrspt.	unspec.	Interest	Interest unauth sci	M16corrspt	unspec.	Public	Off adv	
	T7 unspec.	unspec.	Off adv	Off adm	M17corrspt	Political	Public	Off gov Commercial Unauth sci	
	T8 corrspt.	unspec.	Public	-					
	T9 desk ed	Science	Off adv	-	Sun 5	S1dep desk ed corrspt	Political unspec.	Off gov	Off gov Off adv Off op
Times 6	T2 corrspts x2	Political	Off op	Off gov Off op	S2 dep desk ed corrspt	Political unspec.	Off adv	Off adm Unauth sci Commercial	
	T3 expert	Medical	Unauth sci	Off gov	S3 minister	Agriculture	Off gov	Off adv	
	T4 unspec.	unspec.	Commercial	Commercial	S4 unspec.	unspec.	Off adv	Off adv	
	T5 corrspts x2	Political Health	Off adv Off adv	Offi gov Off opp Unauth sci	S5 corrspt	Political	Public	Commercial Unauth sci Publication	
	T6 desk ed	Science	Off gov	Off gov Commercial					
	T7 corrspt.	Political	Off adv	Interest Public Unauth sci					

The deployment of a wide range of correspondents and their use of wide and varied sources does not detract from the fact that according to table 10 (below) official sources still comprise the most used primary and secondary sources in the coverage of this event. Balance has been attempted by seeking a range of non-official sources but this has to be seen in context.

Table 10 Sources Used 21 March 1996

Title	Primary source used	No. quotes	Secondary sources	No quotes	Title	Primary source used	No. quotes	Secondary sources	No quotes	
Guardian	G1 Off gov	7	Official adv	2	Mirror	M5 -	-	-	-	
	G2 Off adv	2	Unauth sci	1		M6 Off adv	4	Unauth sci	2	
	G3 Interest	8	Commerc.	3			Off gov	2		
	G4 Interest	4	Commerc.	1			Off op	1		
			Int gov	6			Off adv	1		
	G5 Commerc	5	Commerc.	1			Publ'n	-		
	G6 Off gov	2	-	1			Off adm	-		
G7 Public	1	Unauth sci	2			M7 -	-			
Telegraph	Tel1 Off gov	4	Off op	1			M8 Unath sc	2		
	Off adv	3	Unauth sc	2			M9 Publ'n	2	Off gov	4
	Tel2 Off gov	5	Off adm	-				Publication	1	
	Off adv	3	Off adv	-			M10 -	-	Off adv	2
	Tel3 Off gov	-	-	-				Off gov	-	
	Off adm	-	-	-			M11 -	-	-	
	Tel4 Off op	6	Off gov	3			M12 -	-	-	
			Off op	1			M13 Publ'n	-	Off gov	9
	Tel5 Public	10	Off gov	4				Off adv	2	
			Off adv	3		M14 Public	5	-		
	Tel6 Interest	3	Interest	5			-	-		
		Unauth sci	2		M15 Commer	9	-			
Tel7 Off adv	-	Off adm	-		M16 Public	5	Off adv	1		
Tel8 Public	5	-	-		M17 Public	1	Off gov	1		
Tel9 Off adv	16	-	-				Off gov	6		
							Unauth sci	1		
Times	T2 Off op	5	Off gov	6	Sun	S1 Off gov	3	Off gov	2	
			Off op	1			Off adv	3		
	T3 unath sc	-	Off gov	1			Off op	2		
	T4 Commerc	10	Commerc	1			S2 Off adv	5	Off adm	1
	T5 Off adv	9	Off gov	6				Unauth sci	4	
			Off op	4				Commerc	5	
			Unauth sci	2			S3 Off gov	-	Off adv	2
	T6 Off adv	1	Off gov	1			S4 -	-	Off adv	2
			Commerc	1				Commerc	2	
	T7 Off gov	6	Interest	1				Unauth sci	1	
Off adv	3	Public	-		S5 Public	6	Unauth sci	3		
		Unauth sci	1				Publ'n	1		

The most used primary sources were official government and official advisory sources. In total 72 quotes from these sources were counted across this sample (see tables 11 and 12 following). Official government sources were also the most used and quoted secondary source with nearly double the

quotes of the second most used source type – unauthorised science. In 1996 official source types were more easily distinguished from one another than in 1990. In particular the CMO – the equivalent to the CVO in human health terms – is presented as an official advisory type, as is the chair of SEAC.

The data generated from the 'link' event is so rich and complex, that in order to fully understand the trends in reporting that day, the findings need distilling for clarity. In addition, I think presenting the data in this way helps to underline a key aspect of the findings in general. Table 11 shows the number of source quotes – combining primary and secondary source data – for each type of source identified in the news reports.

Table 11 Source types and number of times quoted 21 March 1996

Source type	Number of times quoted
Official Government	77
Official Advisory	66
Official Administration	1
Official Opposition	21
Interest/Pressure groups	22
Commercial interests	42
Public	33
Unauthorised Scientific	25
International Government	1
Publication	4

As table 11 shows, official sources provided 165 of the 291 quotes found in news reports on 21 March 1996. Non-official sources were represented in the sample and most had similar numbers of quotes cited in news reports. In spite of this increased differentiation the messages official sources were conveying were consistent and formed part of a unified communications strategy fielded

by Ministries – who are all but silent in news reports, as table 11 shows. Official Opposition sources were counted as an official source here. This emphasises how this was a politically controlled event, played out and managed in the confines of politics – but with the world watching. Even without the number of official Opposition quotes, official sources still account for 144 of the 291 quotes.

The non-official sources cited and their views were uncoordinated and formed no consistent communications strategy. Turning ‘balance’ into a numbers game fails to take into account that a range of official sources can disseminate views that, when combined, provide a strong and consistent message. This gives official sources quite considerable definitional power. If the same official sources were represented as independent (for example SEAC or the CMO) at the time, this unified reinforcement seems quite pernicious.

Were the strategic goals of official sources evident in the midst of the crisis? As primary sources they were successful in gaining access. But did they get their messages across? The use of official sources in this event suggests that if they did not manage to achieve this they certainly managed to have their voices extensively heard – quite literally in some cases³. The evidence also suggests that newspapers also had their own strategic goals as they deployed a range of correspondents to gather stories. As a consequence they facilitated access to the press which allowed a wider range of secondary sources to enter the public debate.

May 2004

The May 2004 story continued the separation of official government sources and scientific sources as observed above. As table 12 shows the BSE/vCJD story was now defined as a science and health story. The journalists deployed were almost all science and health journalists. All three of the broadsheet correspondents had a long history of writing about BSE (see chapter six). *The*

³ Douglas Hogg wrote a piece for *The Sun* 21 March 1996 page 6

Telegraph and *The Times* both used this expertise by deploying science editors. The tabloids used health correspondents to write their stories.

Table 12 Correspondents and Sources 21 May 2004

Title		Corrspt. type	Corrspt. area	Primary sources	Secondary sources
Guardian	1	corrspt.	Health	Off adv	Off adv Publication
Telegraph	3	T2 desk ed	Science	Off adv	Off adv Off adm Publication
		T3 corrspt.	Ireland	Public	-
		T4 desk ed	Science	-	Unauth sci Off adv
Times	1	desk ed	Science	Off adv	Off adv Publication
Mirror	1	reporter	Health	Off adv	Off adv
Sun	1	reporter	Health	Off adv	Off adm

The use of quotes from secondary sources also reflects the dependency of journalists on official sources. Of the 11 secondary sources used across the sampled reports, seven were official sources – largely official scientific advisory sources. As can be seen in table 13 below, the patterns of quote usage were highly unusual in that the primary source was quoted less than one particular secondary official advisory source – Professor John Collinge. Content analysis alone can only highlight this as an issue and will be subject to further exploration in the next chapter. Only *The Telegraph's* piece - a report connected to vCJD but not about the Hilton study – featured quotes from non-official sources in its co-opted report on current treatment of a vCJD victim in Ireland.

Table 13 Sources Used – 2004 Sources used by sample in news reports

Title	Primary source used	No. quotes	Secondary sources	No quotes
Guardian	Off adm (HPA)	-	Offadv (Hilton), Publ'n (Journal)	1 -
Tel 2	Off adv (Hilton)	2	Off adv (Collinge) Off adv (Ghani) Off adm (DoH) HPA (Pat Troop)	7 2 1 1
Tel 3	Public (vCJD victims and families)	3	-	-
Tel 4	-	-	Off adv (Collinge) Off adv (Hilton) Unauth sci (Anderson) Unauth sci (Smith)	- - - -
Times	Off adv (Hilton)	1	Off adv (Collinge) Off adv (Ironside) Publ'n (Journal)	4 3 -
Mirror	Off adv (Hilton)	1	Off adv (Collinge)	2
Sun	Off adv (Hilton)	1	Off adv (Collinge) Off adm (spokesman)	3 1

Having explored what and who were reported as well as who has done the reporting across the three events, the following section explores the level of agreement between newspapers as regards 'what had happened' – the perceived event. Do all newspapers agree as to what has occurred in each case? What might account for any differences and similarities?

1.4 The perception of events: what has happened?

In routine dissemination the source chooses the timing, the form, and the publications to which the information is to be disseminated. This is also true in the case of certain 'leaks' since sources decide to 'leak' information - unless it is done accidentally. The choices taken at the stage of *attraction* help to shape the nature of the information event at the final transformational stage - *dissemination*.

It has been argued by Hall et al (1978) that primary sources have the capacity to define what a topic is about or what an event means. It has already been observed that official sources are largely dominant in terms of their access to the press. But do journalists and their publications accept their definitions? In this section I examine the level of agreement as to what has happened as presented in newspaper reports. Is it clear what has happened? Different newspapers might cover the same story, use the same sources, but will they see the story as being about something entirely different to other publications?

This section aims to explore this by looking at 'perceived events' - what stories say they are about across the three events studied. Headlines are not considered to be an accurate reflection of story angle as these are not written by the journalist. It has also been observed in this research that headlines can differ significantly from what a report is actually about. This in turn can be entirely different to the event that triggered a story. Did all publications in the sample present the same story in the same way? Was there a consensus about what stories were about? Tables 14 to 17 show the perceived event per publication across the three events analysed. Analysis of this data demonstrates the different angles on the same events across publications. What might account for these differences?

Beginning in 1990, as table 14 shows, there were both differences and similarities in defining the information event. All papers agreed on the story with the exception of *The Telegraph*, which describes the news of FSE in a cat as "naturally occurring".

Table 14 Perceived Information Events 11 May 1990

Publication	Perceived information event per article
<i>Guardian</i>	BVS diagnosis confirmed by MAFF of cat with FSE
<i>Telegraph</i>	Diagnosis of 1st cat with “naturally occurring” SE
<i>Times</i>	FSE diagnosed 1st time in cats
<i>Mirror</i>	1st case of “mad moggy disease”
<i>Sun</i>	Death of 1st cat from SE

As table 15 (below) shows, on the 20 March 1996 not all the papers carried the story of the anticipated announcement of a link between BSE and a new form of CJD. *The Mirror* is key here. So authoritative was its piece that Professor John Pattison claimed in a BBC documentary series that he used its report “as an aide memoir” that day⁴. As already discussed, *The Mirror’s* “world exclusive” informed at least one other newspaper that day.

The Guardian’s report focussed on *The Mirror’s* exclusive. *The Times*, however, in spite of carrying the story, did not cite *The Mirror* as its source – perhaps its story came from elsewhere? As already noted, *The Telegraph* and *The Sun* did not feature the story at all.

Table 15 Perceived Information Events 20 March 1996

Publication	Perceived information event per article
Guardian	Daily Mirror's revelations about the likely statements from Dorrell
Telegraph	No article
Times	Anticipated 'link announcement'
Mirror	<ul style="list-style-type: none"> • Imminent government announcement • Imminent government announcement • Evidence of the connection between Bse and vCJD • Imminent announcement proves independent scientists were right
Sun	No article

The day after the announcement however all newspapers I sampled carried the story as headline news. In terms of the news reports' perceived events, as table 16 shows most stories were written about or in the light of the statements made by Stephen Dorrell and Douglas Hogg in the Commons about the possible link between BSE and a new form of CJD.

On 21 March 1996 19 out of 41 news reports were of this type - some 46 per cent. The remaining articles were perceived to be about the science of BSE (14 per cent) and health issues arising (14 per cent), key public figures in the BSE story (12 per cent), the victims and potential victims (9 per cent) and beef industry issues (5 per cent). In spite of the significant degree of co-option noted in the coverage of this event single most important event concerned the political statements made by Dorrell and Hogg.

⁴ Professor John Pattison interviewed in *'Mad Cows and Englishmen, part three, 'The Storm*

Table 16 Perceived Information Event 21 March 1996

Publication	Perceived Information Event per article	Publication	Perceived Information Event per article
Guardian	<ul style="list-style-type: none"> • Commons statements • Indirectly - Commons statements • Aftermath of statements • Aftermath of statements • Dorrell on Radio 5 • Previous statements about the safety of beef – indirectly a consequence of statements • Victims in the light of statements 	Mirror	<ul style="list-style-type: none"> • BSE may kill you • Announcement of the link between BSE and vCJD • The ten victims are named • Prediction of victim numbers • Door-stepping Gummer with a burger • Scrapping of pro-beef ad campaign • Food with beef ingredients • UK beef sales slump in Europe • History of BSE in light of the announcement • Fear of baby contracting CJD from its mother • Safety of beef products • Victim's Grandmother's view of announcement • Letter from John Major to victim's mother stating beef is safe
Telegraph	<ul style="list-style-type: none"> • Aftermath of statements (very similar to Times piece) • Alternative views of what caused BSE • Commons debate • Response of victims' families in light of statements • AMA letters saying 'beef is safe' withdrawn • SEAC release in aftermath of statements • Public reaction to announcement of possible link, Central London • SEAC release/press conference? 	Sun	<ul style="list-style-type: none"> • Research into new strain of disease • chief medical officers advice • questions over safety of beef • facts about BSE • fear of baby contracting CJD from its mother – a victim of the disease
Times	<ul style="list-style-type: none"> • Debate in Commons after issuing of the two ministerial statements re link • Aftermath of statements • Effect on cattle markets in aftermath of statements • It says SEAC report triggered announcements • SEAC report – specific pathology of the disease • Statements in the light of ten years of debating • Aftermath of [scientific] findings • VCJD and its victims 		

There are some interesting differences and similarities in coverage in terms of perceived events (see table 16). *The Telegraph*, *The Times* and *The Guardian* similarly all carried stories based around the victims and their families. In addition, all three broadsheets feature the Commons statements and consequent debate.

There are quite significant differences in the coverage generated from the 'link' statements (see table 16). It is interesting to see how, from one information event (the Commons statements) the papers differed in their coverage *around* that event. *The Guardian* chose to reprint previous statements from the government stating that beef is safe, wholesome and nutritious. It also covered an interview conducted with Stephen Dorrell on *Radio Five*. Given its oppositional stance to the government of the day, *The Guardian's* articles on the victims and on what has been said in the past about the safety of beef, is understandable.

The Times presented a summary of the previous ten years "debate" on the safety of beef. It also featured an article on the impact of BSE and vCJD on the cattle markets. *The Times'* coverage carried stories about the victims but also the effects on the industry. The article, "*Ten Years Debating Whether Beef is Safe*" places the government in the same position as the public in that no-one suspected a link between BSE and vCJD, and *all* followed the advice of scientists. It was noted in the previous section of this chapter how political correspondents – who normally deal with political and administrative sources, relied most heavily on official advisory sources. Since the journalist writing this story was a political correspondent it is perhaps unsurprising that this article (and presumably this journalist's source) can be seen to hide behind scientists. This 'blame the scientists' approach is a common feature of *The Times'* coverage over this period.

The Telegraph is particularly interesting. Given that it is traditionally a Conservative supporting paper, its focus on the victims and on the Association of Metropolitan Authorities letters might seem curious. But it is a newspaper in

a competitive market and as such must report on the key issues and must try to provide unique information. In my view, this is an example of how the competitive environment – particularly during times of government or national crisis - can outweigh political allegiances and the fealties of partisanship. That said *The Telegraph* is the only paper to carry the ‘alternative cause of BSE’ story.

The data for 2004 presented in table 17 shows a return to fairly monolithic interpretations of what has happened in the case of the Hilton study. All to varying degrees focussed on the Hilton study as the ‘event’ the story was about, but there were two interesting differences.

Table 17 Perceived Information Event 21 May 2004

Title	Perceived information event per article
Guardian	Derriford Study
Telegraph 2	Derriford Study
Telegraph 3	Victim improves
Telegraph 4	Derriford Study
Times	Derriford Study
Mirror	Derriford Study
Sun	Derriford Study

First, *The Guardian’s report*, although primarily concerning the Plymouth study, took the angle of a new research programme being launched by the HPA on vCJD diagnostic techniques. From the content analysis it is not possible to determine the reasons for this difference in focus but this will be discussed in the following chapter.

The second major difference is *The Telegraph’s* co-opted story highlighting new drugs that had been responsible for an improvement in a vCJD victim. No other newspaper extended the event in this way. Again, the content analysis can only suggest that *The Telegraph* had a specific interest in BSE and vCJD.

The impressively high word counts across all other events sampled also give an indication of this. This makes *The Telegraph's* omission of the link story on 20 March 1996 all the more curious.

In summary the findings demonstrate that in 1990 and 2004 broad agreement was reached across the titles as to perceived events – with the exception of *The Telegraph* in 1990 and 2004 and *The Guardian* in 2004. During the crisis of March 1996 the situation was considerably different. On 20 March 1996 as has been observed, not all newspapers carried stories on the link between BSE and vCJD. Those that did were in agreement as to what had happened – a link had been found and an announcement was due.

By 21 March all papers carried multiple stories and all carried stories either on the statements or articles written in the light of the statements in the Commons. As far as perceiving what has happened is concerned the perceived events of the articles demonstrated how far the attraction event had over-shadowed the *actual* scientific event. It was noted too, how many more stories were co-opted around this event. Consequently more sources were accessed than had been previously observed. Crises clearly stimulate publications to go beyond usual patterns and practices. That said, the majority of stories were generated in some way by the Commons' statements suggesting that victims, livelihoods and public health received less attention than politics in the press that day.

1.5 Evidence of dissemination processes: questions of 'how', 'what' and 'when'

It has been observed that institutional sources have the ability to dictate the timing of dissemination and the form of that dissemination. The data presented here explores how much information regarding the processes of dissemination can be gathered from news reports. In order to do this I have developed the categories of *time* and *form*: when did the information come to light and in what way did the information come to be known about? The context of discovery – or attraction – has an important impact on the news product. How

far does journalism help its readers to understand this, and to point them in the direction of documents that they themselves can verify?

The question posed is '*what specific event occurred to trigger the story*' and can this be determined from the analysis of news reports. 'Trigger' is a word I use very deliberately because what triggered a story is seldom what actually happened – as seen, for example, in the case of the 21 March 1996.

Dissemination tends to be triggered by a prior information event. Examples might include a press release, press conference, publication of a report, a Commons debate and so on. Just as in the case of a gun trigger, it is a mechanism pulled by someone for a range of strategic ends. It is suggested that triggers might be made evident by exploring the use of *time* and *form* indicators in news reports.

To recap from chapter four, *time* indicators refer to uses of time in news reports that might suggest when journalists first perceived events. This includes phrases like "last night" and "it was claimed today" but not phrases like "last week" or "last year". This is because the former is indicative of topicality, the latter do not indicate topicality – a key feature of news - but merely background knowledge. Tables 18-21 reveal that *time* was the most commonly used indicator of dissemination in news reports, but that it was used to give news its topicality, its 'now-ness'. Thus, many of the indicators counted as *time* are merely phrases such as "yesterday", or "last night".

Form is a potentially important indicator as it alludes to specific information that stories might be based upon. For example, a "Commons debate" is a useful *form* indicator because one can go and check *Hansard* to see for oneself the content and context of information disseminated in press reports. As the findings presented in tables 18-21 show though, *form* was not the most common type of indicator of dissemination processes. This implies that journalists may not have accessed the form of information actually sparking a story but rather a digest of it – the press release. Therefore the question to be

asked in this section is: can one tell from news reports when something happened and in what form was it disseminated to journalists? The findings here attempt to offer insight into the chain of information events that led to news reports. The tables following detail the indicators found across the news reports sampled.

Table 18 Dissemination Processes Evidence and Type 11 May 1990

Publication	Evidence	Type
Guardian	Yes	Time
Telegraph	Yes	Time
Times	Yes	Time
Mirror	Yes	Time/Form
Sun	Yes	Time

In 1990 all reports contained evidence of dissemination processes. All had *time* indicators while *The Mirror* alone contained *form* indicators (see table 18). It is observed that *time* was the most commonly used indicator of dissemination processes.

On the 20 March 1996 as seen in table 19, there were no articles in *The Telegraph* or *The Sun*. Both *The Guardian* and *The Times* articles on 20 March 1996 contained indicators of *time*. *The Mirror's* time indicators were used to emphasise the 'up-to-date newness' of this news. More importantly than that though it *pre-empts the news*. It stated: "The Government will admit today and "...the announcement today will..." (The Mirror 20 March 1996: 1). It could be argued that it did not only pre-empt the news, it also made sure that this news happened sooner rather than later⁵. No evidence of *form* was found in any of the reports. This is, perhaps, hardly surprising given the nature of this information event – a leak.

⁵ In his evidence to the BSE Inquiry Stephen Dorrell wrote that he only knew he had to make a statement about the issue the night before – the same time *The Mirror*, *The Guardian* and *The Times* were preparing their stories on the imminent statements, see S. Dorrell 1996 BSE Inquiry statement 297

Table 19 Dissemination Processes Evidence and Type March 20 1996

Publication	Article no and evidence	Type of evidence
	Yes	Time
Telegraph	N/A	N/A
Times	Yes	Time
Mirror	M1 Yes	Time
	M2 Yes	Time
	M3 No	-
	M4 No	-
Sun	N/A	N/A

The situation was markedly different on 21 March 1996, as table 20 shows (below). The story was covered in all the papers sampled and evidence of *time* and *form* were both present. Of the eight articles featured in *The Guardian*, six contained *time* indicators. In addition two of these articles also contained *form* indicators. One article contained *form* only. Of the nine articles in *The Telegraph*, six also contained indicators of *time*, and four of these also had indicators of *form*. *The Times* had eight articles. Six of these contained *time* indicators and five of these also carried indicators of *form*. The presence of so many *form* indicators in tandem with some unusually specific *time* indicators was noticeable. It suggests that the increased detailing of *time* and *form* were as a consequence of the increased coverage across the newspapers sampled coupled with the sense of crisis being played out with journalists present. Indeed since this announcement was televised live, the nation also watched part of this crisis being played out too.

Table 20 Dissemination Processes Evidence and Type 21 March 1996

Publication	Evidence	Type	Publication	Evidence	Type
Guardian	Yes	Time/Form	Mirror	M5 No	-
	No	-		M6 Yes	Time
	Yes	Time		M7 Yes	Time
	Yes	Time/Form		M8 Yes	Time
	Yes	Form		M9 Yes	Time/Form
	Yes	Time		M10 Yes	Time
	Yes	Time		M11 No	-
Telegraph	Yes	Time/Form		M12 No	-
	No	-		M13 Yes	Time/Form
	Yes	Time		M14 Yes	Time
	Yes	Time/Form		M15 No	-
	No	-		M16 Yes	Time
	Yes	Time/Form		M17 Yes	Time/Form
	Yes	Time/Form		Sun	S1 Yes
No	-	S2 Yes			Time
Yes	Time/Form	S3 Yes			Time
Yes	Time/Form	S4 Yes			Time
Yes	Time	S5 Yes	Time		
Times	Yes	Time/Form			
	Yes	Time/Form			
	Yes	Time/Form			
	Yes	Time/Form			
	No	Time			
	No	-			
	No	-			
Yes	Time/Form				

Table 21(below) shows that all newspapers sampled broadly agreed on what had happened in their stories on the 21 May 2004. There was one interesting exception. *The Guardian* (see table 21 above) focused on the Health Protection Agency's (HPA) new research project which sought to expand on the work conducted by Hilton et al. This focus was evidenced through the headline, 'Child Tonsil Test To Predict CJD' (*Guardian* 21.5.04: 5) and through the pursuit of this angle throughout the article. There are two indications that the information event in this case is the Hilton study. First, all other papers sampled covered the story that suggests the Hilton study was the event behind *The Guardian's* story. Second, the article used a quote from David Hilton - the only quote in the piece - that suggests that his views in particular were sought at that specific time, as author of the study rather than as an expert in histopathology more generally.

Table 21 Processes of Dissemination 21 May 2004

Title/article	Evidence	Type
Guardian	Yes	Time /Form
Telegraph 2	Yes	Time / Form
Tel Teleg 3	Yes	Form (pictorial)
Telegraph 4	Yes	Time /Form
Times	Yes	Time / Form
Mirror	Yes	Form
Sun	Yes	Time / Form

It has already been noted that headlines do not always accurately reflect the content of the main article. This is true in this article which reduces Hilton's work to a series of quotes in support of the HPA's research programme. It might also be suggested that one could determine the event triggering *The Guardian's* news story was the same as the other papers sampled by looking at specific evidence of dissemination processes in the story. As table 21 (above) shows in total five references to *time* and *form* were found: three in terms of *time* and two in the case of *form*. In terms of *time* indicators *The Guardian* has three instances - two of which are combined with *form*. In terms of *time* alone, the news report states: "The latest best guess published today...". The two other instances combine *time* and *form*: "A study in the *Journal of Pathology* today..." and "The study reported today..." (*Guardian* 21.5.04: 5).

To sum up this section I suggest that the presence of both *time* and *form* indicators in news reports is indicative of journalistic perceptions of crisis and presence of journalists 'live' at the unfolding of an event. In the case of the 21 March 1996 coverage where indicators of *time* and *form* were most marked, it was noted that the *attraction* event became the *actual* event – the '*what had happened*' and was signalled by a sharp increase in *time* and *form* indicators.

These *time* and *form* indicators were largely used in news reports to emphasise a sense of crisis. In the 2004 story the use of *time* and *form* indicators suggests that the source adopted a promotional stance. Furthermore, this strategy was understood and accepted by journalists. The strategic activities of the disseminating source, the *Journal of Pathology*, dictated what was said about 'when' the study was published through the use of an embargo system.

As a report on a study in the latest edition of a science journal, the press release was designed to attract readers and journalists and to promote the journal. Journals expect publicity for such information subsidies. Therefore the focus on *form*: the *Journal of Pathology* in the broadsheets, 'the study' in the tabloids, is indicative of journalistic conventions of citation when drawing on information subsidies from journal sources.

It is increasingly common for journals to issue press releases to promote forthcoming publications to the science community and to attract science journalists to their stories. It is commonplace to offer journalists advance copies of articles featured in forthcoming issues. This could be in recognition of the diversity and specialism of science journalism and its outlets, which may require more depth than press releases allow. So, *time* and *form* indicators tend also to be evident when the source is actively promoting a product to a specialist community.

Based on this research, *time* and *form* elements are also part of journalistic convention. They fulfil the 'what, when, where' of journalism whilst the *time* element in particular reinforces the 'now-ness' of news. And yet in an FOI environment these aspects could be useful to the public, to other journalists, historians, pressure groups and so on.

Some processes of dissemination can be shown to exist in news reports. *Time* is the most commonly used indicator which – in its everyday usage ("last night" or "yesterday") works to demonstrate a story's topicality and newness as

well as the journalists unstinting prowess at accessing it. When *time* and *form* indicators are used in abundance (as the findings for 21 March 1996 explicitly show), this tends to be associated with a sense of crisis, the presence of journalists as an event unfolds, or when a source is promoting a specific product to a specialist community.

1.6 News Values in news reports

In this section I present the findings of the analysis of news values across the three events sampled. Table 22 below presents the news values present in all news reports in each case study. Please note that to aid comparison with press releases in the next part of the chapter I only analyse news reports based (either wholly or in substantial part) on the content of the press releases.

The purpose of this aspect of the content analysis is two-fold: first to determine the correlation of news values across the sample in all three events. Second, to compare these findings with the news values present in press releases. This will enable me explore a number of questions. How successful were sources in getting their messages across in the transformation from IE3 to IE5? Did journalists and their news editors add or subtract certain values and for what ends between IE3 and IE5 – in other words, what part did journalists and their publications play in the transformation of events between the stage of attraction and the stage of dissemination? How did stories about BSE come to be reported? Part of this question, it is assumed, includes, why these stories were reported? What made them newsworthy, and who made them newsworthy? The analysis of the news values identified in news reports seeks to explain why stories about BSE were considered newsworthy. Table 22 shows which news values were present in news reports in 1990, 1996 and 2004 (marked *).

Table 22 News values: news reports

VALUE	1990	1996	2004
Frequency	*	*	*
Amplitude	*	*	*
Clarity			
Meaningfulness	*	*	*
Consonance	*	*	*
Unexpectedness	*	*	
Continuity		*	*
Elite Nations		*	*
Elite Persons	*	*	*
Ref to persons			
Negativity	*	*	*
Competition	*	*	*
Co-option		*	
Predictability	*	*	*
Prefabrication	*	*	*

There is a noticeable similarity across the analysis of the three case studies as certain core values emerge. The core values *were values identified in news reports and shared across all three cases*. These are: frequency, amplitude, meaningfulness, consonance, elite persons, negativity, competition, predictability and prefabrication. Explanations for the presence of these core values are given below:

Frequency: In each of the three events findings have been presented of studies that have been completed and conclusions about the findings made.

Amplitude: Each story is deemed 'big' enough for coverage. Thus in 1990 the species-jump of BSE to FSE in cats, in 1996 the link between BSE and vCJD, and in 2004 the 4,000 predicted vCJD victims, are all deemed 'big enough' news to allow coverage.

Meaningfulness: In 1990 I would argue that the meaningfulness of the event was not defined by the species-jumping of the disease as this had been observed prior to 1990. Rather it is the symbolic meaning of a domestic animal succumbing to the disease that gives this story its significance. In 1996 the threat to public health – particularly children's health makes the issue meaningful as well as the counter-balancing threat to the UK's industrial interests. In 2004, the predicted number of vCJD victims makes the story meaningful and significant in a public health context.

Consonance: BSE as an issue of media interest pre-dates all three of my case studies. As a consequence of this and other food 'scares' and 'scandals', all three studies show that they relied to a greater or lesser extent on the pre-existing knowledge of the BSE problem.

Elite Persons: Agents of all the official source structures identified in this thesis as relevant to the BSE story are present in the findings. It is the usual mix of government Ministers, scientific advisors, (un-named) senior civil servants and MPs.

Negativity: BSE is obviously 'bad news'. The lack of clarity merely compounds this as well as over-riding the journalistic news value of *clarity*.

Competition: Given that amplitude, frequency, meaningfulness and so on are identified as core news values, it is little wonder then that journalists assume the competition will cover such events, too. The status of the source and the strategies they deploy in attracting journalists to their stories may exacerbate the competitive tendency.

Predictability: Predictability is only evident when the coverage of the entire sample in each event is studied. Most newspapers carried each of the stories and used similar sources. Therefore it can be assumed routine dissemination was carried out in each case. Routine dissemination from sources one routinely uses allows for predictability. That is to say, what they say is likely to be newsworthy and what they provide is likely to be useful as well.

Prefabrication: Materials of some form were referenced in news reports: the CVO's letter to the *Veterinary Record*, the findings of the study of vCJD by the CJDSU and the paper in the *Journal of Pathology*.

Having focussed on the core values shared by all news reports, it is important to note that there were differences between the news values contained in news reports of each event. In 1990 *continuity* was not a value found in any of the sampled reports but was present in 1996 and 2004. This is because this event marks the first 'peak of interest in the BSE story (see Miller 1999) and as such little history had been established. In 1996 *co-option* stands out as a distinct value of this case study and I would suggest that this was because of the magnitude of the story, coupled with the specific reporting strategies adopted by newspapers and broadcast news outlets. The latter is significant because the statements were broadcast live on television and radio.

Part 2 Information/Transformation: A comparison of press releases and news reports

In this section I develop the findings of the content analyses further by comparing and contrasting the press releases and the news reports. As two links in a chain of events (IE3 and IE5), the comparisons go some way to understanding the structures and mechanisms involved in the production of the three BSE-related stories and the way information was transformed from one information event to another. In the previous section I presented the findings of the content analysis of news reports. I explored levels of coverage, deployment of correspondents and the use of sources by correspondents. I also analysed the news values present in news reports in the 1990, 21 March 1996 and 2004 events.

It was discerned that most newspapers covered the three events on the same days and those that did not it was argued, adopted a strategy of silence in line with partisan relations. Publications also shared similar patterns in relation to the deployment of correspondents although it was observed that during the crisis reported on 21 March 1996 the range and number of correspondents increased dramatically. Similar sources were used in coverage across the three events but again it is noted how there were two exceptions: first, on 21 March 1996 many more varied sources were accessed. Second, *The Telegraph's* consistent interest and co-option around BSE and vCJD stories.

How far can the similarities between newspaper reports presented in this study be seen as a consequence of source strategies? And what non-source activities served to transform press releases into news?

This final part of the chapter is divided into three sections. The first presents the findings of the content analysis carried out using the same categories and indicators as used for the analysis of news reports. This is intended to ensure reliable and meaningful comparisons between the two data sets. The second section presents the findings of the analysis of news values evident in the

press releases. The third section provides a comparative overview of press releases and news reports⁶ before drawing some conclusions on how events at IE3 were transformed into IE5 events and what mechanisms were responsible for these transformations.

2.1 Content analysis of press releases 1990, 1996, 2004

As table 23 (below) shows, all press releases came from resource-rich, well-organised institutions. There are notable differences between the events.

Table 23 Press releases 1990, 1996, 2004

Event	Issued by	Sources cited	Sources quoted	Perceived info event	Dissem Evidence	Attached or made available (A) Cited docs (C)
1990	MAFF	BVS CVL CVO	- - 5 paras	FSE in cat	Form: Letter to Vet Record	Letter to Vet Record (A)
1996b	DoH	Stephen Dorrell SEAC CJD Unit Douglas Hogg HSE ACDP CMO	8 paras 2 paras - - - - 1 para	Dorrell statement on CJD and public health	Form: Details of new study Form: Details of new advice from SEAC	SEAC Advice (C) Statement by CMO (C)
1996b	MAFF	SEAC Douglas Hogg	- 1 para	BSE: Public health top priority	SEAC Report on new disease	Hogg's statement (A)
1996b	DoH	SEAC CMO MHS	- 13 paras -	CMO Statement on CJD and public health	Form: statement by SEAC	-
2004	Journal of Pathology	Journal of Pathology David Hilton A Ghani L Conyers P Edwards L McCardle D Ritchie M Penney D Hegazy J Ironside Path. Soc of GB Jaida Harris	- 3 - - - - - - - - - -	Study raises questions re UK victims incubating disease	Form: Details of Hilton's study published in Journal of Path. Time: JoP published "this week"	Copy of Journal paper (A)

⁶ News reports included in this part of the analysis are those that focused specifically on the topic of the press releases in each case.

The 1990 and 1996 events occurred at a time of uncertainty and increased media interest in BSE. This interest had been building gradually since the official discovery of the disease was made public on October 31 1987. The 2004 event occurred at a point when the issue of BSE was very much in the background in terms of media interest.

In 1990 the only release issued was by MAFF. What is interesting about this press release is that it hardly addressed journalists at all in terms of what was presented to them. The press release itself contained only two short paragraphs telling journalists what had been discovered, through a letter to a specialist, professional journal.

According to the strict application of this typology, the DoH press release was issued by official administrative sources. But it largely featured Dorrell (8 paragraphs) and the CMO (2 paragraphs). The same is true of the MAFF press release that featured Douglas Hogg's statement. Who are the primary sources in each case? The issuers of press releases? Those most cited? This has to be problematic because there is supposed to be a distinction between government interests and public interest as defined through the work of Ministries. As the content analysis of news reports shows, many journalists make clear distinctions about the affiliations of their sources. But the press releases in 1996 blur distinctions between source types by co-ordinating the responses of different source types with different agendas into Ministry-derived press releases.

Government Ministries are adept at disseminating information from other source types. The second DoH release features advice from the CMO, Sir Kenneth Calman. In news reports he is clearly identified as the CMO or as top medical advisor to the government in some tabloid reports. No news report seeks to explain how he is connected with the government or the DoH. Therefore no indication is given as to any motives he may have beyond the giving of medical advice and no judgements made as to how politically impartial this advice may be ("beef is safe" for example).

As the findings show in 1990, Calman's animal health equivalent, the CVO was frequently described in news reports as a "Ministry vet" or spokesman. In 1996, the CMO is presented as independent. Can the two roles be that different or has much changed since 1990? His institutional affiliations are presented ambiguously. His statement is released by the DoH, his "beef is safe" message is cited word for word by Dorrell in his press statement, and his advice is disseminated at the same time on the same day as Dorrell and Hogg's statements by a government Ministry. Calman's statement clearly forms part of a careful source strategy. This raises a series of questions: which structure is responsible for it? As a source which structure did Calman represent? Which structure does this strategy best serve?

In 2004, the press release was issued by the publishers of the *Journal of Pathology*, Wiley Interscience. The press release quoted the leader of the study (Dr David Hilton) and detailed the main findings of the study. It also offered a copy of the journal article and gave a contact name and number for journalists to obtain one. This is in stark contrast to the releases from official sources in the 1990 and 1996 cases. This can be explained, perhaps, by the different motives the issuers of press releases had in each case. In 1990 and 1996, the strategy was to control and contain the media. In 2004, the strategy was to attract the media and to publicise the journal. It is interesting that the study by Hilton et al in 2004 was funded by DoH money, and also had to report to a steering group. But according to my research neither the DoH nor the HPA issued formal statements that day. The publishers of the *Journal of Pathology* produced the press release. The primary purpose of the press release was to publicise the *Journal of Pathology*. The 'client' orientation in this case is clear. However, as the findings in this chapter suggest, maybe the three cases are not so dissimilar in their 'client' orientation. Perhaps an important separation is required between the administrative functions of Ministries, and the publicity and press work done by their press departments for internal, politically motivated clients.

2.2 Correlation of news values in press releases and news reports

Table 24 (below) shows the news values present in the press releases sampled in 1990, 1996 and 2004⁷. It is argued in this thesis that news values are a mechanism emanating from the structure of journalism, but one that is adapted strategically by sources, as Palmer (2000) suggests. While most articles across the 1990 and 2004 case studies were triggered by and were based on press releases, it is acknowledged that the 1996 case is very different. Newspapers went far beyond the boundaries set by the press releases and the press conference by deploying correspondents to write stories on the impact of the statements on other 'strata' of the BSE reality, like industry, economics and the regions.

The comparison of news values contained within press releases and those of news reports is extremely interesting. In 1990 the comparison reveals that the news coverage across the sample 'added' news values to those contained in the press release from the CVO (through MAFF). The added values were *amplitude*, *meaningfulness*, *consonance* and *unexpectedness*. *Amplitude* and *meaningfulness* were derived from the fact that a domestic cat had succumbed to FSE. *Consonance* derived from the connection FSE seemed to have with BSE, and *unexpectedness* from the transference of the disease from the agricultural sphere to domestic sphere.

In 1996 the only value over the entire sample added to those offered in the press releases was *co-option*. As has already been observed, publications chose to expand the story by deploying more correspondents from different beats, who in turn accessed a variety of non-official sources not previously used in the context of BSE.

In 2004 there is an exact correlation of news values between the press release and the news reports. In this case the news release that was written by a journalist for journalists, promoting a scientific journal through presentation of

⁷ It should be noted that *competition* has been excluded from application to press releases as it does not apply in this case.

Hilton's findings, had achieved a complete 'fit' between strategic appeal to news values through the take-up of those values in news reports across the five newspapers sampled.

Table 24 News values: press releases

VALUE	1990	1996	2004
Frequency	*	*	*
Amplitude		*	*
Clarity			
Meaningfulness		*	*
Consonance		*	*
Unexpectedness		*	
Continuity		*	*
Elite Nations		*	*
Elite Persons	*	*	*
Ref to persons			
Negativity	*	*	*
Competition	N/A	N/A	N/A
Co-option			
Predictability	*	*	*
Prefabrication	*	*	*

It can be concluded here that there is some significant correlation between the news values present in news reports and press releases and that this research confirms, broadly, Palmer's hypothesis regarding news values and source strategies. Just as news values do not constitute a formal check-list of 'must-haves' for journalists this must also be the case for those who compile press releases – many of whom are increasingly former journalists themselves. In all cases the news values present in the press releases were still present in the news reports. Thus the values added at IE3 remained in IE5. But as this study has shown journalists and their publications (through the newsroom's division of labour), 'add values' to suit their own strategic organisational goals in the transformation of information events into news.

Conclusion

This chapter has presented the findings of the content analyses of news reports and press releases. Both have been defined as *information events*. These events are constructed in a chain of dissemination that starts from the first formulated account of an event or phenomenon and ends - in the case of the three events analysed here – in the publication of news reports.

Five transformational stages are posited and as information passes from stage to stage it is transformed into a new but related information event. In this chapter I have analysed two information events: IE3 (the information event created at the stage of attraction i.e. press releases) and IE5 (the news reports based on IE3 and IE4, the journalist's copy). Since all three events occurred in the past it was only possible to take a retrospective approach to the study and work backwards from the end of the chain.

What can be determined from the analyses of the two sets of information events? Why and how did press releases transform into news reports? What aspects were transformed? What factors influenced transformation? How successful were sources' strategically predetermined information subsidies? The findings suggest that news promoters working for resource-rich, bureaucratically organised and 'authoritative' sources issued press releases and that in all three events journalists were attracted to the events in question by these sources. The only exception to this can be seen in *The Mirror's* exclusive on 20 March 1996.

Content analyses has been useful in providing an overview of the three events and the way these events were presented in press releases and news reports. It has also been useful in providing comparative data across a wide time span and between different sets of data. But press releases and news reports were not the only information events constructed in each case. In order to understand how information is transformed from the first formulated account to the stage of attraction, I concluded that a different method had to be adopted. The next chapter presents an in depth case study of the 2004 event. What stages did Dr Hilton's research findings go through from laboratory to public domain and how was it transformed at each stage? By whom, for whom and why?

Chapter 6 A Qualitative Case Study - 21 May 2004 'The Hilton Study'

Introduction

The thesis sees the news report as the final link in a chain of dissemination. From the first observations of an event or phenomenon through to its reporting in the media it is the subject of a range of different information events. These information events can be traced through a posited series of transformational stages. To recap, these stages are *reporting, reviewing, attraction, preparation and dissemination*.

The stages mark moments in the continued obtrusion of an event. In the content analyses chapter elements of who and what obtruded events were highlighted but it was acknowledged that the data generated by the content analyses could only provide broad detail of the structures and mechanisms involved in the construction of press releases (IE3) and news reports (IE5).

The research presented in this chapter seeks to explore the stages preceding press releases and news reports. In addition, the chapter seeks to understand aspects of the stages of attraction, preparation and dissemination that were highlighted in the content analyses but could not be explained by the data in any depth. A key objective of this chapter is to obtain as clear a view of the whole life of an event as possible through interviews with sources and journalists relevant to the 2004 Hilton study.

The chapter is divided into four parts. *Part 1* introduces the Hilton study event in order to establish context. *Part 2* explores the sources' perspective through analysis drawn from interviews with the author of the study, Dr David Hilton, and Amanda Nash, the press officer at Derriford Hospital, Plymouth. This section looks at the roles of Dr Hilton as author of the study and as a primary source in the wider dissemination of his findings. It explores Hilton's part at each transformational stage and focuses on the pressures and constraints he experienced at each of these stages and his views on his study's transformation into news.

Part 3 of this chapter focuses on the perspectives of journalists who wrote the stories based on Dr Hilton's research. This section presents the findings of the interviews conducted with 4 national daily science and health journalists¹. It begins with their views on BSE as a story and the role of science reporting. It then explores three key issues: *journalism at the stage of attraction, the journalists' story: from copy to news story* and *the effects of strategic predetermination*.

Part 4 is entitled Information/Transformation: The life history of an event. It brings together evidence gathered from journalists and sources in order to assess the usefulness of the transformational approach. What can be said about the way events are constructed and then re-constituted for different audiences and purposes? These questions are broached in this section.

A concluding section sums up what has been explored in this chapter. It then reflects on the strengths and weaknesses of the research presented in this chapter before going on to establish the issues to be discussed in the following chapter.

Part 1 The Hilton Study: background

In this part of the chapter I place the Hilton study in context by explaining who conducted it and what it involved. The study was seen by scientists and journalists as inconclusive which may perhaps explain the comparatively low word counts of stories sampled (Chapter five, table 1).

On the 21st of May 2004, newspapers reported the results of a study by Dr David Hilton of Derriford Hospital, Plymouth, Professor James Ironside of the CJD Surveillance Unit, Edinburgh, and Dr Azra Ghani of Imperial

¹ As noted in chapter 4 the *Guardian* correspondent gave a very short telephone interview which was unexpected and so unrecorded, though hand written notes were taken. He agreed to be interviewed formally but after receiving a copy of his article and a brief outline of the interview he did not respond to my further emails and phone calls. The journalists who were interviewed in full wrote the news reports carried in *The Telegraph*, *The Sun* and *The Times*.

College, London. The study sought to analyse tonsil and appendix samples for evidence of vCJD infection. The results of the study were inconclusive, a point emphasised by one of its authors, Dr Hilton (Hilton: 2004). However the study - which was conducted anonymously - found that 3 samples tested positive. This figure was extrapolated by the study's statistician, Dr Azra Ghani, to arrive at a figure of 3,800 people in the population that might be infected with the disease.

The study itself began in 1998 and was funded by the DoH. The researchers reported back to a CJD steering group comprising of members from the DoH, the Medical Research Council (MRC) and other experts in the field. At the start of the study the group met every two months. As the study progressed the meetings decreased to two per year. However, if a positive result was found the steering group had to be notified and the Chair would decide whether or not to assemble the group.

Once the study was complete, a final steering group meeting and a presentation of the findings to a closed session of SEAC, it was agreed that the research was ready to be submitted for publication to the *Journal of Pathology*. The resultant article was accepted for publication after peer review in the *Journal of Pathology* in May 2004². Prior to publication, Dr Hilton worked with a press officer at the journal's publisher, Wiley Interscience. Dr Hilton noted that he found it difficult to communicate what the study had found to the former journalist writing the press release. Indeed, Dr Hilton turned to the editor to intervene.

Prior to the publication, it was agreed between the two main authors - Dr Hilton and Professor Ironside - that the former would undertake press interviews and the latter, interviews with the broadcast media. Derriford Hospital's Press Officer, Amanda Nash, discussed with Dr Hilton how to get

² Prevalence of lymphoreticular prion protein accumulation in UK tissue samples, *Journal of Pathology*, May 2004 203:733-739, David A Hilton, Azra C Ghani, Lisa Conyers, Philip Edwards, Linda McCardle, Diane Ritchie, Mark Penney, Doha Hegazy, and James W Ironside; received 19 February 2004, revised 15 March 2004, accepted 22 March 2004

his point across to journalists. They also prepared him by asking difficult questions journalists might ask. Dr Hilton has no formal media training.

From the issuing of the press release on the Tuesday (18 May 2004) Dr Hilton received a trickle of requests for interviews. According to Hilton, the BBC were the first to approach him. National daily newspapers contacted Hilton on the Wednesday and the Thursday (19 and 20 May 2004 respectively). The broadcast news companies began calling for interviews on the official publication day on the Friday (21 May 2004).

On the day the findings were published in the *Journal of Pathology* (Friday 21 May 2004) the press office at Derriford had received 39 requests for interviews with Dr Hilton from both print and broadcast journalists³. Not all requests were met. Dr Hilton did not want to speak to the *Daily Mail* and *Channel Four News* because, in his view, they tended to sensationalise science stories. *The Daily Mail*⁴, allegedly, responded by offering money for an interview. The offer was declined.

It is interesting to note that, according to Dr Hilton, the BBC got hold of the story the weekend before the embargoed press release went out.

Negotiations led to the BBC honouring the terms of the embargo.

The story was included in all the newspapers sampled: *Daily Mirror*, *The Sun*, *The Telegraph*, *The Guardian* and *The Times*. However, it should be noted that this was not the case, according to interviews with print journalists who covered the story.

The story did not last beyond the Friday. As press officer, Amanda Nash stated: "By 5pm the story was dead. Weekends kill stories" (Nash 2004). Thus it is noted here that, unlike the two previous case studies, this story only featured in the news for one day - Friday 21 May 2004.

³ Source: Interview with press officer Amanda Nash at Derriford Hospital, Plymouth 1 October 2004

⁴ This was not verified by Amanda Nash. The journalist who wrote the story declined to participate/offer any insight into her preparation of this story, claiming she is bombarded

Part 2 The Sources' Perspective

This section examines the sources perspective through interviews with the study's author, Dr David Hilton, and the press officer who advised him, Amanda Nash. Several other sources were approached but declined to be interviewed. These were Professor John Collinge, Head of the Prion Unit at St Mary's Hospital, London, Professor James Ironside, Head of the CJD Surveillance Unit at Edinburgh University, and Professor Pat Troop, Head of the HPA – all official advisory sources⁵.

The reluctance of such senior figures to take part in this research will be discussed in the following chapter. For now, it is perhaps enough to say two things. First, that this research would have been fuller and richer had they agreed to participate. Second, it has not gone unnoticed that these source types - official advisory sources - were among the most used primary and secondary sources in news reports across the three events. Some, like Professors Collinge and Ironside have been key players in the BSE policy community since the 1990s.

Through the following discussion, it should be possible to assess the roles scientific sources played in all five stages of the dissemination chain. This discussion will also allow for an in depth view of the strategies this source deployed in managing the source-journalist encounter in the stage of preparation. This will shed light on the transformation of information between press release and the journalist's copy - the construction of IE4. This section is important then because the content analyses of press releases and news reports were unable to provide data on the construction

on a daily basis by such requests.

⁵ Through his PA, Professor Collinge agreed to be interviewed and asked for an outline of the discussion that would take place. This was sent. The interview was arranged and attempted on three occasions (two in the same day) but in each case Collinge could not be interviewed because of his schedule. A final attempt to get him to answer at least a couple of questions by email also failed due to "time pressures". Professor Troop agreed to be interviewed and asked for an outline and this was sent. An email reply from Professor Troop's personal assistant stated that Professor Troop could no longer take part due to time pressures. Professor Ironside failed to respond to any of the emails I sent nor did he return any of my telephone calls in spite of assurances from his PA that he

of information events at this stage. The decision to interview Dr David Hilton was made on the basis that he was the co-author of the report, the study leader, and was the author who dealt with print journalists. Professor Ironside, co-author, was assigned to deal with the broadcast media. The third co-author, was Dr Azra Ghani, a statistician who worked on the statistical analysis of the study's findings but did little press work, according to Dr Hilton.

This part of the chapter explores the roles played by Dr Hilton as author of the study and as a primary source of information to journalists in this event. It details Hilton's input and experiences at each of the five transformational stages. Consideration is given to the pressures and constraints Hilton experienced at each stage. This section also considers the role of strategic predetermination in the obtrusion of events at each stage. It should be noted that the study itself had been the subject of two leaks prior to the dissemination of the completed findings. According to Hilton, the first of these instances was not authorised by any of the authors or any of the steering group members who monitored the research (the steering group are discussed in more detail below). Hilton notes how the authors and the steering group met to discuss results at a stage when no positives had been found in the tissue samples. Yet a story based on information from the then incomplete study appeared in the press. The findings reported were a complete invention. Hilton explains it thus:

...there is a meeting every year or every two years of everyone who is funded by the DoH and at that meeting somebody asked me what the results were and this was confidential at the time. Shortly after that, an article appeared in the *Sunday Times* saying we'd found some positives or possibly found some positives, based on my refusal to comment (Hilton 2004).

Information from a pre-reporting stage was leaked which pre-empted the studies findings. What had happened in this instance? What was the reason for this ‘misrepresentative leak’? For Hilton it is a question of the continuation of funding in the area. Hilton believes a “medical person” with a “pessimistic view” wanted to ensure the issue stayed in the media spotlight for funding purposes (Hilton 2004). This leak occurred in a pre-reporting phase - that is to say, prior to and distinct from the event under scrutiny in this chapter. The second leak occurred within the chain of events analysed in this chapter and is discussed in section 2.3.

2.1 Stage One: Reporting

As has already established, Dr Hilton’s role in the life history of the event centred on his research study into prions found in human tissue samples. Dr Hilton explained how, in 1998, he had written a letter to *The Lancet* about the discovery of one patient whose tissue samples had tested positive for CJD prions⁶. He and Professor James Ironside agreed to conduct a study of further tissue samples. Hilton noted the part protocol played when they embarked on the study and how in doing so, the DoH framed the ‘event’ as their project. Hilton stated that: “...we advised the DoH about the study and they agreed and made an announcement that they’d actually asked us to do the study” (Hilton 2004a).

Further pressures prior to the construction of the first event in the chain were also evidenced through a process of continuous monitoring by a group made up of peers, the representatives of the funding body and the MRC. The steering group monitored the Hilton study throughout its four and half year’s duration. Hilton stated the study was: “...monitored by a steering group and the steering group is composed of people involved in the study, together with members of the MRC and the DoH and various other experts” (Hilton 2004).

⁶ Prion immunoreactivity in appendix before clinical onset of variant Creutzfeldt-Jakob disease, *The Lancet*, vol 352, August 29 1998, p703-705

The steering group met at regular intervals during the initial phases of the study: "...every couple of months at the start" (Hilton 2004). As the study progressed, the meetings became less frequent, around twice a year. However, when positives were found they were required to notify the Chair of the steering group. As Hilton said: "...but if we find a positive, part of the protocol is to notify the Chair of the Steering group and he might want to call a meeting to decide what to do" (Hilton 2004).

It could be argued that from the earliest stages of the study the author experienced a subtle yet controlling pressure over the work through the DoH's 'ownership' of the study, and through the continuous reporting of progress to the steering group. Additional pressure might also have come from the fact that the researchers relied on funding from the DoH.

Thus as the originator of the event, Hilton experienced pressures and constraints which may have influenced the research upon which the event was based even prior to the reporting stage. This is not to suggest that the actual physical realities being studied were somehow influenced by such constraints. Rather this point acknowledges that Hilton had a specific audience for his first stage information event - the presentation of the findings of the study to the steering group for approval to publish. This audience had certain expectations that were bound to be reflected in the presentation of the findings.

Hilton's role as the originator of the event seems fairly straightforward: he was the leader of a study. And yet Hilton did not simply go away and get on with the research. He was mindful of a number of publics he had to report to throughout the study. A specially formed steering group monitored his research. This group represented the interests of the funding body (DoH), the medical research elite (MRC) and of course, the researchers themselves.

As the originator of this event, Dr Hilton lost control of the information in the pre-reporting stage as the leak to the *Sunday Times* demonstrated. The findings were presented, discussed and the steering group made recommendations for changes. These were agreed and the findings were amended. This was how the first information event in the chain came to be constructed: the formalised and accepted findings. Unfortunately access to this document was not secured.

It is clear that distinguishing between types of official advisory source is required. Hilton's observations show how the use of the term 'official source' needs further clarification in that there was in fact a whole structurally and hierarchically differentiated community involved in the construction of the information event constructed in IE1 - all of whom were official source types. But all had different roles and quite probably different agendas. It is noted here then that for the content analysis, the typology of sources helped in making the data meaningful. In this chapter and with the data gathered from interviews, the typology of official sources is too broad to account for the differences between official advisory source types.

2.2 Stage Two: Reviewing

This section begins by exploring the formal review process. But it also identifies another process, its function and role in the dissemination chain unclear.

Having presented their findings to the steering group the research team agreed to submit their findings to the *Journal of Pathology* for publication in order to attract the appropriate community of peers to their study. But how much control did Hilton have in the decision of when and where to publish the findings? In some ways, as a scientific researcher, Hilton and his colleagues had considerable autonomy in terms of where to publish. He stated (*italics added*):

...we decide where we want to publish it and we submit it. And obviously they will accept it *if they are happy*...the steering group and the Department [of Health] have no involvement in where we publish or the content of the paper, that's up to us as investigators (Hilton 2004a).

However Hilton states quite clearly that he was contractually obliged to inform the DoH of the intention to publish in advance. He stated: "Well, according to the contract there are constraints. I mean when we publish we have to give them notice when we are going to publish" (Hilton *ibid*).

Freedom of where to publish is arguably not as crucial as having the ability to dictate when the research is published and at what stage. Hilton was asked about how the decision to publish was made. His answer was contradictory on this point. On the one hand he states that it was the steering group which dictated when information would be published. Dr Hilton said that "...part of the remit of that steering group is to decide when to publish the results..." (Hilton 2004).

And yet as I have stated, Hilton speaks of the decision the authors made to publish if positives were found. He stated: "Once we found a positive we felt obliged to publish as there was a lot of interest in the study" (Hilton 2004).

In fact when a second positive was found their view had changed and the information was not published. Hilton explained this decision: "...but when we found a second positive it seemed silly not to wait until the study was complete a few months down the line so we published at the end" (Hilton 2004).

In spite of the perceived autonomy expressed by Dr Hilton, it seems then that there were a number of constraints placed on the authors prior to the transformation of their work from an enclosed report to a journal paper ready for publication. What was constructed from this particular process of review

was the paper submitted to the journal for review incorporating not only the findings presented by Hilton to the steering group but with agreed changes based on their subsequent comments.

The information event is the paper prepared for the *Journal of Pathology*. It was constructed in this part of the reviewing stage and consists of findings that had already been informally peer reviewed within the enclosed world of the steering group before the paper was sent to the *Journal of Pathology* for formal peer review. The formal review process in the journal took only a matter of weeks. Minor changes were made to the paper and it was accepted for publication.

The second process revealed in my research was less formal and its power and influence undetermined. Dr Hilton explained that prior to its publication in the *Journal*, the findings were presented to a closed session of SEAC. Hilton stated: "Because I had to present the findings - everyone on the steering group knew the results for many months I guess - but I had to present it to SEAC at a closed session of SEAC..." (ibid). It is not known what might have happened if SEAC had objected to the paper's findings. It is only known that the paper was published. The paper had passed from the review stage to the stage of attraction. But it is noted that in its transformation into a research paper the research findings had to undergo a formal review and a presentation to senior peers at a closed session of SEAC.

The following section explores the contributions and experiences of Dr Hilton in the stage where the findings were transformed into an attraction event (IE3) - the press release.

2.3 Stage Three: Attraction

With the research completed and ready for publication, Dr Hilton had two clear roles in the ongoing dissemination process. First, he was a source of information for the journalist constructing the press release on behalf of Wiley Interscience, the publisher of the *Journal of Pathology*. Second, he was a source of information for journalists after the issuing of the press release. In this section I explore Hilton's experiences of the construction of the press release and the preparations he made for his primary source role. I end this section discussing the second leak that took place during the attraction process and how it was dealt with subsequently.

This section begins, crucially, prior to drafting of the release. This is important for this thesis because it provides an account of the transformation of the research paper *into* the press release.

Jaida Harris⁷, a journalist employed by Wiley Interscience, produced the press release. At several times during the process, Dr Hilton expressed concern with the way that the press release presented his research. Hilton stated: "The first time I didn't accept it, it was scare-mongering, it was rubbish [laughs]" (ibid).

After several email exchanges Dr Hilton became frustrated. As a result he turned to the editor of the *Journal of Pathology* for support. He stated: "I thought I wasn't getting anywhere so in the end I contacted the editor. And said I am not very happy. He changed it, done by him and not by this journalist and so in the end it was a lot more acceptable" (ibid).

This incident demonstrates the distrust Dr Hilton had in the journalist's ability to write the press release in a way he deemed to accurately reflect the findings of the study. The concern with regards sensationalism and scare-mongering continued throughout Hilton's experiences in the stages of

⁷ An interview with Jaida Harris was sought but she had left the employ of Wiley Interscience by the time I contacted them in October 2004

attraction and preparation. For example, when explaining why he opted to speak with the press he stated:

...to ensure that the story that reached the media or the public was the way I intended it to from the publication i.e. that there is a lot of uncertainty about what these findings meant and if you don't speak to the media they will speak to someone else who want to make it, wants to scare-monger (Hilton 2004).

By way of re-iteration on this point, he added: "It's great for scare-mongering this sort of thing, and if you don't speak to the media directly somebody else will portray it in a way that you don't want it to be portrayed" (Hilton 2004).

Clearly, Hilton felt the need to control the interpretations of his findings during the stage of attraction. But how prepared was Hilton for dealing with journalists' questions? Unlike many senior scientific figures in the BSE story Dr Hilton had received no media training. He stated that: "When it was published it all happened very quickly and so time scales didn't allow [for media training]" (Hilton 2004). The world of the scientist however, is very different to that of the journalist. Hilton seemingly accepted this but saw this case as a 'one off' which explained his perceived lack of need for specialist media training. He reasoned: "It's not going to happen again, it's not worth spending two days on a media course" (Hilton 2004).

The Press Office helped Hilton at Derriford Hospital, who asked him difficult or awkward questions and coached his responses accordingly: "The press office here were quite helpful. They gave me a list of questions they thought journalists might ask so I could prepare some sort of answer...more or less the day before" (ibid).

As mentioned at the beginning of this part of the chapter, there was a second leak in the life history of the study. This took place during the stage of attraction, which is why I have included it here. In the life history of *this*

event⁸ however, this is the only leak. According to Hilton this leak occurred in the stage of attraction shortly after the presentation to SEAC in the reviewing stage. Hilton stated: "I suspect someone who was listening in to that released it to the media because the BBC got hold of it I think on the weekend before the Tuesday when it was officially press released" (ibid). Clearly, controlling the timing was important to the members of this policy community - which of course included Hilton and his team. Action was taken. Hilton stated that: "The press office here and the MRC managed to negotiate with the BBC not to leak it" (ibid).

2.4 Stage Four: Preparation

In this section I explore the source-journalist encounter from Hilton's perspective. How in demand was he as primary source of information about the study? Which journalists did he speak to and were there journalists' with whom he chose not to speak? What input did Hilton have on the journalists' copy? These are the issues I address in this section.

His experiences can be described as intense but ultimately short-lived. The Press office at Derriford Hospital reported in their monthly review that they had received 39 requests for David Hilton to talk to media outlets on [the] Friday alone⁹. However, as already noted they also saw how quickly the story died (Nash 2004).

In terms of which journalists Hilton elected to speak to it is important to note that Hilton exhibited a degree of independence. Interestingly, *The Guardian's* strikingly different story had little to do with Hilton in spite of the fact that Hilton was the only source formally quoted, as was seen in chapter four. *The Guardian* did not speak to Hilton, either. Indeed, of all the journalists interviewed, only one actually spoke to Dr Hilton: the journalist from *The Telegraph*. The journalist from *The Times* spoke to Professor Ironside.

⁸ The findings of the completed study, thus the first 'bogus' leak based on the incomplete findings is considered to be a different event.

⁹ Copy of executive summary of the press coverage Derriford Hospital received in May 2004 provided by Amanda Nash, Press Officer, Derriford Hospital October 1 2004

One journalist readily submitted to the authority of Dr Hilton. The journalist at *The Telegraph* passed his copy on to Dr Hilton prior submitting it to his news desk. This journalist also passed a copy on to Collinge (senior science correspondent, *The Telegraph* 2005). In spite of Hilton's claims that he did not want to "edit" the journalist's text, he did make various suggestions. *The Telegraph's* journalist himself and Hilton both confirm this, as do the email exchanges between the scientists and the journalist.

2.5 Stage Five: Dissemination

After his involvement as a primary source of information for journalists, Hilton's involvement in this chain of dissemination ended. In this section I reflect on how Hilton felt the story was treated and how far he felt his communicative goals and the goals of others had been achieved.

In spite of reservations and concerns Dr Hilton felt the story was by and large, treated fairly and his concerns about sensationalist reporting were unfounded. He stated that: "I thought the media were very responsible and the BBC in particular" (Hilton 2004). The reason he gave for this was the responsible coverage of Fergus Walsh, though the implicit reason might well be to do with the BBC's willingness to honour the terms of the embargo after they were 'leaked' the story the weekend before. Hilton's view as regards the coverage, particularly why it was picked up when it was interesting but is not verified through this research. He believed that the BBC had a head start and were the first to disseminate the story. He claimed that:

They seemed to be the ones who carried it. The others seemed to pick it after then, I think. ..All the other major news companies didn't come in until the Friday after the BBC had run it so on Friday I had, like, Channel Four, ITN, Sky all wanting to do interviews on the Friday whereas it had been press released on the Tuesday. The BBC were in touch with me from the Tuesday onwards, doing stuff, then the newspapers on the Wednesday and Thursday, but the major news

organisations wasn't until the Friday. Which suggests to me that they hadn't paid much attention to the press release but once the BBC had run it...(ibid).

The experiences and input of Dr Hilton allow for a number of interesting observations. His primary focus was the way the findings would be interpreted. They were, by his own admission, inconclusive, and he instinctively felt that this ambiguity gave journalists room to interpret the findings in an overly sensationalist way. This anxiety led to him making a series of decisions based on assumptions about journalistic practice. He did not trust the journalist composing the press release to avoid a "scare-mongering" angle and so went over her head to the science journal's editor to negotiate the changes he wanted to make.

In assessing the coverage of the study it was noted how Hilton had an acute awareness of the role of other sources, like Professor Collinge. An awareness of the agendas of competing sources' was also evident from the interview with Amanda Nash in the press office at Derriford Hospital. She suggested David Hilton was "not self-promoting unlike some in the area" (Nash 2004). This 'self-promotion' is seemingly tied in with the need to attract funding. Hilton did not specifically state he was talking about John Collinge, but he did note this about journalists' use of pessimistic sources and pessimistic sources use of journalists:

[But] some people are obviously of a pessimistic view and wanted to I guess keep it in the media spotlight to keep funding going into the area perhaps. I suspect that is what happened [in the case of the first leak and the mis-leading claim that a positive sample had been found] (Hilton 2004).

As heads of important units in the BSE/CJD story both Collinge and Ironside are quote-worthy sources. One has had media training¹⁰, whilst the other's

¹⁰ According to Dr Hilton, Professor Ironside had received media training but this could not

success in delivering his message certainly indicates a scientist who is also a very 'clued-up' media player. Dr Hilton, on the other hand, was a histopathologist who did not anticipate the need for media training arising in the future in spite of the fact that his work dealt with human health issues.

As an official source of the story, Hilton was often quoted from press releases rather than quoted directly. And even though he had control over access to himself, once the press release had been issued, there was little he could do to change angles or influence copy - except in the case of *The Telegraph*. Thus it can be concluded that in spite of being an official source, the study leader and co-author of the research his involvement in all but the final stage in the chain of dissemination, Hilton was not as successful a source as Collinge. It has been observed that Hilton was very much the reluctant media face of this event. By contrast, Collinge had no such reluctance, in spite of having nothing to do with Hilton's study himself.

In addition, while Hilton's findings were inconclusive and Hilton himself was reluctant to present them as either good news or bad news, Collinge's generally pessimistic view perceived by journalists (and Hilton) might explain why journalists cited him across the reports. Hilton also noted how Collinge's status as a national expert might also have contributed to his 'over-accessing' by journalists:

Well, there are national experts on this disease and James Ironside and John Collinge. James Ironside was working with me and he was joint author on our paper. John Collinge is always asked because he's head of the MRC's Prion Unit, his comments are usually quite newsworthy (ibid).

When pressed further, Hilton stated: "...he tends to take a more pessimistic view. Which is why he is probably approached more by the newspapers" (ibid).

It is noted how Professor Richard Lacey was also approached frequently by journalists in the 1990s precisely because of his more pessimistic view. Professor Lacey argues that he lost his institutional credibility as a consequence of his negative views¹¹, but in Collinge's case at present, his institutional status remains intact in spite of his perceived pessimism.

In this section I have reflected on Hilton's views on the transformation of his science into news and how far he felt his communicative goals and the goals of others had been achieved. The findings suggest that Hilton was satisfied with the "responsible" coverage in spite of the anxieties he expressed concerning press negativity. The frequent citation of Collinge in reports was highlighted by this researcher in the interviews with Hilton and Nash as being a feature of the news reports. For Hilton, this is explained by Collinge's long-standing interest in and expertise on, prion diseases as well as his pessimistic view adopted to ensure prion diseases stay on the news agenda to increase funding for research. For Nash the success of sources like Collinge can be explained by their mastery of the skills of self-promotion.

This part of the chapter has explored the roles played by Dr Hilton as author of the study and as a primary source of information for journalists in this event. It details Hilton's input and experiences at each of the five transformational stages. Consideration was given to the pressures and constraints he experienced at each stage. The following part of the chapter examines the experiences of the journalists who wrote the news reports about Hilton's study. The data gathered has provided detailed insights into the stages of attraction, preparation and dissemination and the processes of information transformation that took place at these stages. This part of the chapter also explores the journalists' views on the role of science reporting and the effects the BSE story have had on science reporting.

¹¹ Interview with author see appendix 6 Schedule of Interviews

Part 3 Journalists' Perspectives

This part of the chapter focuses on the perspectives of journalists who wrote the stories based on Dr Hilton's research. This section presents the findings of the interviews conducted with journalists. It begins with their views on BSE as a story and the role of science reporting before going on to explore three areas. These are: *journalism at the stage of attraction, from copy to story*, and *science and health reporting: some observations on pressures and constraints*.

3.1 Science reporting and the case of BSE: roles, trust and science

In part two of this chapter Hilton's roles as researcher and primary source were explored and defined. In this section my aim is to establish what journalists' felt the roles of science reporters were in general terms. To establish their involvement with the BSE story over time and to assess their attitudes to the issue, the journalists were also asked what impact they felt the BSE story had on science and health reporting.

Science journalists occupy an important role in society. Their work often provides the only interface between scientists and the public. In that respect, many people make decisions based on the accounts and explanations that science reporters produce. Some of the journalists interviewed made some extremely interesting and provocative points.

The Sun's tabloid sensibilities, and its populist approach to all matters - including science and health issues - had been well-absorbed by its health correspondent. She referred constantly to readers, in spite of her never having seen any readership research on what readers like or want. This was very common, and something noted in interviews I conducted with tabloid journalists who were members of the political Lobby.¹² *The Sun's* health correspondent stated:

¹² See Westminster Tales: the crisis in 21st century reporting by Steve Barnett and Ivor Gaber, Cassell, 2001

I think its, I think it, newspapers and broadcast media are the bridge between the two...and I think there has been a reluctance on the part of the public to accept the government line on these stories and I think the media have been important in bridging the gap between the two and bringing to light the latest research (ibid 2005).

For journalists like *The Times'* respondent, the question of a science journalist's role turns on the distinction between generalist and specialist. Specialists, in his view, had handled BSE and CJD better than generalists. He was particularly critical of *The Mirror* and its campaigning stance. He argued:

The Mirror though - I'm not sure science is well served by a campaigning newspaper, they really went to town on it. I suppose the thing about BSE is that some 'talked it up' - especially *The Mirror* (senior science reporter, *The Times* 2005).

Clearly, for *The Times'* respondent, science reporting was not compatible with a campaigning ethos. The view taken by *The Telegraph's* respondent was interesting in that his notion of the role of science reporting was determined by the information versus entertainment dichotomy. He stated:

...I'm old fashioned. I think I'm in the information business and that for me if you want to work out what goes wrong with journalism and science you should look at the readership and whether the journalists are in the information or entertainment business and that makes sense (senior science reporter, *The Telegraph* 2005).

For *The Times'* respondent, however, things go wrong in science journalism for a different reason. Clearly for this respondent, the external pressures of the organisation's hierarchy compromise the role of the science reporter. He stated:

The way things go wrong in journalism is not wilful mis-reporting by specialist reporters but the kind of subtle changes that get made to stories that we were talking about earlier that get made to stories - um -and the headlines that are put on them which are not, of course, written by the specialists who write the stories, they're written by other people. That's where things go slightly wrong sometimes (senior science reporter, *The Times* 2005).

Journalists were asked about their views on the impact the BSE story had had on science reporting and in society more generally. Their responses illustrated a range of both positive and negative effects. One journalist felt the story had helped to raise the profile of science and health reporting in the national news. The health correspondent at *The Sun* stated: "...it's basically raised the profile of health reporting, it's something that everyone is interested in" (health correspondent, *The Sun* 2005). Others felt that the story had made journalists more sceptical and less ready to accept what scientists and government were telling them. But there were negative aspects of this as *The Telegraph's* respondent pointed out:

I think journalists are probably more sceptical now and maybe the GM debate is one example of where scepticism probably got a bit destructive if you ask me, in that you know we are talking about an entire technology there which came in many shapes, sizes and forms, and you know BSE is something very specific so um yeh, I think maybe it probably made us a bit more sceptical (senior science reporter, *The Telegraph* 2005).

One of the journalists interviewed cited an increased need for accuracy as an example of the positive effects the BSE story had had on science reporting. *The Sun's* health correspondent argued: "I think it's had quite a positive effect, actually. I mean with stories like this there is a need for accuracy" (health correspondent, *The Sun*, 2005).

The Telegraph's respondent identified one final important aspect of the BSE

story and its impact on science reporting. He believed recent news events were coloured by what he described as a 'post-BSE establishment thinking'. He suggested:

...Bill Stewart on mobile phones, that is one example of post-BSE establishment thinking. What he is saying is basically, we don't know. There's some tentative evidence, better safe than sorry, you wouldn't have got that in pre vCJD, you would have got, you know, a statement, we think to the best of our knowledge that is safe and not to worry about it and I think that is a concrete example of post-BSE establishment thinking (senior science reporter, *The Telegraph*, 2005).

Several positive effects of the BSE story have been identified. The journalists interviewed suggested a number of ways this had been achieved: through the raising of the profile of health and science reporting, by the increased scepticism of journalists through an increased need for accuracy in dealing with important health-related research and by the relative openness of 'post-BSE establishment thinking'. However, the same journalist who advanced this idea also perceived this relative openness as a negative effect and it is to these I now turn.

The interviews with journalists suggest that there may have been more positive effects on science and health journalism of the BSE story than negative effects. But two specific negative effects stand out: 1) trust between scientists and the public and 2) the quest for openness.

The BSE story has widely been interpreted as a key moment in the break down of public trust in science and government (previously discussed in chapter 1). This was picked up in the interviews with journalists although it was striking that journalists were not in agreement about where blame for this rested. *The Sun's* Health correspondent stated, for example:

...basically, the government has been very reluctant, I mean from the offset of the BSE crisis erm, I think it was very, very badly handled by the Conservative government, and I think there's been a reluctance on the part of the public to accept the government line on these stories... (health correspondent, *The Sun* 2005).

Whilst *The Telegraph's* respondent does not fully accept there had been a break down in public trust he is contradictory in that he says the BSE crisis was:

...probably part of the reason that there's been a mistrust of government *sic*], I think this story has been told a hundred times before but I think the bland assurances that all was fine I think scientists actually did make a bit of a mess (senior science reporter, *The Telegraph* 2005).

The Times' respondent, whilst not expressing views on the question of public trust, came to the defence of scientists. He argued: "I do think the experts - science experts - have been wrongly blamed for mishandling the story" (senior science reporter, *The Times* 2005).

The perceived openness was cause for concern and cited as a negative effect for *The Telegraph's* respondent. Throughout the interview he expressed his frustration at the inconclusive nature of Hilton's study. He believed the pressure to publish sooner rather than later was a consequence of post-BSE establishment thinking. As we have seen, Dr Hilton had similar concerns initially about publishing results as the study progressed. But it was also noted how Hilton's strategy changed and he held out on publishing until the study was complete. For *The Telegraph's* respondent, the study was too small. He stated: I think it was a bit unsatisfactory really. As I said to you I really wish we had a you know 50,000 tissue samples done or 100,000 instead it looks like they were very keen as soon as they found a few positives... (senior science reporter, *The Telegraph* 2005).

He goes on to explore the possible reasons for the study's authors to publish quickly. He stated:

I appreciate you know they probably you know its a complicated equation at the back of their heads they're thinking well if we sit on this for another year to get better stats we could be accused of withholding important data so I suspect they probably had to do what they did... (ibid 2005)

This respondent proposes an interesting dilemma in the post-BSE era. He stated: "There is an interesting question, you know, is it better to give people part digested information in the spirit of openness or to sit on it a while until you actually have a firm picture of what is going on...discuss" (ibid 2005).

My aims in this section was to establish what the journalists' felt the roles of science reporters were in general. I sought to establish the involvement of each with the BSE story over time in order to assess their attitudes to the issue. The journalists' views on the BSE story and the impact that it had had on science and health reporting were also discussed. In the following section the research findings focus specifically on the journalists' involvement in the reporting of the Hilton study.

3.2 Between attraction and preparation

In this section I discuss the journalists' experiences of the stages of attraction and preparation. How did they hear about the stories? Which sources did they interview and why? What processes were involved in the writing up of copy? These are the questions I have attempted to answer. I first look at their experiences of the stage of attraction: how were they alerted to the publication of Hilton's findings and their results?

It has been observed that science journals utilise press releases in order to promote their contents to journalists. In spite of Dr Hilton's theory that other publications picked up on the story after the BBC ran it, the research carried

out with journalists suggests otherwise. All three journalists interviewed said the story came to them through press alerts. Put another way, it was reported as a consequence of routine dissemination.

All three correspondents said that from what they could remember the stories came from a press alert. The health correspondent at *The Sun* said: "...It was the journal *Science* and I obtain releases to that journal from an academic research website called Eureka Alert"¹³ (health correspondent, *The Sun* 2005). In the case of *The Times*, the senior science reporter also uses this term 'news alert': "...It was probably a news alert from a news agency I would have thought" (senior science reporter, *The Times* 2005). The senior science reporter at *Daily Telegraph* confirmed to the best of his knowledge that it was a press release that brought the Hilton study to his attention. He stated: "I think I was sent a press release" (senior science reporter, *The Telegraph* 2005).

The journalists were asked to explain why they believed the Hilton study was newsworthy. *The Sun's* health correspondent stated: "Er, I thought it was in the public interest because it was such a wide-reaching study..." (health correspondent, *The Sun* 2005).

The Times' respondent was clear that the study was significant for him as he had been following it for a while and was waiting for results. He stated: "Well, I knew early on in the research that one case had been found so I knew to look out for it" (senior science reporter, *The Times* 2005).

In spite of writing two stories based on the findings on 20 May 2004, *The Telegraph's* respondent recalls how he had concerns about the newsworthiness of the event. He was dissatisfied with the study's findings. He stated: "[As I said to you] I really wish we had a you know 50,000 tissue samples done or 100,000..." (senior science reporter, *The Telegraph*).

¹³ This correspondent identified the journal as *Science*. It was in fact the *Journal of Pathology*

Journalists' patterns of source use at the stage of attraction were discussed with the respondents. It is noted that of the three journalists interviewed, two spoke to the authors of the study directly. One did not speak to them at all but quoted from the press release¹⁴. All three journalists were asked who they had spoken to in the construction of their copy. Whilst only *The Telegraph's* reporter communicated with David Hilton, all three spoke to the most used source, Professor John Collinge of the National Prion Unit.

John Collinge, as already observed, was clearly successful in accessing the press and getting his views across. As evidenced in part 2 of this chapter, Dr Hilton had commented on Collinge's pessimistic views and suggested that the maintenance of funding levels for research into BSE and CJD might account for them and his willingness to express them. One of the journalists interviewed showed awareness of Collinge's pessimistic views: "I think [I quoted Hilton] from the press statement but I think I talked to John Collinge. He has quite a pessimistic view on these things" (senior science reporter, *The Times* 2005).

The angle of *The Telegraph's* story reflects the problems of interpretation of figures and the difficulties in quoting statistical data. The same journalist showed awareness of Collinge's agenda. When asked about his decision to write a commentary piece on the statistical evidence, he stated:

...Yeah, I mean I must stress we don't normally do this but we just thought, it actually arose with a conversation with one of my senior colleagues who said look isn't this just a load of old rubbish because another survey was suggesting that it was the figures are on decline and its all been a big fuss over nothing. And you know, I think, then you know, and then you know you talk to someone like John Collinge and you realise there's a sort of doomsday scenario out there as well (senior science reporter, *The Telegraph* 2005).

¹⁴ *The Guardian's* correspondent did not, according to Hilton, speak to him. The Press officer could not verify this.

Furthermore, this respondent's commentary piece also reflected Collinge's concerns about the need for further studies. In the interview he explained:

I think I also wanted to express the frustration just how pathetic the government's response has been to tackling to trying, Collinge has been calling for a tonsil survey for years and years and years...(ibid 2005).

The health correspondent at *The Sun* had only recently started doing the job and her lack of experience combined with the lack of space for such stories in tabloids might well go some way to explaining the sources she used.

This respondent did not speak to either of the authors. However she spoke to the very accessible John Collinge. She also contacted a spokesperson at the DoH. The press office selected this spokesman for her. She explained:

Yes, the press office put me through to the relevant spokesperson, yes, I can't actually remember their name, because there are about five on public health and I can't remember their names (health correspondent, *The Sun* 2005).

When asked who or what her primary source was this journalist assigned the press release as her primary source. *The Sun's* Health correspondent stated this explicitly when asked directly about her primary source, although she did not identify the correct journal title: "Once again, it was the *Journal Science* and I obtain releases to that journal..." (health correspondent *The Sun* 2005).

Unsurprisingly, bureaucratically organised, organisations (HPA, DoH) and officially endorsed experts (John Collinge, David Hilton, James Ironside) were called upon by journalists to explain this story. One of them, John Collinge, had major success in getting his message across. And he did not need a press release or an army of press officers to do it for him. The reasons for this can be summed up as follows. First, he had long been a

part of the BSE/CJD policy community. Second, he was the Head of the DoH funded Prion Unit at St Mary's Hospital, London. Third, he clearly made himself accessible on days when the news 'broke'. And fourth, journalists knew him for many years and his pessimistic view was also well known by journalists and colleagues in the medical profession.

It was found, then, that journalists were successfully attracted to the event by the press release issued on Eurekalert - a journal alerting service available by subscription - while one journalist said he was sent a copy by the issuers. The sources journalists used to construct their copy about the Hilton study were overwhelmingly official sources of the advisory type. However, it is suggested that in this event, the term 'official advisory source' is unhelpful in making the important distinctions that need to be made between Hilton and Collinge.

It is concluded here that in the stages of attraction and preparation journalists relied heavily on the press release in the construction of their stories. That said, they all sought the views of a source who, although having a long-standing connection to the BSE story, was not mentioned in the press release from the *Journal of Pathology* or connected to the Hilton study. He was, however, a member of SEAC and an authority on prion diseases. Collinge is therefore an official advisory source and one of higher standing in the BSE policy community than Dr Hilton. Since all sources used were in some way connected to this enclosed policy community it is observed that in their coverage of this event, journalists did not stray far beyond the parameters set for them at the stage of attraction.

3.3 From copy to story: accounting for differences in news reports

In this section I discuss the differences noted between the news reports in the sample. My aim is to demonstrate how the pressures and constraints of the newsroom helped to transform the journalists' copy into the stories eventually published. This section therefore provides detailed evidence of the way information was transformed from IE4 to IE5. This transformation is

part of the stage of dissemination since the purpose of writing news stories is to disseminate them. This section explores journalists' accounts of the transformation of their copy into published news stories by exploring the distinctive aspects of each report.

The Times' 'Time-Bomb' Splash

The Times was the only paper to lead with story on its front page. *The Times'* respondent was not happy about this and he stated: "In some ways I would rather it hadn't been. I mean, you get more control over it if it is inside the paper" (senior science reporter, *The Times* 2005). He added that it was the news editor, the deputy editor and the "back bench" who made the decision to take his story as the lead: "Journalists have very little say on things like that. It was purely happenstance" (ibid 2005).

The decision to lead with the story was not in the science reporter's control, in spite of his senior status. What about the angle? How are the two related? The respondent suggested that the use of the word 'time-bomb' made the story more newsworthy. He said:

Yes, I remember they wanted to use that word and they told me about that. I wasn't too keen on that. Not really accurate. Its not really a word I would use. It wouldn't have been in my copy (ibid 2005).

When asked if the word made it more appropriate for the front page, he added: "Yes, yes it would. That's right" (ibid 2005). In the case of *The Times'* news report then, the story made it on to the front page because those with the power to make decisions about where stories go wanted it to be there. In order to make it a worthy headline story, the headline and copy were made more dramatic and the 'time-bomb' metaphor was used much to the dismay of the reporter.

The Sun and 'Us Brits'

The Sun's story appeared on the same page as *The Mirror's* corresponding story and contained exactly the same amount of words as its competitor's story. I think this demonstrated a certain tabloid feel and sensibility for this story. However *The Sun* was much more keen to identify the problem highlighted by the research as affecting "Us" - a word it used in the headline. This builds a bridge between the information and the reader but also, interestingly, identifies the reporter as 'one of us' too. What were the reasons for this angle? What characterised the content of this interview was the sense the health correspondent had of the readers and their interests. When asked why she decided to follow up the story she stated: "Erm, I thought it was in the public interest because it was such a wide-reaching study at least I'm not aware of a bigger study in this area" (health correspondent, *The Sun* 2005). This point is reiterated again and again. For example she claimed: "It's an area that our readers are interested in, and are still very interested in, its still a hot topic for us" (ibid 2005).

When asked about the use of 'Us' in the headline, the correspondent demonstrated this link the tabloid tried to forge with the reader. She stated: "I think it personalises the story for the reader, it immediately draws the eye to it, erm, I mean when we say we are talking about normal Brits" (ibid 2005).

In this case it can be concluded that the angle taken in *The Sun* came from a certain tabloid sensibility that sought to reach readers through appeals to the person and through national identity.

The Telegraph's 'Senior Level'

The Telegraph's coverage was unusual in that it featured three CJD stories on the same day and on the same page. I found this co-option surprising because when I interviewed the senior science reporter, he gave me the impression that the Hilton story was rather disappointing. He stated:

Yeah, it was a bit of a tricky one really because, ur, you know because its actually a bit unimpressive really isn't it, really to have just three tonsils and two are ambiguous. Its the kind of study that makes me groan because you know you've got to report it because its of huge significance for health, and yet you do really wish that they'd shut up and done another 10,000 tonsils and we'd have better statistics... (senior science reporter, *The Telegraph* 2005).

Given his opinion, it seemed curious that *The Telegraph* should include three CJD stories, two directly based around the Hilton study. Like *The Times'* story, the author stated that it was something those more senior to him were keen on. He stated that: "...I think with this story there was interest at a more senior level because of the confusion and so there was more willingness there" (ibid 2005).

Senior figures in the newspaper's hierarchy have to pitch for stories but it appears that this correspondent was given space to cover this event and to co-opt a related news story around it. But this respondent noted how interest from the news desk does not mean a story will be featured in the paper. He gave the example of his previous day's work : "I wrote five stories yesterday, I got in one so you often get interest from the news desk but there's no correlation between that interest and what gets in the paper" (ibid 2005).

In this case however, the journalist believed the interest at a senior level did make a difference. So while this might explain why the story itself made it into the paper in the first instance, it does not explain the angle. The three stories work together on the page to reinforce and underline a specific message: the need for more research into vCJD. Looking at the two stories concerning the Hilton study it can be said that in both the angles expressed frustration with figures and statistics and the state of research into the disease more generally. The story about the young victim of vCJD and his treatment completes the reinforcement of the message which was: more needs to be done.

3.4 Science and health reporting: some observations on pressures and constraints

In this section I discuss the pressures and constraints on journalistic practices and news work identified by journalists in this research. The purpose of this section is to explore what these pressures and constraints were and the influence they might have had on what was disseminated in news reports. Did the journalists experience any of these pressures and constraints in terms of researching and writing their copy on the Hilton study? Did they experience any of these constraints and pressures in the transformation that took place between their copy and the finished news report? This final section in part three seeks to address these questions. I begin by isolating the constraints and pressures identified by the journalists I interviewed.

Readers

The interviews with journalists suggest readers were considered as pressures in two ways. First, readers and the journalists' views of what the reader wants operate as a constraint. In this respect, *The Sun's* health correspondent is keenly aware of what she thinks the readers want. She made the decision to follow up the story based on her sense of its interest to readers as still "a hot topic for us" (health correspondent, *The Sun 2005*).

But the reader influences the copy in other ways, most notably in the use of language. She attributed use of terms like, "shock new research" and the rounding up of figures in the headline compared to the copy (4000 in the headline, 3,800 in the copy) to house-style. In relation to the use of "shock new research" she explained: "Erm, I mean in a tabloid newspaper to describe findings in any other way, it is shocking and surprising" (health correspondent, *The Sun 2005*).

The respondent agreed that the tabloid environment binds her. This is also a point expressed by *The Telegraph's* respondent, when talking about his readers. He stated:

The whole point of the exercise is to sell newspapers, and I'm lucky in that I've got a readership that likes to think that its getting informed and solid information. For a tabloid probably readers want to be on a slightly more exciting thrilling ride than we are willing to give them (senior science reporter, *The Telegraph* 2005).

The Times' respondent agrees that there are constraints on tabloids. He stated that: "Tabloids do the best they can within the constraints they operate in" (senior science reporter, *The Times* 2005).

The *Telegraph's* respondent also discussed the second way in which readers exert pressure and operate as a constraint. In response to a question about the desirability of guidelines for science reporters he noted:

I think it's a fairly pointless exercise. As far as I'm concerned we are open to much more scrutiny, my stuff is read and if I get it wrong and I get endless complaints about me I get sacked. Its very simple. Academics can fiddle around for years doing stupid things with a peer group of about three people. I've got millions of people breathing down my neck (senior science reporter, *The Telegraph* 2005).

The Telegraph's respondent also sees his readers responses as part of a system of regulation which he has internalised. He stated:

You know if I get things horribly wrong I get complaints and phone calls from readers so there is already a very vigorous feedback mechanism which stops us from doing anything too appalling, and I think I've had it when I've written stories about human disease and I've had tearful mothers ring me up and say I was being unfair and I shouldn't have put it this way so you get instant feedback so you know once you've been through that a few times that's a much more powerful corrective than any guidelines drawn up by a bunch of academics (ibid 2005).

The Sun's health correspondent also commented upon this self-regulation. She argued that:

...a lot of self-regulation goes on amongst health and science reporters. They know they have a duty to the public because they're writing about very, very serious, life-threatening issues and it is their responsibility to provide accurate up to date information...(health correspondent, *The Sun* 2005).

Complexity

Science and health reporters are specialists in their areas within the newspaper hierarchy but they are generalists when dealing with science stories. Journalists cited *complexity* as a pressure they experienced as science and health journalists. They sometimes have to translate and condense complex scientific information. *The Sun's* respondent for example, stated that: "I have to break down very complex [issues] and explain them to readers and make them accessible to the public" (health correspondent, *The Sun* 2005).

The Telegraph's respondent, who found the story difficult to encapsulate in a single story, also expresses this point. Explaining his decision to include a (rare) commentary, he stated:

I did a commentary with it which is actually unusual but that's because it is so bloody confusing we just thought its actually one of those rare examples where I think a commentary actually helps people, give it a proper context and salience (senior science reporter, *The Telegraph* 2005).

Thus complexity is negotiated by the use of a commentary to clarify points. The commentary in the coverage of Hilton's study was also used to reinforce the message previously identified: more research is needed.

Time and Space

Journalists on national daily papers work to tight deadlines and many find they have to pitch for space, in spite of an increased interest in health and science issues in the press over the last decade or so¹⁵. How far can time and space be considered constraints upon how the story was covered?

Type of newspaper is an important, if somewhat obvious point. Across the sample, the tabloid journalists had far fewer words to play with than their broadsheet colleagues. Interestingly, in spite of the fact that the broad sheet journalists stated they were not given specific amounts of space in the paper or word counts, both showed a strong sense of what would be expected. For example, when talking to *The Times*' respondent about the space element, he was told how many words he had written. He replied: "Oh well, that would be the standard length for a splash of this nature." (senior science reporter, *The Times 2005*)

Similarly, *The Telegraph*'s respondent, though somewhat contradictory, explained that whilst word count was not discussed as such, discussions did take place with the news editor. He explained that at *The Telegraph*: "...you're never given a space basically just pitch the stuff at them and hope that they like it and you know, they've got pictures and illustrations and they can make it work on the page (senior science reporter, *The Telegraph 2005*).

Whilst issues of space may vary from paper to paper, time is a pressure that effects all journalists working on daily newspapers. Journalists seldom work on one story in any given day. Quite often they are juggling stories to tight deadlines, which may or may not be included in the finished product. This was emphasised by *The Telegraph*'s respondent.

¹⁵ It should also be noted that health stories seem to take more prominence than science stories. One indicator of this might be the fact that one of the respondents started as a science editor, but was asked to become Health editor. When asked why, he states "Well, they asked me and I'd been doing the job [of science editor] for years and I didn't feel I could say no really. I mean, they wanted someone to do it. So I did." (Telegraph respondent 2005)

Clearly, from the journalists sampled reliance on the press release and only a few other institutional sources, time pressures shape the final story. Within the pressures and routines of news work, where journalists are working on several stories at once that may or may not be published in the paper, the pre-digested information offered by press releases is hard to resist. This is evident in this case study, where all journalists interviewed were alerted to the story by the press release issued by the *Journal of Pathology*. In addition, they were reliant on it for information and source quotes to varying degrees. One journalist even declared that the press release was their primary source.

Organisational Hierarchy

As already noted, another constraint evidenced in the interviews, was that of the organisation itself - notably the hierarchical structure of organisations.

Both senior science reporters at *The Telegraph* and *The Times* felt the pressure from 'above' in terms of the way the story was to be handled. *The Times'* respondent described the interest from "the news editor, the deputy editor and the back bench" whilst *The Telegraph's respondent* explained the interest in the story as coming from "a senior level". In addition, it was clear that *The Times'* respondent experienced a considerable loss of control of the story once the decision was made to run it as their lead for the day. He did not like the headline or the changes made to his copy but felt powerless to do anything about it. This sense of powerlessness extends into his change from science to health editor.

Sources

The behaviour of sources and their interactions with journalists in the source-journalist encounter also operated as a constraint and a pressure. In terms of constraint, for example one senior science reporter experienced problems with figures and attribution¹⁶.

¹⁶ The journalist asked specifically not to be quoted on this and has therefore been made anonymous

With regards to pressure, *The Telegraph's* journalist felt concerned enough to check his copy with scientists before publication, although he did exhibit a sense of defensiveness in this respect. He stated:

I think I checked a draft with Hilton because I feel these sorts of stories you can always, you know its a complicated one. I mean, some of my peer group would be horrified to hear me say that, but actually I find that if you think of a scientist as being ridiculous and just ignore them and just go on with the story, but actually with this story its very important because you don't want to terrify everybody...(senior science reporter, *The Telegraph* 2005).

The reasons for this checking go beyond the fear of terrifying the readers. As this respondent acknowledged there was also the need to conserve the relationship with one's sources. He added: "I don't want to have it so that when I ring up these guys they just say, 'Christ, you made such a mess of it last time I don't really want to talk to you anymore'" (senior science reporter, *The Telegraph* 2005). Another journalist described how in the past a particular source would call up science reporters for no good reason. As we have previously noted, *The Times'* respondent stated that he had known John Collinge for many years. Interestingly, he described the source-journalist relation between SEAC and science correspondents in the following way:

In the late 90s we were quite regularly called up to SEAC...sometimes for not very much at all. I think they just wanted to talk to us because they felt we could communicate the issues better [than non-specialists] (senior science reporter, *The Times* 2005).

The need to maintain good relations with sources is a constraint the journalists' appeared to internalise (and is exhibited in this respondent's reluctance to speak on the record about difficult sources). But that did not mean journalists' did not experience frustration with sources. One senior

science correspondent noted how Collinge would not be quoted on the upper limit figure he had given and how uncomfortable Hilton had been with Collinge's figure. The journalist stated:

...yes it was Collinge who gave that upper limit and although Hilton himself was uncomfortable with that I thought well look you know, I'm sorry guys you can't raise that point and then sort of retract, so that was one of the examples where I'm afraid I used my journalistic, um, I felt a reasonable upper limit should be put there (senior science correspondent, anon 2005).

To conclude this section it was found that several pressures and constraints were experienced by the science and health correspondents interviewed. Journalists identified several pressures and constraints they experienced in their day to day work. These were: readers, complexity, time and space, organisational hierarchy, sources and house-style, particularly in the tabloid environment. Part 3 of this chapter has presented the journalists' experiences of covering the Hilton study. I began by exploring their views on BSE as a story and the role of science reporting. I then focused discussion of three areas. These were: journalism at the stage of attraction, from copy to story, and science and health reporting: some observations on pressures and constraints. Part four aims to draw together evidence from the accounts of the sources and journalists presented here in order to understand how the Hilton study came to be reported.

Part 4 Information/Transformation: disseminating the study

The central question posed in this thesis: *how did stories about BSE come to be reported* is approached through a consideration of the transformational stages detailed in chapter four. The objective of this approach is to provide a life history of the *Hilton study as an event that came to be reported*. In this part of the chapter I combine the findings drawn from the interviews with sources and journalists in order to understand as fully as

possible how this event came to be obtruded and the processes that facilitated its obtrusion.

This part of the chapter focuses on the five transformational stages and the information events constructed at each stage in the case of the Hilton study. It is perhaps important to reiterate here the methodological concerns of the thesis in order to underline why this approach is useful. The realist ontological view supported here states that a physical reality was observed and interpreted by Hilton and his team. The weak constructionist epistemology adopted then seeks to understand how this reality was transformed into news reports. From the first formulated accounts of this physical reality a series of constructed events were generated in order to establish connections between this physical reality and the different social worlds trying to make sense of it.

The objective behind the transformational stages approach used in this thesis was in broad terms to attempt to understand how stories about BSE and vCJD came to be reported. The interviews with the source of the study - Dr David Hilton - and Amanda Nash from the Derriford Hospital's press office - enabled me to gather information on the reporting, reviewing, attraction and preparation stages in the chain of dissemination. The interviews with journalists have provided valuable insight into the stages of attraction, preparation and dissemination. The purpose of applying the transformational stages approach to this case study was to enable me to present as complete a view of the study's life history as possible. Transformational stages need to be seen in the context of what they are transforming: information. At each stage of the dissemination chain a new but related information event is created. Thus a dissemination chain contains information events in varying forms with different communicative goals and intended for different recipients.

In this analysis of the Hilton study it is noted that greater participation by sources would have greatly enriched these findings. The evidence

regarding transformational stages and information events drawn from the interviews still provides valuable insights into how events are transformed into news. At each stage information about the same event is transformed into another as table 25 (below) shows.

Table 25 Transformational stages and information events: Hilton Study

Reporting	Findings of study (IE1)
Reviewing	Journal paper (IE2)
Attraction	Press release (IE3)
Preparation	Journalists' copy (IE4)
Dissemination	News reports (IE5)

At the *reporting stage* Hilton had to present his findings to the steering group. The steering group suggested changes and these changes were made. The amended document provides the first formulated account of this event or IE1. The *reviewing stage* involved the findings being accepted as a research paper. At this stage the information was quite quickly turned into a paper. Notification of intention to publish was given to the Department of Health and the paper was submitted to the *Journal of Pathology* for peer review and minor changes were suggested. The paper was also required to be presented to SEAC prior to publication. The amended paper was the second information event constructed (IE2). The *attraction stage* moved the information away from the enclosed structure of official advisory sources and into journalistic environments. At this stage the findings of the paper were transformed into a press release (IE3) designed to promote a forthcoming issue of the *Journal of Pathology*. After some problems in defining and framing the information the press release was published on *Eurekalert*¹⁷. In the *preparation stage* journalists followed up on the press release from the *Journal of Pathology*. Some reports were more reliant on it

¹⁷ *The Telegraph's* respondent said that he was sent the press release electronically. Either he received an email alert from Eurekalert or from Wiley Interscience. He was unclear.

(*The Sun* and *The Mirror*) than others (*The Guardian*). Hilton was quoted in all reports but not all spoke to him, suggesting that the quotes featured in some news reports were lifted straight from the press release. In addition, all journalists interviewed recalled speaking to sources other than those cited in the press release. Having researched and prepared their copy (IE4) journalists submitted their work to their respective editors. In the final stage - the *dissemination stage* - editors and sub-editors worked on the journalists' copy. The subsequent news reports (IE5) marked the final transformation in this chain of dissemination. In spite of the fact that the journalists were alerted to the story by the same press release and used for the most part the same sources, it was observed that there were significant differences between the news reports.

The Sun and *The Mirror's* stories appealed to the person while *The Sun* appealed to 'nation' in its "us Brits" angle. *The Mirror* added a small picture of a cow taken with a convex lens giving the impression that it was 'mad'. *The Times* featured the story as headline news on the front page. It was accompanied by a headline using the word "time-bomb" and an inset image of a brain scan showing evidence of the plaques characteristic of vCJD. *The Times'* correspondent objected to the use of the word 'time-bomb' in the front page headline though accepted that it was done to make the piece more newsworthy. As was shown, *The Telegraph* carried two stories by the same journalist on the study's findings. On the same page another story had been co-opted as it concerned a victim of vCJD. A large photograph of the bed-ridden victim and his family was featured.

Analysis of the interviews with sources and journalists has provided valuable insights into the life history of this event. It has enabled me to explore the ways in which information was transformed at each stage in the chain of dissemination. Who and what motivated these transformations at each stage? In order to understand this it is necessary to examine the ways in which information events were *strategically predetermined*. This will be discussed in the following chapter.

Conclusion

The purpose of this chapter was to explore in detail how the Hilton study became news. How did it come to be reported and what exactly was reported? Thus the ultimate purpose of the chapter was to provide a life history of the event. I introduced the Hilton study event for reasons of context. I then moved on to explore the sources' perspective through analysis drawn from interviews with the author of the study, Dr David Hilton, and Amanda Nash, the press officer at Derriford Hospital, Plymouth. I looked at the roles of Dr Hilton as both author of the study and as a primary source in the wider dissemination of his findings. I examined Hilton's part at each transformational stage and focused on the pressures and constraints he experienced at each of these stages. I also included his views on the study's transformation into news reports.

I then focused on the perspectives of the journalists who wrote the stories based on Dr Hilton's research. I began by exploring their views on BSE as a story and the role of science reporting. I then discussed three key issues: *journalism at the stage of attraction, the journalists' story from copy to story, and the effects of strategic predetermination and routine dissemination*. Finally I drew together the findings from the interviews with sources and journalists to present the life history of the Hilton study as 'media event'. This was done in order to clarify the links in the chain of events that extended from the first scientific observations made about the physical reality of vCJD in this case, to the news reports based on these observations.

The following chapter brings together the different types of data in order to examine what the findings have shown about the ways stories about BSE and vCJD came to be reported in the press. The chapter will discuss the role of strategic predetermination in the construction and dissemination of the three events studied. I will argue that by close analysis of the stages of transformation and the material evidence they produce it might be possible to better understand how stories come to be reported in the press.

Chapter 7 Discussion - Information/Transformation and the Strategic Predetermination of Events in the BSE Story

This chapter revisits the structures and mechanisms identified in my literature review in chapter two. In addition, this chapter discusses information events and the transformational stages of the news chain. In this chapter connections are made between structures and mechanisms and their 'imprints' on the information events analysed in this research. I then argue that - in addition to the mechanisms identified - structurally non-specific aspects of strategic predetermination can be determined in the construction and dissemination of information events. It is suggested that these constructions take place over a series of stages in the dissemination process: from scientific findings to news reports. However it is also argued that aspects of strategic predetermination were resisted at various stages.

This chapter is divided into five parts. Part 1 discusses source structures (Government, Administration, Science and Science Journals) and their mechanisms as evidenced through the research. Part 2 explores what I term the structures of public dissemination: Journalism and Newspapers and the imprint their structural mechanisms had on the BSE story in 1990, 1996 and 2004. The chapter then goes on in part 3 to discuss the findings and how they relate to the transformational stages and the information events constructed at each stage as posited in chapter four. Part 4 presents a discussion of strategic predetermination while part 5 explores the ways in which aspects of strategic predetermination were resisted in 1990, 1996 and 2004.

Part 1 Source structures and mechanisms in the BSE ‘story’: 1990, 1996 and 2004

It was observed that each structure was characterised by specific mechanisms¹. This thesis has argued that these mechanisms had an impact on the way source structures constructed and disseminated information. Could imprints of these structural mechanisms be determined in the information events analysed? This part of the chapter discusses the core structures and mechanisms identified in relation to the findings presented in the previous two chapters.

In section 1.1 I discuss the difficulty in finding the imprints of the Administrative structure and suggest that its specific mechanisms might account for this. I also discuss how a structural mechanism of Government helped to reinforce Administrative neutrality. In section 1.2 the structural mechanisms of Science are discussed in relation to the impact they were seen to have had on information events and the circumstances of their construction. In section 1.3 I discuss the mechanistic tension between the work of Science Journals and the need for publicity.

1.1 Government and Administration: searching for imprints

The structures of Administration and Government are two of the most prominent structures identified in this research. But specific evidence of their dissemination activities can be very difficult to determine in news reports. Terms like ‘Ministry officials’ and ‘government spokesperson’ are commonplace in news reports and do little to help a reader identify the specific source of a story. What insights can this study offer into the structural relations between Government and Administration in the BSE story? And what structural imprints might each have left on information events?

¹ See chapter 2 literature review

I discussed the work of Heclo and Wildavsky whose 'Whitehall Village' conception provided a basis for understanding relations between Higher civil servants and Ministers. Unfortunately no evidence from the quantitative or qualitative research could be found for the presence of the Higher civil service in the chain of dissemination in any of the three events analysed. Perhaps this can be attributed to the view that government and information are considered a "private affair" by politicians and civil servants as described by Butcher and Drewry (1991:172).

Also, I discussed the work of policy promoters in the structure of Administration. Some evidence of their presence was determined in news reports in 1990, 1996 and 2004 but as noted before, in vague terms like 'Ministry spokesperson'. Clear evidence of their presence in the dissemination chain could be observed in 1990 and 1996 through the analysis of press releases. In both cases scientific findings 'sparked' the dissemination process and in both cases, no offer of findings or details of how to access findings were attached. It was noted too through the quantitative analysis of press releases, how press releases from Ministries in both cases were comprised of the voices, views and statements of other official sources - except of course - Administration.

From these findings one would imagine that the Ministries played very neutral roles. And yet the stories presented in chapter one painted quite a different picture. In 1990 MAFF co-ordinated the communications strategy, notified Ministers and held the scientific findings. In 1996 Higher civil servants were present in key meetings leading up to dissemination and were involved in formulating the communications strategy and the writing of Dorrell's statement. As was noted by Butcher and Drewry the representatives of this structure have a 'real and distinct influence in important matters (Butcher and Drewry 1991:22).

In 2004, although the Government was not seen to be involved in the dissemination chain, there was the DoH in the shadows and holding the purse strings². So how might this lack of imprint be accounted for? It is argued that it might be accounted for by the mechanisms of Administration. Furthermore, in 1996 a mechanism of Government helped to conceal it further still. In chapter two I identified some of the key mechanisms of Administration. These were a *co-operative and reciprocal ethos*, *enclosure* and the *GIS guidelines*.

Evidence from the BSE Inquiry archive³ shows how in 1990 knowledge of the findings was shared among members of other departments within the Ministry, departments outside of the Ministry, other government agencies and a Minister⁴. It was also shown that a MAFF-led communications strategy was planned and executed in concert with the DoH and the British Veterinary Association. This all suggests an approach that is co-operative and reciprocal and confirms Jasanoff's conception of the structural inter-relations of official sources as "closed, co-operative, informal and consensual" (Jasanoff 1997: 228).

Enclosure as defined by Palmer (2004) consists of the right to silence, and the choice of forms of communication (Palmer 2004: 3). Enclosure was evident across all three case studies. Administration can be seen as directly responsible for the enclosure in 1990 and 1996 and potentially able to enclose in 2004. In 1990, MAFF led the communications strategy, controlled access to the findings and did not disseminate them - not even to the *Veterinary Record*.

In 1996, the DoH led the communications strategy and again, no documents were made available the day the findings were made public. However five press releases 'interpreting' them were issued from official sources, through the Ministries, as seen in chapter five. In 2004, Hilton was contractually obliged to inform the DoH of his intention to submit his paper on vCJD. The DoH did not

² Dr Hilton stated the study was funded by the Department of Health – see chapter 6

³ As discussed in chapter 1

object. The GIS guide was not so much evident from the research but I argue that the effects of its impossible ethos' were very much in evidence. The blurring of official source types in 1990 and the opposite effect in 1996 was a particular puzzle to me. Why were the CVO, MAFF and the Central Veterinary Laboratory practically indistinguishable from one another in journalists' news reports in 1990 when in 1996 it was noted that journalists made more distinctions between similar source types?

I believe the answer may lie in the ethos of the GIS that explains (and accepts that) lines are difficult to draw between politics and administration. But one must try to draw them nevertheless. Neutrality from party politics is fundamental. As was quoted in chapter two:

To be able to do their work properly Press Officers have individually to establish a position with the media whereby it is understood that they stand apart from the party political battle but are there to assist representatives of the media to better understand the policies of the government of the day (GIS Guide 1998: 35).

In their day to day work most government information officers will not find themselves dealing with a political crisis and so the usual conventions apply in demarcating lines between source types. Thus it is a convention - also used and accepted by journalists - not to name Ministry press officials who give journalists information. This helps to reinforce the Administrative structure's 'neutral role' in politics. This neutral role was reinforced in 1990 as was evidenced in the content of the press release and the letter from the CVO to the Veterinary Record. MAFF issued the release but aside of the masthead no other imprint could be determined.

⁴ see chapter 1, part 2 The Link

In 1990, whilst the evidence from the BSE Inquiry stated that Ministers knew of the finding, it was not considered to be a political crisis. Therefore it was not necessary to reinforce neutrality as the usual conventions applied that guaranteed them that neutrality. However in 1996 the event in question *did* constitute a political crisis. As a consequence source types and their affiliations were more carefully delineated by journalists and by press officers in their press releases. Importantly, where Administrative sources were the most used primary source in 1990, they were not used as much as either Government sources nor Science sources. The press releases they issued on the link were little more than the statements from Ministers, from the CMO and from SEAC. It is quite usual for Ministries to 'speak for others' as they usually get quoted in news reports. But in the majority of news reports on 21 March the representatives of Government and Science took centre stage.

I would argue that political crisis, therefore, served to amplify the neutrality effect by rendering the representatives of the Administrative structure silent in the 1996 coverage. But as the story presented in chapter one demonstrated, Administration's representatives were very much part of the dissemination of this event. It was noted too how Romola Christopherson, the then Director of Communications at the DoH was a key part of the dissemination process as the Government tried to work out what to do. This finding reminded me of Davies (2000) observations on the power of professional communicators in government and its Ministries. Davies stated: "These trends indicate that the business of news production is becoming ever more absorbed into the British political process and that at the centre of this transition is an increasingly powerful class of professional communicators" (Davies 2000: 39-40).

The political crisis of 1996 resulted in Stephen Dorrell accepting Ministerial responsibility for the situation by making the centre-piece statement to the House of Commons. As a consequence, the press releases from MAFF and the DoH focussed on the Ministerial statements and the majority of news reports were

written either as a direct consequence of them or 'in the light' of them. This was how the Ministries reinforced the neutrality that the civil service demanded.

As discussed then, the Administrative structure - policy implementers and policy promoters - have their own strict rules regarding the separation of the political from the administrative. Dorrell took Ministerial responsibility which shaped the way the press releases were constructed and the event was reported. But as his evidence to the BSE Inquiry demonstrated, he took this responsibility at the behest of the Cabinet. He could not disagree, because as a member of the Cabinet also, he had to observe the rules. It could be argued that the mechanism of Collective Cabinet responsibility played a role in the dissemination chain and in the formation of information events. Which is a politician likely to choose to preserve: temporary tenure at a government Ministry or long term political career? Will he or she act in the best interests of their Ministry or their Government; that is to say will they act in an administrative or political capacity? It has to be problematic for the perceived neutrality of the civil service when they have to construct and disseminate statements from Ministers in times of political crisis.

1.2 Science: shaping findings and shaping the news encounter

The structure of Science has played a significant role across all three events studied in this thesis. All three events were sparked by scientific findings that were either in some way connected to Government and Administration (1996 and 2004 studies were funded by the DoH) or were passed to the Administrative structure (from Bristol University Veterinary School, to the Central Veterinary Laboratory to MAFF in 1990). But how evident are its structural mechanisms, identified in my literature review in chapter two as norms of scientific investigation and institutional affiliation and status? How did these mechanisms affect the construction of information events?

Abrutyn (1998) observed how in the past science and medicine was generally discussed in science and medical journals, but notes how this has changed as the audiences for science news have broadened (Abrutyn 1998: 470). As I have said, Science and its agents have played a key role across the three cases studies analysed. They have experienced significant and highly consistent presence in all the studies presented but have come to dominate the field in the most recent case study in 2004.

Have BSE and vCJD become issues of science and health when only eight years prior to Hilton's findings - his study began two years after the 'crisis' in 1996 - they were issues perceived to have an effect on industry, agriculture, economics, international relations, the education system and many more? Was Hilton's study a science and health story because it was framed that way? This issue will be discussed further in part 3 of this chapter. In the remainder of this section I discuss the two mechanisms identified in chapter two and their effects on the construction and dissemination of information events.

As discussed in chapter two, the norms of scientific investigation as a mechanism help in understanding the perceived gulf between scientists and the world outside it. It was noted that for Gill (2002) drawing on Singleton and Straight (1988), scientific investigation as a process has three features: empiricism, objectivity and control features (Gill 2002:17-19). Empiricism is of key importance here, since all three case studies involved the reporting of scientific studies. Scientific investigation and its empirical basis produced the information that provided the basis for the news stories analysed. In all three cases the norms of scientific activity created the events subsequently reported in the press. Therefore this mechanism had considerable impact on the construction of events in all three events studied in this thesis. Science as a structure requires evidence-based, rigorous research and the product of such activities provided the first formulated accounts of 'what had happened' in 1990, 1996 and 2004.

The operation of objectivity as part of scientific investigation was observed in the findings of the qualitative research. Dr Hilton's insistence that the findings were inconclusive was in line with the norms of scientific investigation. Even if a researcher wanted to find something if no clear objective truth had been extracted from the data then scientific objectivity dictates that the 'truth' was inconclusive. However, this 'truth' was a source of considerable frustration to at least one journalist.

Control in scientific investigation refers to the delimiting of potentially influential environmental factors in experimental situations and so has little application here. As an aside, I would suggest it could be very acceptably adapted and applied in an understanding of *how scientists seek to control the interpretation of their science*. This might be particularly relevant since as the market for science stories increases, more and more scientists are brought into contact with media representatives.

Institutional affiliation and status is important within the structure of Science and as has been noted, it is also important to journalists in their selection of sources. But what effects of this mechanism could be observed in the findings? As in the social sciences, in order to apply for research funding one needs to be formally affiliated with an applicable institution. The first point to make here is that research seldom takes place without institutional affiliation because it is a requirement of funding. In each of the three events, research was conducted because the work was supported by institutions that had obtained funding to produce what they produced. It could be argued then that the construction of the first formulated accounts of events very much depended on institutional affiliation. Furthermore, it could also be suggested that since researchers increasingly approach the media because they want to raise their chances of receiving funding (see Gopfert in Owens 2002: 710) then funding plays a key role in *how stories come to be reported*.

This thesis has shown how institutional affiliation and status of Science sources played a role in the sources selected by journalists. It was also noted - as already observed - that in 1990 the affiliations of Science representatives were indistinct.

In terms of the overall ethos of Science as a structure, Wright made an interesting observation: "...there is little room for 'I don't know'. Or 'we were wrong'...why must science be portrayed as one big, happy success story" (Wright 1995: 15 in Zimmerman et al 2001: 54).

Nelkin (1995) observed that scientists are increasingly attempting to promote their work but want to control the interpretation of findings. Whilst this is clearly evident in the 2004 case study, the enclosure of the 1990 and 1996 events suggest that it was not Science that was engaged in promotion and control. It seems that Science was dictated by a policy community of official advisors, policy implementers, and Ministers in the story of BSE and vCJD.

As the BSE Inquiry found, SEAC were frequently asked questions by Ministers, to which their answers were 'We don't know'. These answers were not accepted and the structure of Science was forced to deliver answers in a way that ran counter to scientific investigation. This point was observed in chapter two by MacNaughton and Urry (1998) who argued that governments who seek authority by drawing on 'sound science' do not appreciate the indeterminacy of scientific investigation (Macnaughton and Urry 1998: 259). Maybe it is objective science as exemplified by Dr Hilton's approach that can say, *I don't know or the findings were inconclusive*. Politicised science, media-ised science is not afforded that luxury.

1.3 Science journals: mechanistic conflict?

As has been discussed in part 1 of this chapter, the rather awkwardly entitled structure of Science journals played a key role in all three events to varying degrees. But what were the effects of the mechanisms identified in chapter two:

peer review and in-house public relations? The operation of these two mechanisms illustrates a tension within such organisations. This tension was demonstrated in the 2004 event: between Science and Journalism. In some respects they also have similar pressures as newspapers. On the one hand journals are seen as the nursery of ideas bringing forth news research, rigorously and systematically carried out and checked, refined and cleared for publication through peer review. On the other they must survive in an increasingly competitive market. Journals need to attract attention, they need to promote themselves.

Peer review was clearly of paramount importance to Dr Hilton and his colleagues - as it is for most researchers whose work is funded by the public purse. The paper presented to the journal - the information event - was constructed out of that peer review process. In 2004 peer review was a key component in determining the publication of Dr Hilton's findings. The qualitative research findings demonstrated how the peer review process was considered by Dr Hilton to be a minor obstacle to the publication of the research, as only a few minor changes were suggested.

As a peer reviewed journal, this might explain why the CVO chose to write to the *Veterinary Record*. However, it is perhaps relevant to note that the *Veterinary Record* referees all contributions - excluding letters⁵, so the letter benefited its sources by appearing in a well respected scientific journal but allowed them to avoid the peer review process and having to publish specific findings. Therefore, since peer review was avoided in 1990 no evidence of its effects can be determined in this case. Perhaps the absence of peer review speaks volumes?

As was noted in chapter two, Science journals as structures play a central role in the dissemination of research to the science community. But it was also noted that as publications within capitalist frameworks, they are like newspapers in that

⁵ See <http://veterinaryrecord.bvapublications.com/misc/ifora.dtl> Information for Authors

they must survive in a competitive market. Therefore, they must promote themselves. It could be argued that as a structure, Science journals exist somewhere between the structures of Science and the structures of Newspapers. Therein lies a tension, as revealed in the 2004 case study. According to Preda (2005) science journals are the “centre of medical knowledge production” (Preda 2005: 41). It was this role of the Science journal that was of paramount importance to Dr Hilton in his decision to publish his findings. But as seen in this thesis they are also commercial concerns that in order to survive must promote their activities in the wider public sphere. This promotional work was the cause of significant tension between Dr Hilton and the press officer working for the *Journal of Pathology*. This tension can be understood perhaps through the client orientation of the press officer. The press officer used journalistic methods to attract journalists to the story she was promoting for the *Journal of Pathology*. Her client orientation was pitched towards the journal and not Dr Hilton.

While not a consequence of its own mechanisms, science journals also played an important role in the communications strategies of official sources in 1990. Thus Science journals can be used as strategically elected destinations for information by sources in much the same way as newspapers. The evidence for this was found in the content analysis of news reports and press releases. First I found that the *Veterinary Record* was cited as a source. The content analysis of press release showed that journalists received a copy of the same letter from the CVO sent to the *Veterinary Record*. The archival research from the BSE Inquiry showed that the dissemination of the findings concerning the cat with FSE was tied to the publication cycle of the *Veterinary Record*.

It was suggested that this sought to give the impression that the public and professionals were informed at the same time. But it also suggests that the structures of Government, Administration and Science could control the story more effectively if it came out on their terms.

To conclude this section it has been argued that Science journals are the *nursery of ideas* and *commercial products*. This I have argued brings a tension to this structure that was evidenced through the conflict between scientist and press officer in the 2004 event. I have also argued that one science journal in particular was also an important strategic destination for the communication strategies of Administrative sources. In the following part of this chapter, attention shifts from source structures to structures of public dissemination: Journalism and Newspapers.

Part 2 Structures of public dissemination

In this part of the chapter I turn attention to the structures of public dissemination: Journalism and Newspapers. I will discuss the impact the structural mechanisms of Journalism and Newspapers had in the construction of information events. As explained in chapter two, the structure of journalism was devised in order to separate out the work of journalists from their newspapers. Of course, this separation in many ways is arbitrary and accepts the fact that they do, of course, over-lap. But their goals are different. The goal of the newspaper is to stay in circulation and increase its market share, to produce a daily paper in order to compete and to attract advertising, and to pay profits to share holders. The goals of journalists differ. They want to produce newsworthy copy using sources they trust, to compete with colleagues from within their own newspapers and from others, to get exclusives, and to earn a wage. It might be controversial to suggest that it is entirely possible for each structure to exist without the other. However arbitrary it may be, it was important for this research to attempt to draw a line between the two structures. Not only did it allow for analysis of their inter-relations, it also enabled me to understand the motives and techniques each structure used in the construction of information events, particularly in the 2004 case study.

2.1 Structures of Public Dissemination: Journalism

The mechanisms discussed in my literature review in chapter two will be explored in this section. To recap, the mechanisms identified were *the NUJ Code of Practice*, news values, objectivity and source selection. Each mechanism is now discussed in relation to the imprints left on the information events identified through the research, beginning with *the NUJ Code of Practice*.

As argued in chapter two, the *NUJ Code of Practice* acts as an internal mechanism that sets out appropriate professional practices. This mechanism attempts to guide, shape and form the work journalists do. The *NUJ's Code of Conduct* has set out the main professional principles in British journalism for 80 years.

Evidence of principle 7 was found in the event on 20 March 1996. It states: “ A journalist shall protect confidential sources of information“ (ibid). Kevin Maguire’s protection of his source and *The Mirror’s* willingness to accept this, demonstrates the journalist’s internalisation of this principle. In addition, *The Telegraph’s* journalist also protected his source by not attributing the figures used. The *NUJ code* emphasises the responsibilities of journalists in “eliminating distortion” (principle 2 ibid), but there was evidence to suggest that whilst journalists might fight this distortion, the structure of Newspapers does not. In 2004 *The Times’* journalist noted his dissatisfaction with the ‘time-bomb spin’ placed on his story by the news desk. Here the news desk was not working in the interests of its journalism but in the interests of the newspaper.

This thesis has shown that news values act as important internal mechanisms in shaping news reports and are also used by sources to attract journalists. The findings identified the presence of nine core news values in the news reports sampled. These core values were found in all news reports across the three events. These values were *frequency, amplitude, meaningfulness, consonance, elite persons, negativity, competition, predictability* and *prefabrication*.

As well as values shared by all reports across the events sampled, there were also differences perceived in the news values of each event. Continuity was a value identified in reports in 1996 and 2004, but not in 1990. It was suggested that this was due to the fact that the BSE story in the media was in its early stages. In 1996 co-option was used across the sample. This had only been done previously by *The Mirror* and *The Telegraph* in 1990 until the 'link' statements in 1996. It was suggested that the magnitude of the story drove newspapers and journalists within their competitive environments to provide more stories, from different angles, expressing a wider range of views than in 1990. In 2004 no additional news values were added. And it was noted how the values perceived in news reports matched the values perceived in the *Journal of Pathology's* press release. But it was also underlined by the findings of the qualitative research that individual journalists had their own sense of the prime news value of their stories.

For *The Sun's* journalist, reader/public interest was the story's news. For *The Telegraph's* journalist the value of the story was ambiguous but the structure of Newspapers via the "senior level" intervened. For *The Times'* journalist, the story had continuity since he had covered the false leak story months earlier and knew the study was coming to its conclusion. It could be argued then that the journalistic sense of the newsworthiness of the story was determined in two ways. By the requirements of the structure of Newspapers in the case of *The Sun* and *The Telegraph*, and on journalistic continuity in the case of *The Times'*.

The research presented in this thesis suggests that journalistic news values can be seen as mechanisms that have the ability to construct and shape information events at the stage of preparation and dissemination. But it is argued that other structural concerns can be articulated through news reports. Quite simply journalistic news values are not the only values to be found in news.

Another important mechanism for the structure of Journalism was identified as *objectivity*. I now discuss the uses of journalistic objectivity revealed in the

findings. McNair's three characteristics are used to underpin this discussion. To re-cap, the three characteristics were: the separation of fact and opinion; provision of a balanced account of a debate or issue; validation of journalistic statements by reference to authoritative others (McNair 1998: 68). The requirements of objectivity tend to lead journalists to rely on authoritative, socially accredited sources to quote on newsworthy events. This was evidenced throughout the research. In all but one instance - 20 March 1996 - journalists were cued-in to events by authoritative sources. By establishing *what has happened and who is involved* first, sources tend to shape how objectivity is to be achieved.

Another important way in which journalistic objectivity is achieved is through balanced reporting. This balance tends to be translated in news reports as balanced citation and quoting of sources. This was evident across the news reports sampled in the quantitative analysis but on 21 March 1996 it was noted that whilst this balance of non-official sources was achieved, these sources had no unified communications strategies. Official sources, on the other hand, did have a unified strategy.

In 2004 the qualitative findings demonstrated one journalist's approach to balance. While *The Telegraph's* journalist was concerned to obtain balance by going beyond Dr Hilton and his team, he selected Professor Collinge to provide balance, knowing he had a pessimistic view. Therefore, the journalist perceived Dr Hilton's inconclusive results as frustrating and turned to a source who provided a pessimistic forecast.

The findings suggest that all journalists interviewed interpreted balance as *going beyond the primary source*. They did this to varying degrees. *The Sun's* journalist spoke to Professor Collinge and to the HPA. *The Times'* journalist also spoke to Professor Collinge and Dr Hilton's co-author Professor James Ironside. But they all stayed well within the boundaries of Science. The exception is found

in *The Telegraph's* coverage, with its inclusion of the co-opted story about the young victim of vCJD. The anonymous senior science reporter's experience with factual accuracy also emphasizes the aspect of journalistic objectivity outlined in chapter two. It was noted that for Soloski (1989 cited in Tumber 1999) objectivity is part of news journalism as a profession and as such, it plays a key role in controlling journalistic behaviour. Journalists' claims for objectivity therefore partly rest in their claims to be reporting 'facts'. For Soloski journalists take no responsibility for the veracity of such facts because these facts came from sources (Soloski 1989 in Tumber 1999: 308). Thus they stand back from facts or let the facts do the talking. In the case of the anonymous senior science reporter, the facts were seen to be a source of frustration. The experiences of this journalist demonstrate how the pursuit of objectivity is a fraught process.

It was suggested in my literature review in chapter two that source selection and source dependency are internal mechanisms that contribute to 'who', 'what' and 'when' issues are reported. The discussion of source-journalist relations in chapter two noted how much work in the sociology of journalism confirms the dominance of official sources in news reports (Gieber 1964 in Tumber 1999, Sigal 1973, Gans 1979, Hall et al 1978). In the context of science and health reporting in the British press, Entwistle (1995) found that journalists "preferred to quote respected leaders in the field and trusted contacts who had previously supplied lively comments" (Entwistle 1995 cited in Conrad 1999: 286).

My research findings are also strongly suggestive of a dependency on official sources for information. The findings of the content analysis revealed that reporters overwhelmingly used official sources as both primary and secondary sources of information regardless of correspondent type. However it was observed that the co-option around the story on 21 March 1996 resulted in a wide range of different source types facilitated by the deployment of a range of specialist and non-specialist correspondents. Was the drive behind the presence of so many co-opted stories featured in news stories journalistic? Or did the

demand come from the structure of Newspapers operating in a competitive environment? The content analysis of news reports does not provide enough data to answer that question. However it is a reasonable assumption that at the very least newspapers would strive to control journalistic resources for budgetary reasons.

The event on the 20 March 1996 demonstrated the trust the journalist placed in his non-attributed “unofficial, unauthorised” source. But clearly this source was an official source. The source was merely acting in an unauthorised capacity. Conrad (1999) observed how for science reporters the demands of journalism determine who is approached. But I think his claims can be extended to include most types of specialist reporter. He argued: “The journalistic ethos suggest a source should be a “top guy in the field” to safeguard credibility” (Conrad 1999: 291). This ethos was evidenced in the qualitative research findings, too. The journalists interviewed for the 2004 case study ‘went to the top guy’ by approaching Professor Collinge who was Head of the MRC’s Prion Unit and a longstanding member of SEAC. Eide and Hosen’s (1994) finding is also confirmed here. They argued that: “Journalists seem to prefer sources who can provide clear-cut findings and express clear-cut points of view” (Eide and Hosen 1994: 428). Certainly in 2004, Professor Collinge was more prepared to provide a clear-cut view to *The Telegraph’s* journalist than was Dr Hilton, albeit a negative one.

To sum up it was found that in 1990, 1996 and 2004 journalists cited official sources most often (as primary and secondary sources of information). Although other source types were cited in news reports (for example, the National Farmers Union, Opposition MPs, and commercial interests like the Pet Food Manufacturers’ Association), the number of quotes from such sources are dwarfed by those included from official sources.

Allied to the notion of source selection is that of source dependency. Source dependency is an important internal mechanism that determines if, when and how stories are covered. Shoemaker and Reese's (1991) point about what journalists' *can and cannot know* is an important one.

For Sigal (1973) source dependency arose out of the need to access authoritative information swiftly and regularly and this encouraged dependency on official sources who were more able to routinely disseminate the quantities and quality of information needed on a day to day basis (Sigal 1973 in Tumber 1999: 230). What evidence can be seen of source dependency from the findings presented in chapters four and five? Source dependency is suggested in the way all three events were covered in similar ways on the same day by almost all the newspapers sampled, across the three events. The source dependency here might be seen as a consequence of journalists' reliance on press releases. In each event (with the exception of *The Mirror's* enterprise journalism) all stories were the subject of press releases which were issued the day before they were embargoed for release and distributed in routinised ways. Furthermore, the 2004 case study revealed that none of the journalists' interviewed read the report upon which the press release was based. They read the press release and spoke to sources. Therefore, not only were journalists' dependent on sources to alert them to events, they were dependent on their information subsidies and the sources cited within them.

Rock (1973 in Cohen and Young 1981) saw the dependency on sources as a consequence of news production processes (space and time) that acted as constraints on journalistic enquiry. The journalists interviewed for the 2004 case study remarked upon these constraints. The result of time and space constraints is that journalists rely on sources that can supply quantities of reliable and regular information. This may well go some way to explaining the patterns of official source use identified in this research.

In the context of science journalism it was observed through the qualitative research how the complexity of the science reported by science correspondents acted as a constraint for journalists. For Nelkin (1995) the technical nature of science facilitated source dependency. The research showed that all news reports were almost entirely reliant on scientific sources to explain what the findings of Hilton's study meant. It was also observed how this dependency was made apparent through the conflict over the interpretation of figures between Dr Hilton and Professor Collinge. *The Telegraph's* correspondent had a strategy for dealing with this: he used the articles he wrote to express his frustration at the lack of clarity of scientific findings.

To sum up here my findings support the assertion made by Conrad who argued that authoritative sources influence news stories in two ways: by directly providing quotes to journalists in order to enrich the story and indirectly by providing information, interpretation and perspective (Conrad 1999: 300). I have discussed the mechanisms identified as structurally specific to the structure of Journalism. I have sought to explore the imprints evidenced in the research of these mechanisms. In the following section I explore the mechanisms of the structure of Newspapers evidenced through the research.

2.2 Structures of Public Dissemination: Newspapers

In chapter two of this thesis I discussed the mechanisms I considered to be of importance to the structure of Newspapers. That is to say, the aspects specific to the structure of Newspapers that enabled them to construct and publish the news reports (a form of information event) analysed. These mechanisms were: bureaucratic and hierarchical organisation, partisanship and agendas and campaigns. What evidence of these mechanisms can be determined through my research findings? What imprint did they leave in the dissemination process? I begin by discussing bureaucratic organisation.

In all three events it is observed that the bureaucratic operations of source structures through the use of routine dissemination provided the connection between the source and the journalist and consequently the Newspaper. Newspapers are bureaucratic organisations, and as observed by Fishman (1981) they are geared to deal with other bureaucracies. The provision of predictable, reliable material suits sources and it suits the operation of news bureaucracies. Resources can be effectively and efficiently deployed. In all three events press releases were supplied and used as the basis for much of the reporting. It was noted that even in the 1996 event when Newspapers made decisions to carry more stories, many of these stories were still framed in the light of 'the statements' not the science.

Routine dissemination is constructed in such a way as to fit in with the news cycle as dictated by the news bureaucracy (as discussed by Berkowitz 1991, Burns 1998, Meyer 2002). But it also dictates what is available to the journalist and when it is available for newspapers to publish. This was seen in 1990 and 2004. In the 1990 event, it was observed that the *Veterinary Record* and its publication day played a pivotal role in the decision of when to publish the findings on the dead cat. In 2004 publication of the findings of the Hilton study were tied in to the publishing cycle of the *Journal of Pathology*.

Palmer (2004), who sees timing as an important technique deployed in source strategies, shares a concern with this aspect. For Deacon et al (1999) being able to predict "nature, timing and presentation...to fit with media logic" is an important benefit of routine dissemination strategies (Deacon et al 1999: 25).

Hallin (1986) underlined the way official sources and their "timely flow of information" complemented the day to demands of journalism (Hallin 1986: 71). I would argue that the demands of journalism though, must meet the demands of newspapers which must in turn meet the demands of markets and readers. Paletz and Entman (1981) support the view that news organisations are like any other capitalist institution in that they are hierarchically organised with structured

division of labour that work on a day to day basis within an organised and routinised framework to maximise efficiency and profit.

It is concluded here that aspects of bureaucratic organisation of Newspapers helped to shape and influence the coverage of the stories through their ability to dictate how resources were deployed and how quickly the product was to be received. Their organisations are such that journalists are differentiated in terms of status and expertise and tied to relentless news cycles dictated by the structure of Newspapers which in turn place them in positions where they are all too eager to accept information subsidies. It is suggested that bureaucratically organised sources use two strategies. They can adapt their dissemination to fit in with news cycles as in the 'leak' on 20 March 1996 and the strategically organised attempts to routinise the crisis in 1996. Or they can try to dictate to news cycles as in 1990 and 2004, through embargoed press releases albeit tied to the publication cycle of journals.

It was observed ⁶ that Newspapers as structures can shape news content through partisanship. Franklin's (2004) extension of Seymour-Ure's conception of 'press-party parallelism' is useful here. He defines this as occurring when:

...politicians and media share political sentiments there is a greater potential for relationships to be cooperative and consensual where they differ contacts are likely to be less frequent but more conflictual (Franklin 2004: 20-21).

Can the effects of partisanship be seen in the findings? I argue that partisanship can be evidenced but it is generally very subtle and difficult to detect. In 1990 it was noted in chapter four that *The Telegraph* perceived the information event in a subtly different way to other newspapers. *The Telegraph's* allegiances to the Conservative Party have been well documented. The framing of its report

⁶ see literature review in chapter 2

presents the event in less alarmist terms than other news reports that day. *The Telegraph's* correspondent described the event as the first “naturally occurring case of FSE”. No source was attributed to this, no other news report used this term and it was not used in the press release distributed by MAFF. The use of this angle frames the event in a less sensationalist way. This was in sharp contrast to *The Mirror's* coverage. Its oppositional stance to the government of the day might be partially evidenced through the number of articles it contained. In addition its use of unauthorised scientific and public sources suggests its willingness to seek views likely to be antagonistic towards the government.

The Mirror again showed evidence of its oppositional stance on 20 March 1996 by publishing the first story on the link between BSE and vCJD, in spite of their being no formal attribution. Maguire explained this by saying: “They didn't know the source. I think they trusted me because of my track record...Although it was said on the morning it appeared with grim humour, ‘if you're wrong you're on you own” (Maguire 2002: 9). Its exclusive story by Maguire came from a ‘mischievous source’ described as “unofficial, unauthorised”. This source acquired the information from a source described in a way that reflects the blurring effect between official source types observed earlier in this chapter. Maguire defined the source as: “If you count official government, taking all advisory and civil service and political then I'll go for that” (Maguire 2002: 10).

Another possible example of partisanship may be evidenced from the absence of stories on the link on 20 March 1996 in both *The Sun* and *The Telegraph*. Both newspapers were still supportive of the government at that time - although *The Sun's* support was wavering. Neither reported the story prior to its official dissemination. Why would *The Sun* and *The Telegraph* be ‘left out of the loop’? *The Sun's* allegiance may be confirmed in its decision to include an article on 21 March 1996 by Douglas Hogg on the facts about BSE and the safety of British beef.

Newspapers as structures are capable of setting news agendas, which in turn can determine the focus of new reports. Setting news agendas mean that Newspapers as structures can dictate what is news or what aspect of news to obtrude. Sometimes Newspapers mount campaigns in support of their agendas. Whilst this has been seen in the BSE story (*The Sun's* sausage campaign in 1990 is a good example⁷), the news reports sampled provided very little evidence of Newspapers setting agendas or campaigns. The only evidence found was in *The Mirror's* oppositional stance in 1990 and 1996, although *The Times* correspondent also clearly identified *The Mirror's* stance as 'campaigning'.

As outlined above this might well be explained by partisanship. But another reason for its approach might be understood by considering *The Mirror's* place in a highly competitive market. Since the 1980s *The Mirror* has been locked in a fierce circulation war with *The Sun*. This hostile environment saw the demise of Britain's youngest tabloid, *Today*, the first tabloid to close since the *Daily Sketch* in 1971. *The Mirror's* formulation of agendas was perhaps as much about differentiating itself from the competition and succeeding in the market as it was about expressing oppositional views on the government of the day.

It is concluded here that Newspapers can and do develop their own agendas and campaigns that reflect their own interests but there is little evidence of this in the findings. Partisanship can be a strong motivational force in the formation of a campaign or agenda. But the need to compete in the competitive environment of the structure of Newspapers might also be a motivational force too strong to resist.

So far in this chapter I have discussed the key structural observations drawn from the findings. Conclusions will be drawn in the final chapter. Having discussed the structures and mechanisms of the BSE stories in 1990, 1996 and

⁷ 12 days after the FSE story was reported, *The Sun* launched a campaign: 'The Sun says: forget all that rubbish about Mad Cow Disease and get stuck in to two FREE succulent sausages on *The Sun*, Front page 23.5.90. It should be noted that this was also 17 days after John Gummer was photographed apparently force-feeding his daughter a burger at a county show. This was a

2004, I now explore what happened to the information in each case in part 3 of this chapter. I now discuss the findings in relation to transformational stages and the construction of information events in the process of dissemination.

Part 3 Information Events and Transformational Stages

In chapter three, five transformational stages were posited in the process of dissemination. These stages represent points where information is transformed from one information event to another. Each information event is transformed into a new but related information event. As discussed in chapters four and six, the objective behind the transformational stages approach used in this thesis was to attempt to understand how stories about BSE and vCJD came to be reported. I wanted to see how much of the life history of each event could be determined from news reports and press releases and I wanted to explore through interviews the information events prior to them. This part of the chapter discusses what light the quantitative and qualitative research can shed on the processes of dissemination. This section begins by discussing the patterns of use of indicators of *time* and *form* observed in 1990, 1996 and 2004. I then explore the 2004 case study: what can be discerned about the stages of dissemination in this case and the information transformations that took place?

3.1 Transformational stages and information events: indicators of time and form

The content analyses sought to find evidence of prior information events and processes of dissemination by counting indicators of *time* and *form*. As was shown in chapter five, the most common evidence of dissemination in news reports was of the *time* type. It was noted that the use of *time* indicators had little to do with informing the reader of specifics of dissemination but rather was a journalistic convention used to articulate topicality and presence. By contrast

stunt set up by *The Sun* newspaper (*The Sun*, 6 May 1990 Front page).

form indicators were most often used in press releases although this does not mean access was given to documents upon which press releases were based in the three events.

In 1990 and 1996 no actual, tangible evidence of *form* was offered or attached to the press releases issued by MAFF and the DoH beyond the statements of official sources. It was argued that in these cases the only information journalists were given were the official interpretations of the information in question: press releases and press conferences. In 2004, the press release stated that copies of the Hilton paper could be obtained prior to publication for journalists' information but the report itself was not attached.

I suggested that the differences in the use of *time* and *form* indicators between the press releases and the news reports sampled could be accounted for by a consideration of the communicative goals of each. That is to say, news promoters want to steer journalists in the direction of what they are promoting whether it is a policy or a product. Thus the *form* – answering the 'what' question - is central to that promotional goal. Journalists on the other hand, privilege topicality. Their use of *time* indicators confirmed this point.

It was noted that on 21 March 1996 the coverage contained high counts of *time* and *form* indicators. Both were invoked by journalists and presented as evidence of a major crisis. Thus it was argued that *time* and *form* can be used for strategic purposes: whether instilling a sense of topicality to news or routinising a crisis by controlling access to original forms of information and presenting strategically predetermined information subsidies in their place.

It has been acknowledged that content analysis could only provide a broad picture of how events were transformed. The following section discusses the transformational stages and the information events constructed in the life history of the Hilton study in 2004.

3.2 Transformational stages and information events: a discussion on the life history of the Hilton study

The findings suggest that Dr Hilton's study passed relatively smoothly through the reporting and reviewing stages. However it was observed that the reviewing stage was particularly extended. The paper had to be reviewed by the journal and presented to SEAC prior to its publication. Reviewing it would seem is a central feature of this event's 'early life' not least of all because it was subject to continuous review in the pre-reporting phase.

Real conflicts did not seem to emerge in the way the information was being transformed until the paper left the structures of Science and Administration and entered the stage of attraction. Here it was observed how Dr Hilton and the press officer clashed over the "scare-mongering" he perceived was contained in the press release she had drafted. Intervention was required from the journal's editor before the matter could be resolved.

During the stage of attraction, Dr Hilton was helped to prepare for his encounters with journalists and established a basic media strategy for dealing with requests for interviews: Dr Hilton took on press duties whilst his co-author took on broadcast interviews. It was noted that Dr Hilton had not received media training. In the stage of preparation Dr Hilton continued to exhibit concern as to how the findings would be interpreted. He made himself available to some journalists while denied access to others based on his perception of them as sensationalising.

Meanwhile journalists in the stage of preparation exercised their journalistic sense of balance by going beyond Dr Hilton but stayed firmly in the sphere of Science and the scientific BSE policy community. They approached Professor Collinge because of his pessimistic view on vCJD. It was observed how one journalist worked closely with both Dr Hilton and Professor Collinge in preparing his copy. This journalist experienced problems in establishing a consensus

between the two concerning figures. It is suggested that both Professor Collinge and Dr Hilton were in this case unusually concerned with perception - something noted by Pellechia (1997) as a characteristic of politicians (Pellechia 1997: 50).

It can be said that during the stage of preparation the information was beyond the control of any single source. The copy produced by the journalists was shaped by a range of factors beyond *what* the sources had to say. With the information now exposed to so many variables the information was transformed in different ways by the time it reached news desks ready to be turned into news stories. At this stage it seemed that nobody involved in the previous four information events had control of the information - not even the journalists. Their copy was turned into the product of news: amplified, shaped, illustrated and framed by headlines.

In this section I have discussed the findings in relation to the way information events were constructed and transformed as they passed through a series of stages and out into the public domain. The final two parts of this chapter concern the way information events were *strategically predetermined*.

Part 4 The Strategic Predetermination of Information Events

Strategic predetermination is a concept I use to describe the packaging of information as part of strategies (drawing on Palmer's definition of strategy as motive plus technique) with clear communicative goals. In order to secure these goals this research suggests that information can be 'predetermined' in at least five ways. These are: *defining and framing events, the selection of recipients for information, the correlation between journalist types and expertise of sources used, the appeal to news values, and routine dissemination*.

In this part of the chapter I discuss the quantitative and qualitative findings in order to explore the effects of strategic predetermination on the construction of information events across the three events.

This part of the chapter is divided into two sections. The first section provides a discussion of the findings of the quantitative research on strategic predetermination as detailed in chapter five. The second section discusses the findings of the qualitative research in relation to the effects of strategic predetermination.

4.1 Quantitative evidence of strategic predetermination in news reports and press releases

Evidence of the operation of aspects of strategic predetermination drawn from the quantitative research are summarised and discussed in this section. *Defining and framing, selection of recipients, correlation of sources and journalists, the appeal to news values and routine dissemination* will each be discussed.

4.1.1 Defining and Framing : the perception of events

It was argued that sources have the capacity to define and frame events in press releases and other information subsidies. It was argued that this primary definition of topics as defined by Hall et al may be considered an aspect of strategic predetermination. In terms of perceptions of 'what has happened' in each event there is a remarkable consistency between what press releases said had occurred and what newspaper reports said had occurred. In 1990 the uniformity of approach was clear across the news reports sampled: a cat had been diagnosed with FSE. The press release clearly stated in its headline: Spongiform Encephalopathy in a Cat (see appendix 3). However, one newspaper differed subtly in its perception of the event. *The Telegraph* focussed on "naturally occurring" FSE. However, there was evidence that this event had become over-shadowed by a political debate on the subject. This is discussed in the following section.

In 1996 the initial information event - the SEAC findings - gave rise to a series of other events and stories on 21 March. It was noted that in spite of the newspapers attempts to widen the story into other areas, official sources were the most used and quoted primary and secondary sources. Many stories were 'co-opted,' in that they were connected to BSE but not directly connected to the findings or the statements. The issue of co-option is important because it does express some resistance to the strategically predetermined effects of defining and framing. This is discussed in part five of this chapter.

The 'event' promoted by the press releases from Dorrell and Hogg were not the findings per se but the information event constructed to disseminate the findings. Consequently, the majority of news reports focussed on the statements made by Dorrell and Hogg, and the majority of stories used them as a springboard into other related stories. Thus the 1996 event demonstrated how in newspaper reports the actual event (scientific finding) was transformed into a political event (statements in the Commons). This was in spite of the fact that MAFF had attached a statement from SEAC 'interpreting' the CJD Surveillance Unit's findings. Luckily for the disseminating source, all the statements issued that day confirmed each other in their perceptions of what had happened.

In 2004 a broad agreement of perceived events was noted across the news reports sampled (with the exception of *The Guardian's* HPA angle discussed in this chapter). In addition there was also observed a level of consensus between the perceived events in news reports and the event as presented in the press release. These findings suggest that strategic predetermination was broadly successful in achieving a consensus between source perceptions of events and those perceptions found in news reports.

4.1.2 The selection of recipients for information and the correlation between types of journalists and area of expertise of sources used

These second and third aspects of strategic predetermination identified through the research worked together to ensure strategically relevant recipients received information from strategically relevant sources. These aspects also facilitated in the defining and framing of events.

In 1990 the most used and quoted primary sources were official sources from MAFF and the CVO (presented in news reports as a MAFF official). These reports were written by a range of different correspondent types which suggests that the story had yet to be defined in the newsroom. As noted in the above section, in 1990 there was evidence that the event had become over-shadowed by a debate on the findings in the House of Commons. This can be evidenced through the presence of Opposition sources who were attacking the government. Interestingly, no political correspondents covered this story. In spite of the presence of a political debate in the Commons this was not seen as a political issue by newspapers.

The diffuse range of correspondent types used demonstrated that no 'match' was achieved - possibly because no 'match' was sought. Thus it could be argued that avoiding the correlation of journalists to source types was also an aspect of strategic predetermination. These aspects of strategic predetermination were particularly noticeable in 1996. On 20 March Kevin Maguire's mischief-making source deliberately selected *The Mirror* in which to leak their story. The source did this knowing *The Mirror* had an oppositional stance to the government of the day and would therefore be more likely to carry it. After all, as I have noted, *The Sun* and *The Telegraph* - both government supporting papers - were the only ones that did not carry the story.

In 1996 the DoH, MAFF, SEAC and the CMO were among the most used sources. It is important to note that neither SEAC nor the CMO produced their

own independently distributed press releases. The statements were issued under the MAFF and DoH mastheads. In spite of this the advice of SEAC was presented as independent whereas no such distinction had been made in 1990 between Ministry and scientific advice. As a consequence, in 1996, the majority of stories about the link between BSE and vCJD tended to focus on the statements being made rather than the SEAC findings. The most used type of specialist correspondents on 21 March were political correspondents, who routinely receive information from Ministers and their Ministries. Consequently, the DoH, MAFF, SEAC and the CMO were among the most used sources in news reports. Thus in terms of the perceived event and its establishment as a political issue, the selection of recipients and the degree of 'match' achieved between sources and journalists suggest aspects of strategic predetermination can be evidenced in news reports and press releases in 1996.

In 2004 the most used primary and secondary sources were official scientific sources. However the most quoted source was not mentioned in the press release although as a source he is without question an official source as Head of the National Prion Unit and long-standing member of SEAC. In the 2004 event, the press release was widely used and quoted across all the publications with the exception of *The Guardian*. It cited the report but chose to frame its story around the HPA research programme. As a consequence those stories that were reliant on the parameters of the press release took the same angle as the press release.

In 2004, an almost complete 'match' between correspondent type and source type was achieved. However, it was also noted that the most cited and quoted source did not appear on the press release and had no direct connection to the study, beyond expertise in prion diseases. This is explored as an element of resistance in part five of this chapter.

In the 2004 event the selection of recipients was facilitated by the use of the Eurekalert scientific journal alerting service. This service provides a specialist subscription service to journalists. Its website states:

Reporters and freelancers may register for access to the embargoed section of EurekaAlert!. The embargoed section contains releases that have not yet become public information. Once the embargo date has passed, these releases are rolled into the public archive. Advance access to releases is vital in late-breaking news stories (Eurekalert ⁸).

In a sense, then, it was observed that those journalists using the Eurekalert service selected themselves. However, because Eurekalert is designed for those with an interest in science stories, it was unlikely that non-science and health specialists would have picked it up thus predetermining its media life as a science and health story.

4.1.3 The appeal to news values

A fourth aspect of strategic predetermination identified through the quantitative research findings was the appeal to news values. This confirmed Palmer's findings on the use of news values by sources . For this thesis the appeal to news values is but one aspect of the strategic predetermination of information.

It was found that the news values discernible in press releases were translated into the news reports across the sample. It was noted that in general news promoters had an accurate idea of what elements of the events journalists might consider newsworthy. It was demonstrated that journalists added other values not present in the press releases. This suggested that appealing to news values may facilitate the reporting of an event but it could not necessarily dictate how the event might ultimately be presented in news reports. This issue is discussed later in this chapter.

4.1.4 Routine dissemination

A fifth and final aspect of strategic predetermination suggested by the quantitative research findings was routine dissemination. The findings indicated that the stories were all considered important and interesting enough for publications to publish. It was observed in chapter four that the largely 'blanket' coverage might be suggestive of routine dissemination. That is to say that journalists received information either at the same time and/or in the same form. It also suggests that the press releases were successful in attracting the attention of journalists and their publications. All three events involved pre-scheduled attraction strategies.

In 1990 the low key press release accompanied by the letter to the *Veterinary Record* coincided with the national daily news cycle as well as the publication cycle of the *Veterinary Record*.

In 1996 two statements were prepared. A press conference with SEAC was organised shortly after the televised statements by Stephen Dorrell and Douglas Hogg in the House of Commons. This strategy is best described as an attempt to *routinise the crisis*. It is noted however, that the 'enterprise journalism' of Kevin Maguire at *The Mirror* pre-empted the strategy formulated by official sources in 1996. It is also important to emphasise how publications and their journalists went beyond official sources in their news reports after the announcement of a link on 21 March 1996 thus resisting official routinisation strategies.

In 2004 as with the 1990 case study, the press release was issued to satisfy a range of news cycles, including national dailies and the disseminating source: the *Journal of Pathology*.

It is argued, then, that routine dissemination is a useful term in describing the channels through which journalists were accessed by sources in 1990 and 2004.

⁸ <http://www.eurekaalert.org/help.php#about>

However the crisis in 1996 the every day routine channels went into over-drive as press officers, politicians and official scientists worked together in an attempt to routinise the crisis.

I have argued that the findings of the quantitative research presented in this thesis provide evidence of strategic predetermination in news reports and press releases. But an important contention of this thesis is that news needs to be studied as a series of information events that require researchers to go beyond the analyses of news reports and press materials. My qualitative research has endeavoured to fulfil this requirement. The following section discusses the findings of the qualitative research. It discusses the ways in which information was transformed from stage to stage in the dissemination process and examines the effects of strategic predetermination.

4.2 The transformation of information and the strategic predetermination of information events: the qualitative research findings discussed

Press releases and news reports were not the only information events constructed in each of the events studied for this research. In order to understand how information is transformed from the first formulated account to the stage of attraction, I concluded that a different method had to be adopted. What stages did Dr Hilton's research findings go through from laboratory to public domain and how was it transformed at each stage? By whom, for whom and why? These are some of the key questions I address in this section. By way of introduction I will begin by distilling the evidence gathered to provide an overview of the transformational stages and the information events constructed within them. In short, *the life history of this event* and the material evidence of this *life*.

At the *reporting stage* Hilton had to present his findings to the steering group. The steering group suggested changes and these changes were made. The amended document provides the first formulated account of this event or IE1.

The *reviewing stage* involved the findings being accepted as a research paper. At this stage the information was quite quickly turned into a paper. Notification of intention to publish was given to the Department of Health and the paper was submitted to the *Journal of Pathology* for peer review and minor changes were suggested. The paper was also subject to a concurrent review by SEAC before it was officially cleared for publication. The amended paper was the second information event constructed (IE2).

The *attraction stage* moved the information away from the enclosed structure of official advisory sources and into journalistic environments. At this stage the findings of the paper were distilled and transformed into a press release (IE3) designed to promote a forthcoming issue of the *Journal of Pathology*. After some problems in defining and framing the information the press release was published on *Eurekalert*.

In the *preparation stage* journalists followed up on the press release from the *Journal of Pathology*. Some reports were more reliant on it (*The Sun* and *The Mirror*) than others (*The Guardian*). Hilton was quoted in all reports but not all spoke to him, suggesting that the quotes featured in some news reports were lifted straight from the press release. In addition, all journalists interviewed recalled speaking to sources other than those cited in the press release. Having researched and prepared their copy (IE4) journalists submitted their work to their respective editors.

In the final stage - the *dissemination stage* - editors and sub-editors worked on the journalists' copy. The subsequent news reports (IE5) marked the final transformation in this chain of dissemination. In spite of the fact that the journalists were all alerted to the story by the same press release and used for the most part the same sources, it was observed that there were significant differences between the news reports.

The Sun and *The Mirror's* stories appealed to the person while *The Sun* appealed to 'nation' in its "us Brits" angle. *The Mirror* added a small picture of a cow taken with a convex lens giving the impression that it was 'mad'. *The Times* featured the story as headline news on the front page. It was accompanied by a headline using the word "time-bomb" and an inset image of a brain scan showing evidence of the plaques characteristic of vCJD. As was shown, *The Telegraph* carried two stories by the same journalist on the study's findings. On the same page another story had been co-opted as it concerned a victim of vCJD. A large photograph of the bed-ridden victim and his family was featured.

Analysis of the interviews with sources and journalists has given me valuable insights into the life history of this event. It has enabled me to explore the ways in which information was transformed at each stage in the chain of dissemination. Who and what motivated these transformations at each stage? In order to understand this it is necessary to examine the ways in which information events were *strategically predetermined*.

4.2.1 Aspects of Strategic predetermination

In this section I discuss the aspects of strategic predetermination identified through the qualitative research. The purpose here is to verify that these aspects can be observed and to discuss the impact each aspect had on the events constructed in the life history of this event.

4.2.1.1 Defining and framing

The advantage of seeing news reports as part of a chain of distinct but related information events is that one has a view of the life history in the dissemination of an event. This life history has enabled me to determine that attempts to define and frame *what has happened* did not just occur in the stages of attraction, preparation and dissemination. The research has shown how the event itself - the publication of study's findings - was concerned with defining a problem: the prevalence of vCJD in the UK population.

A pre-reporting phase was characterised by continuous reporting of progress to the steering group. In the reporting stage the creation of IE1 involved the presentation of the findings to the steering group who accepted its findings after some changes suggested by the group were made. In addition, it was observed how the DoH had attempted to frame itself as the body that had instigated the research.

In the reviewing stage the paper constructed out of the findings (IE2) was subjected to 'enclosed' presentation to SEAC before it was published in the *Journal of Pathology*. The *Journal of Pathology* reviewed the paper and suggested minor changes be made in order to make it publishable. This may not have resulted in definitional changes to the paper's content but it did ensure that the paper was framed and presented in such a way as to be consistent with the style of the journal.

In the stage of attraction it was observed that a definitional struggle took place between Dr Hilton and the writer of the press release (IE3). In this instance the conflict that arose from the defining and framing of the event saw a clash between this aspect of strategic predetermination and one other: the appeal to news values. Clearly the journalist who wrote the press release attempted to fulfil the strategic goals of the *Journal of Pathology* - the promotion of the journal in a way that, in Dr Hilton's view, undermined the findings. The matter was only resolved after Dr Hilton appealed to the journal's editor to intervene. He won that particular definitional struggle and the press release was toned down.

Dr Hilton's concern to maintain the study's definition of the findings as inconclusive continued throughout the stage of attraction and into the stage of preparation and informed his dealings with journalists. Dr Hilton was more anxious about how the work would be defined in the media than he was about any of the potential re-definitions that could have been demanded of the work by

peers. This explained his willingness to undertake media duties in the stage of preparation. However another official advisory source threatened to distort the definition. Known for his pessimistic view of BSE and CJD, Professor John Collinge was spoken to by all the journalists I interviewed. By taking a pessimistic view, Professor Collinge attempted to frame and define what the study *meant* to suit his own communicative goals. Therefore it could be argued that he defined and framed his responses to journalists in an attempt to strategically predetermine what the event was really about in his view: more funding and more research.

How far were the official definitions of *what had happened* challenged in the news reports? How effective was this aspect of strategic predetermination? During the stage of preparation - where the journalists' copy (IE4) was constructed - it was observed that attempts were made to re-define *what had happened* and to impose a sense of what the findings *meant*. However it was also found that one of the three journalists interviewed in depth was not happy with the way his copy had been transformed in the newsroom.

For *The Sun* the findings meant that more of "us" could die from vCJD. The framing of the findings in such populist terms is common in tabloids and *The Mirror's* report used the same convention and defined the study's findings in much the same way. This, I think provides evidence of what Nelkin (1995) describes as journalists internalising the needs of editors (Nelkin 1995: 110). The fact that *The Sun's* correspondent was new to the job at the time is also suggestive of Reed's (2001) findings that younger correspondents are expected to provide quality copy in short spaces of time (Reed 2001: 288). *The Times'* story comes to similar conclusions with its 'time-bomb' headline on its front page.

In *The Telegraph* the study is given more significance by the inclusion of two reports based upon its findings. What the study *means* is established through a tension between these two stories and a third report on the treatment of a young

victim of the disease. The two articles that drew on Dr Hilton' study both expressed frustration with its inconclusive results. The third report serves to emphasise why one should be frustrated. *The Guardian's* report accepts that Dr Hilton's study was inconclusive and focused on the HPA's study that aimed to provide more satisfactory conclusions. The question is do these angles represent and attempt to resist the strategically predetermined definitions of the event? This is discussed in part five of this chapter.

To conclude this discussion, defining and framing are aspects of strategic predetermination that can be found in other information events aside of news reports and press releases. This is because a source of information on a given event is not just a source of information for journalists. It is likely that they will have had other roles prior to the stage of attraction. In the earlier stages of an event they would have been sources of information about the event to their peers, their policy community and their funding bodies as well. Their definitions of events were subject to contestation during the reporting and reviewing stages and as this case study has shown, until consensus had been achieved information could not be transformed and it would not progress down the chain.

4.2.1.2 Selection of recipients for information

The selection of recipients for information as an aspect of strategic predetermination is designed to attract the appropriate receivers of messages. Exploring the selection of recipients for information in the case study provides some interesting findings in terms of the choices Dr Hilton made in this respect. It was observed that during the reporting stage Dr Hilton had little choice in whom to report his findings, as he was obliged to report to the steering group.

During the reviewing stage Dr Hilton's choices: he and his team were able to determine where to publish the findings. It was noted how a presentation to SEAC was requested prior to publication as well as acceptance by the journal. In addition, timing of publication was potentially in the control of the DoH since Dr Hilton was contractually obliged to notify their representatives of intent to publish.

At the attraction stage Dr Hilton had no control over who received the press release from the *Journal of Pathology* as this was dealt with by the press office at the journal's publishing house - Wiley Interscience. This release was posted to the *Eurekalert* service. In a sense then, journalists were not so much directly selected by the source of the press release for receipt of information. Rather the journalists who used the service exercised self-selection.

Dr Hilton did exert some control as a 'primary source' over the recipients he selected for information. He chose not to speak to the *Daily Mail* and *Channel Four News*. This could be interpreted as a form of resistance to this aspect of strategic predetermination. This point is pursued in part four of this chapter. He elected to do press interviews rather than television and radio interviews. At the stage of preparation Dr Hilton conducted various interviews and read through the copy prepared by *The Telegraph's* correspondent.

During the transformation of copy to story Dr Hilton had no role to play. His role as primary source of information to the national press was over, and by the weekend, as Amanda Nash of the press office at Derriford Hospital had observed, the story had died.

4.2.1.3 Correlation between journalist types and source expertise

It was observed in chapter five that the 'fit' between the types of correspondents deployed to cover specific stories and the kinds of sources they used seemed an obvious point. Political reporters use political sources, science correspondents use scientific sources: obvious. But not strictly borne out as the content analyses

in chapter five showed: in 1990 the event had yet to be defined and a diffuse range of correspondent types using the same sources covered the story. In 1996 the most used sources by political correspondents were official advisory types. That said, in 2004 there was a distinct correlation between types of reporters attracted to the story and the sources they used. This tendency can be seen as an aspect of strategic predetermination.

It is argued that journalists were *cued in* to this event as a science and health issue by sources, through the *channel used to attract them*, through the *framing of the event* and the types of *sources cited*. The channel used to attract journalists to the event was a routine channel of dissemination. That is to say, a well-established channel managed by a bureaucratic, resource-rich organisation used on a daily basis by journalists in the course of their work. The channel - *Eurekalert* - provided press alerts to the journalists from all major science, technology and health publications. The *Journal of Pathology's* press release reached science and health correspondents who were known to use this service.

The framing of the event as the findings of a scientific study also served to position this as a story of interest to science and health correspondents. The results may have been inconclusive but it was still a new finding and so worthy of reporting. Clearly there were other contexts for understanding what this study meant as the news reports showed, but they were not contexts outside the realms of science and health. Had the full story of the study been pitched to political and economic correspondents the story could as easily have become 'about' the politics of vCJD and the economics of research funding, as it was about science and health. The source of the press release and the sources cited within it also *cued in* journalists to the 'science and health' pedigree of the event. In spite of the event having political and economic dimensions political reporters do not tend to go looking for stories in science journals. No other source types outside of science were cited in the press release. Thus the issuers of releases and those cited acted as journalistic indicators: this was a science story.

4.2.1.4 Appeal to news values

News values as a concept describes elements of an event that make it newsworthy and reportable. Generally the term is used to understand how journalists select stories and the elements of events they choose to amplify in their reports in order to make them newsworthy. It should also be noted that news value as a concept is not only of interest to journalists and press officers. In the qualitative research findings Hilton's evidence suggested that he was concerned about the negative spin journalists might apply to the story. The presentation of the findings to a closed session of SEAC might also suggest an awareness of the potential newsworthiness of the study and its findings.

It was observed in chapter four that certain news values had been written into the press release (Chapter 5 table 24). The interview with Dr Hilton confirmed that a former journalist who was working as a press officer for Wiley Interscience wrote the press release. It was observed earlier how a clash occurred between Hilton and the press officer during the stage of attraction. The communicative goals of Hilton and the press officer differed. Dr Hilton's communicative goal was to get his paper published and for the findings to be accurately represented in press reports. Dr Hilton believed the definition of what the findings meant was being distorted in order to attract journalists to the story via an appeal to the value of negativity. The press officer, on the other hand, was not working for Dr Hilton but for the *Journal of Pathology*. Her communicative goal was to promote the journal and its contents that month.

Newsworthiness in this case study was not just a concern of journalists, then. Dr Hilton expressed a repeated concern that his inconclusive findings would be interpreted negatively by journalists. The presentation to SEAC might also indicate a similar fear concerning the news values that might have been perceived in the study.

Professor John Collinge as an official advisory source also seemed to be operating with an awareness of the newsworthiness of negativity. His pessimistic view was noted by the journalists from *The Times* and *The Telegraph*. Dr Hilton also commented on Professor Collinge's pessimism and suggested that his success as a source might be attributed to this. Dr Hilton also suggested that Professor Collinge's motive for adopting a negative stance might be in order to keep CJD in the media spotlight to help maintain research funding. Professor Collinge was certainly quote-worthy: he was the most cited source across the newspaper reports sampled in 2004 (Chapter 5 table 13). It could be argued that Professor Collinge's appeal to news values through expressions of negativity constituted a form of strategic predetermination, particularly since journalists expected his views to be negative. The appeal to news values as an aspect of strategic predetermination works to frame and define events *for journalists* in ways that satisfy the communicative goals of sources. Though it should be noted that other structures are interested in news value too.

How successful were Dr Hilton and the press officer in achieving their communicative goals? All reports mentioned the *Journal of Pathology* and all newspapers sampled carried the story. It can be concluded that the press officer's communicative goals had been achieved. In spite of his fears that his findings would be perceived negatively in press reports, Dr Hilton stated that he was satisfied with the coverage. However, despite his best efforts as table 13 showed in chapter 5, *negativity* was a value contained in all the news reports sampled. Interestingly, it was also identified as a value in the press release which might suggest that Dr Hilton's victory over the press officer's "scare-mongering" was perhaps not as conclusive as he had hoped. Or perhaps until the disease is curable and preventable, news about vCJD will continue to carry this aspect of newsworthiness.

As was demonstrated in chapter five, all the news values detected in the press release were replicated in the news reports (Chapter 5 tables 22 and 24). The interviews with journalists provided further insight into the newsworthiness of this story. *The Telegraph's* journalist was ambiguous as to the newsworthiness of the story. However, the senior level he described were interested enough to require two stories from him on the study. Another vCJD story was co-opted to emphasise the need for further research on vCJD. *The Sun's* journalist stressed that it was the public/reader interest aspect that made the story newsworthy for her. *The Times'* journalist explained that he had already covered the 'false positive' story a few months ago and was looking out for the completed findings of the study. Clearly the story was newsworthy because it had an element of continuity for this journalist.

4.2.1.5 Routine channels of dissemination

The channels through which journalists were reached are described as routine channels. These have already been defined as *well established channels managed by bureaucratic, resource-rich organisations used on a day to day basis by journalists in the course of their work*. The choices made by sources to use routine channels are seen as aspects of strategic predetermination. The selection of routine channels for the dissemination of information has many advantages for sources: they control the form, the manner and the timing of routine dissemination. They can promote certain sources. They can target specific journalists and publications more efficiently. And they can embargo stories. Note a distinction has been made between the source's ability to control the timing of routine dissemination and their use of the embargo system. This is in recognition of the fact that the date a release was issued may not be the same as the date when stories can be published. This is important because details like this reveal something of the processes that occur between the stages of attraction, preparation and dissemination.

In this case, the press release was issued on a Tuesday and stories were embargoed for publication until the Friday, the same day the *Journal of Pathology* was published. Finally, the use of routine channels means that sources have the ability to manage and schedule interactions with journalists. This was seen in the systematic way Dr Hilton and Professor Ironside divided media duties between them.

The use of a routine channel was certainly successful in the dissemination of the Hilton study's findings although it was noted that the BBC had to be persuaded by the MRC not to leak the story. This is discussed in part five of this chapter as it demonstrates an element of resistance to this aspect of strategic predetermination.

The journalists interviewed confirmed that their stories had been written as a consequence of their receiving the press release from the *Journal of Pathology* via the *Eureka!ert* service as already discussed. It was also observed how the health journalist at *The Sun* viewed the press release as her primary source. It is suggested that the use of such subscription services may lead to transformations in the nature of 'news beats' and in source-journalist relations. It is an issue that forces one to question existing definitions of journalism. Because of these factors I think this is an important area of research for future scholars in the field. Unfortunately it is beyond the remit of this thesis.

Routine dissemination reinforces the effects of other aspects of the strategic predetermination of events. As has been discussed, through the use of routine channels certain sources were promoted. Specific journalists and publications were targeted more efficiently. Embargoes were placed on stories. And interactions with journalists were managed and scheduled.

This section has explored *strategic predetermination* as evidenced through the research presented in this chapter. It was argued that aspects of strategic

predetermination were used in attempts by sources to control the perception of events and their subsequent coverage in the press. However the efforts by sources to strategically predetermine events had the aim of creating better conditions for the achievement of communicative goals. It was found that aspects of strategic predetermination by sources took place at all stages prior to the stage of dissemination.

This section has explored and discussed *strategic predetermination* as evidenced through the research presented in chapter five. It was argued that aspects of strategic predetermination were used in attempts by sources to control the perception of events and their subsequent coverage in the press. However the efforts by sources to strategically predetermine events had the aim of creating better conditions for the achievement of communicative goals. It was found that aspects of strategic predetermination by sources took place at all stages prior to the stage of dissemination. How is one to determine if the event was successfully strategically predetermined by sources? I suggest that assessing how far the aspects of strategic predetermination were resisted in the construction of news reports can contribute to this.

Part 5 Resisting the Strategic Predetermination of Events

It is argued that strategic predetermination is a *tendency* to construct, shape and disseminate information. These aspects are key to understanding the ways in which information is transformed to suit the communicative goals of sources. But it is only a *tendency*, not a conspiracy theory. It is not as inflexible as Herman and Chomsky's propaganda model. Resistance is possible and communicative success is not always a guaranteed outcome. In this part of the chapter I discuss the evidence provided in this research of the resistance of strategic predetermination.

5.1 Resisting *definition and framing*

The evidence provided by the quantitative analysis of news reports demonstrated how journalists and their newspapers attempt to resist defining and framing by sources across the three events.

In 1990 *The Mirror's* use of public sources (the dead cat's owners) suggests that, in line with its populist leanings, sought to define the story in terms of what it meant to people, not just scientists, government and pet food manufacturers. *The Mirror's* report was the only one to feature a public source type. *The Telegraph's* perception of the event was slightly different, as discussed previously. But was the use of the term "naturally occurring" evidence of resistance or subtle support for the government of the day? Further exploration of this event through the BSE Inquiry archive showed that the term was used in intra- and inter-ministerial language⁹. It is a term generated from scientific discourse and is probably indicative of the fact that the senior reporter writing this story was the science editor. Thus correlation of type of journalist and area of expertise of sources helped to define this event for *The Telegraph*. This demonstrates that aspects of strategic predetermination work together to achieve their desired effects.

In 1996 the degree of co-option seen through the coverage of news reports on 21 March can also be seen as a form of resistance to the ways in which the 'link' story - and BSE more generally - was being defined. All newspapers carried stories linked to BSE in addition to their stories based on the specific event in question: SEAC's findings. Co-opted stories cast the shadow of BSE far and wide covering industry, education, the regions and Europe. As a consequence a diverse range of opinions and views were expressed in news reports which opened up and widened the national debate.

In 2004, evidence from the content analyses suggested that two newspapers

⁹ MAFF's Richard Lawson's minute provides an example of this. See <http://www.bseinquiry.gov.uk/report/volume1/whoswho.htm> (accessed 8/11/02)

engaged in resistance of the definition provided by sources. Both instances employ the news value of co-option to re-frame the event. As was seen, *The Guardian's* reporter chose to co-opt Dr Hilton's findings into his story about the HPA's study. This re-framed Dr Hilton's study. The story of the day was not this study; it was only part of the bigger vCJD research story. *The Telegraph's* use of co-option was not seen within the reports, but across their coverage. *The Telegraph's* correspondent expressed frustration at the inconclusive nature of the study. By adding the story about the vCJD victim, the frustration expressed is justified and reinforced. This evidence suggests that the Journalistic mechanism of news values can be used to resist defining and framing of events.

This aspect of strategic predetermination was also observed in the construction of other information events in 2004. The framing of ownership was observed in the construction of the study in the pre-reporting phase. In the stage of attraction, the conflict between Dr Hilton and the press officer demonstrated how their communicative goals differed. Hilton approached the news encounter as a scientist. It has been argued that a key mechanism of Science as a structure are the norms of scientific investigation. For Dr Hilton, "inconclusive" was the "objective truth" of the story. However the press officer - with a background in journalism and the client orientation of a press officer - was not interested in scientific truth. As a promoter of the journal, the press officer focussed on the client. A structural mechanism of Science Journals.

Further evidence of the resistance of definition and framing can be found in the behaviour of the two key sources cited in the news reports: Hilton and Professor Collinge. *The Telegraph's* respondent's account of the preparation stage provided valuable insight into the effects of defining and framing . The contestation over figures experienced by the anonymous science correspondent demonstrated how at the stage of preparation, the journalist was caught between two sources locked in a definitional struggle. As a source Professor Collinge challenged the perception of Hilton's study in order to keep the issue in the

media spotlight that would in turn, ensure funding was achieved. Thus Professor Collinge used defining and framing in the stage of preparation to resist the definitions made by Dr Hilton in spite of having no connection to the study itself.

5.2 Resisting *selection of recipients*

Across the findings there was evidence found of resistance to this aspect of strategic predetermination of information events. The quantitative findings demonstrated that the co-option observed in the coverage on 21 March 1996 meant that many more sources were being sought. The diversity and range of sources used suggests that whilst journalists and newspapers still printed the view of official sources, they also included the views and opinions of others. The qualitative research showed that this aspect of strategic predetermination *can* be resisted in the construction of other information events. In the stage of preparation Dr Hilton had a broad agreement with his co-author that he would take on press interviews. He had no control over the kinds of journalists who would receive the press release. But he did resist speaking to the *Daily Mail* and *Channel Four News*. The *Daily Mail's* reporter tried to 'resist' his resistance with a financial incentive. Dr Hilton resisted.

5.3 Resisting *correlation*

The quantitative findings also provided evidence of resistance to the correlation of journalist type to area of source expertise across. Resistance to this correlation by official sources was seen in 1996 through the amount of co-opted stories carried by newspapers on 21 March 1996. Although it was noted that official sources were matched effectively with correspondent types in the reports based on the SEAC findings and the statements in The Commons. In addition, Kevin Maguire of the *Daily Mirror* may well have had a scoop on 20 March 1996 and one not obtained through routine means, but it is noted that the source still selected Maguire.

In 2004 the news reports in *The Guardian* and *The Telegraph* showed evidence of this aspect of strategic predetermination. *The Guardian's* co-option of the story meant the journalist did not need to speak to Dr Hilton. In altering the focus of the story to highlight the HPA's study, the journalist resisted the correlation constructed in the press release. But as a health correspondent, he stayed well within the bounds of the official sources disseminating the HPA's information.

The Telegraph's co-option of the story from the Ireland correspondent also facilitated resistance of correlation. By co-opting the story about the young vCJD sufferer, *The Telegraph* extended the issue to include an article from its Ireland correspondent. This article, as discussed, helped to reinforce the way *The Telegraph* framed the publication of Dr Hilton's findings.

5.4 Resisting *the appeal to news values*

As was observed in chapter five, the news reports across the three events successfully translated these values from those inscribed in the press releases. However, it was noted how significant evidence of resistance to the appeal to news values was evidenced through the *journalistic application of news values* - identified in this thesis as a key mechanism of the structure of Journalism. In addition it is noted how representatives of the structures of Newspapers added the amplification of certain news values in the final news report (IE5) in the dissemination phase. It is emphasised here that the work done to the story beyond the journalist's copy serves to represent the interests of the structure of Newspapers first, and Journalism, second - if at all.

The quantitative findings showed that in spite of transferring the news values from press releases into their news reports, journalists and their publications added value and newsworthiness to suit their own communicative needs. In 1990 the news coverage across the sample 'added' news values to those contained in the press release from the CVO (through MAFF). The added values were found to be: *amplitude, meaningfulness, consonance* and *unexpectedness*. *Amplitude*

and *meaningfulness* were derived from the fact that a domestic cat had succumbed to FSE. It was argued that *consonance* derived from the connection FSE seemed to have with BSE, whilst *unexpectedness* derived from the disease moving from the agricultural sphere to domestic sphere.

In 1996 the only value 'added' across the sample was *co-option*. As has already been observed, publications chose to expand the story by deploying more correspondents from different beats who then accessed a variety of non-official sources. This widened the debate and extended the boundaries of the BSE story.

In 2004 resistance to the appeal to news values was seen in more detail. The quantitative findings showed that the news values contained in the press release were picked up in all the news reports. But some resistance through the journalistic use of news values was noted in the accounts of respondents. *The Telegraph* and *The Guardian* had in different ways demonstrated co-option of the Hilton findings. To recap, *The Telegraph* did this through the co-option of the story concerning the victim of vCJD. *The Guardian* co-opted the Hilton study into a story about the HPA's new study. It was noted how *The Telegraph's* respondent did not think the story of Dr Hilton's study was newsworthy. Only the interest of the "senior level" ensured that the story was reported.

The Times' respondent expressed the view that for him the story had the value of continuity as he had covered the 'false positive' story a few months before and was aware that the study was coming to a conclusion. But *The Times'* respondent noted how the choice to use the 'time-bomb' metaphor was not his idea and that it was forced upon him by those senior to him. *The Sun's* correspondent explained that for her the story had news value because it was of interest to her readers who she equated with the public. It was argued that this view was a structural view, a consequence of a 'tabloid ethos' that is populist to its core. It is argued that this view had been internalised by the correspondent and helped to shape her conception of newsworthiness.

5.5 Resisting *routine dissemination*

There were two clear examples provided by the findings of journalists' resistance of routine channels of dissemination for receiving information from sources. The first was *The Mirror's* exclusive on 20 March 1996 and the second was the threat of the BBC's leak in 2004. This section discusses why these two incidents qualify as 'resistance' as well as how and why this resistance occurred.

As was seen, *The Mirror's* story on 20 March 1996 was published on the morning of the day the statements were due to be made in the House of Commons. The source selected Kevin Maguire, then political editor of *The Mirror*, as his recipient because it fitted with their "mischief-making" motive. Evidence to the BSE Inquiry from Stephen Dorrell demonstrated that dissemination had been planned as far as possible. Interestingly, accounts of this were evident in news reports and were evidenced through the content analysis by the high counts of *time* and *form* indicators. But by reporting what his un-attributed source had told him Maguire by-passed routine dissemination. He believes that *The Mirror's* story affected the government's strategy. His account is worth quoting at length:

I think it changed the way they did it [disseminated information]. I believe they were planning to make a statement that day anyway, but I am sure it changed the nature of the statement as they had lost the initiative...the plan was a pre-briefing to a few favoured trusted journalists on the Monday. The statements would have been in a very calm atmosphere on the Monday and then after that there would have been some calmer briefings and they would have given their spin and taken whatever line they wanted. As it was, they were confronted with a headline in the *Daily Mirror* saying "Mad Cow Can Kill You" (Maguire 2002: 6).

For Maguire, bypassing routine dissemination made the environment within which messages from official sources were circulating much more difficult to navigate. It also provided various professional benefits. One might say that the structure of Journalism rewarded him for his enterprise journalism¹⁰. Maguire explained what the story meant for him:

Well it marks you out as a story getter, somebody who can actually get stories out and make a difference. Make waves, make headlines...I picked up a whole series of 'Scoop of the Year' awards. As a result it was considered the biggest story of the year and if you've got it then great, that's what journalism is all about (ibid: 5).

The second example of the resistance of routine dissemination was evidenced through the qualitative findings in 2004. Prior to the stage of attraction is what observed that Dr Hilton's findings were presented to a closed session of SEAC. It was Dr Hilton's view that the findings were leaked to the BBC shortly afterwards, when the story had entered the stage of attraction. Dr Hilton recalled how the intervention of the MRC prevented the BBC from leaking the story in advance. Thus in this case, resistance was attempted by circumventing routine dissemination. But due to the intervention from the MRC - part of the structure of Science - the BBC did not succeed. Other instances of attempts to resist routine dissemination can be seen in the threat of the leak in 1990, and *The Mirror's* use of public sources that same year. The co-option observed on 21 March 1996 also suggests a degree of resistance of routine dissemination.

In this section I have discussed the ways in which aspects of strategic predetermination were seen to be resisted based on the evidence provided by the qualitative and quantities research.

¹⁰ It is seen as enterprise in that Maguire did not receive the information through the planned routine channels and a degree of risk was involved in running the story.

In conclusion

This chapter has discussed the key findings and issues arising from the research. The chapter discussed the structures of BSE and vCJD and sought to connect the structures identified with their mechanisms as evidenced through the research. I explored *how stories came to be reported* through discussion of information events and transformational stages. I then discussed the aspects of strategic predetermination determined through the analysis of the research findings. However since strategic predetermination is only a tendency instances of resistance of strategic predetermination were discussed.

In the final chapter I draw some key conclusions as to what the findings have shown. I explain what can be said about the ways stories concerning BSE and vCJD came to be reported. I outline the contributions I think I have made to the sociology of journalism and to the field of BSE-related research, specifically. I then reflect on the strengths and weaknesses of the thesis before reflecting on areas that I suggest deserve further research. I then make some final concluding remarks.

Chapter 8 Conclusions, contributions, reflections

In this final chapter I first draw some conclusions about how the three events came to be reported. I then discuss the contributions to knowledge I have made. The chapter then discusses the strengths and weaknesses of the research. I end this thesis with some reflections on what is at stake in 'taking sides' in the debate on *reality*.

Part 1 Some conclusions

The intellectual puzzle driving my research is to understand how the three events analysed 'came to be reported'. Why it is important to do this has become clearer since I began this research project – notably after events of 11 September 2001. For example how did the infamous Weapons of Mass Destruction (WMD) dossier come to be reported? How is it known that the UK has been saved from at least three terrorist attacks since 7 July 2005? How is it known that Sir Ian Blair digitally recorded a phone conversation with the Attorney General in November 2005? I believe developing methods and approaches in the study of the whole life history of stories is becoming an increasingly urgent task for scholars in the field. To understand how stories come to be reported means that researchers in the field need to develop approaches that allow knowledge to be known if not shown.

The thesis concludes that each event - the subject of scientific findings - was transformed through a series of stages. These stages are characterised by what is done to the specific information to create the next information event in the chain. Information events, as I have explained, are separate but related events constructed in a chain of dissemination. Each information event is transformed for specific recipients in the next stage. Aspects of strategic predetermination guide their construction and dissemination.

The transformational stages prior to press releases and news reports were made partially visible in 1990 and 1996 by the use of archival research from the BSE Inquiry, interviews with a key source (1990) and a key journalist (1996). The transformational stages were made partially visible through the qualitative research of the 2004 event.

It is concluded that in each event official sources dominated coverage in news reports. Even on 21 March 1996 - the crisis - official sources far out-numbered non-official source types. It was argued that journalistic balance must take into consideration the strategic effects of official sources working together, since non-official sources have no unified communications strategy orchestrated between them in this instance.

It is hoped that other researchers might apply the transformational stages to their own research in order to assess the effectiveness of the approach. For example, can the stages posited here be applied to other specialist areas, and other types of stories beyond routinised forms of reporting.

For me the thesis has also demonstrated the need for accountability and for greater education of news consumers. Over the years as I have been researching this thesis, I have taught undergraduates and post-graduates on journalism and media courses across the UK. With each new academic year I ask students to perform the same exercise. I give them a news story - any story will do but political stories are especially good for this - and I ask them four questions: *who is the primary source of the story, what has happened, when did it happen and how is it known?* Year after year the results are the same: seminar time runs out before adequate answers are ever determined. Students are always shocked that such basic information is so hard to come by in news reports. I believe more attention needs to be paid to this by scholars and journalists. The use of *time* and *form* indicators shown in this research, do

little in news reports but conceal the processes of dissemination. Real knowledge of process is sacrificed on the alter of journalistic convention. And that suits official sources. Only national and political crises seem able to override the conventional use of *time* and *form*.

On the part of scholars there are two specific areas that in my view need particular attention. First is to explore the structure of Science - particularly 'official science' and the role (and impartiality) of scientific advisors. Second, there is an urgent need to for a dialogue about the invisibility of Administrative structures. Ministers come and go, but Secretaries are Permanent! The following part of this chapter discusses the contributions to knowledge I have aimed to make through this research.

Part Two Contributions to the literature in the sociology of journalism and beyond

In this section I explain the contributions my research has made to the literature. I first discuss the contributions to knowledge I have made to the sociology of journalism. I then focus on the contributions I have made to the existing literature on BSE and variant CJD in the field, and the new information I have provided.

2.1 Sociology of Journalism

This research sought to contribute to the literature in the sociology of journalism in several areas. I explored and updated primary definition by seeing the act of defining and framing as an aspect of strategic predetermination. I sought to address the weakness described by Schlesinger (1990) and Schlesinger and Tumber (1994) that suggests that contestation cannot be evidenced by applying the concept to events beyond news releases

and news reports. In this way, through the qualitative research conflict was evidenced at stages prior to news reports.

My research adds to knowledge on journalists' use of official sources and finds that official sources were dominant as sources in news reports, and as issuers of press releases. It also demonstrated that in spite of attempts at journalistic balance, official sources set the agenda in press releases and continue to reinforce agendas through news reports. True journalistic 'balance' cannot be simply defined as a case of balancing the numbers and types of sources used. As 21 March 1996 showed, official sources acted together to present a unified and strategic communications strategy. In spite of the accessing of a wide range of non-official sources, these sources had no unified strategy. They were reactive rather than pro-active in this event.

Through my transformational stages approach and the conception of information events I have contributed to knowledge on the nature of the source-journalist encounter and what precedes it. I have also contributed further empirical examples to knowledge on the relationship between journalists and their newspapers through the qualitative research conducted for this thesis. I have shown how correspondents internalise their newspaper's ethos. I have shown how journalists can be over-ruled in terms of whether a story is newsworthy or not because covering the story suits the interests of the senior level. I have also shown how journalists often have very little say in the final transformation from copy to story.

I also sought to contribute to research in the field on science communication. How do scientists communicate with journalists and others in the processes of dissemination? I have demonstrated through my case study of the 2004 event

that scientists have different attitudes towards journalists. While Hilton took a traditionally suspicious view, Collinge made himself very available to journalists to talk about a study he had nothing to do with.

My research also presented the views of journalists on what science reporting is and its role in social life and their attitudes to the perceived break down in trust between government, science and the public. In addition I provided new information and a critique of the proposed European Guidelines on science communication.

My research has also consciously attempted to address the question of media-centric study in the sociology of journalism. News reports and press releases are just two information events constructed in the processes of dissemination. My approach suggests that to really understand how stories come to be reported, one needs to go further back along the chain to the first formulated account of an event or phenomena.

A final contribution I wanted to make was to the knowledge generated on science journals. My literature research suggested that this was an under-researched area in the field and given the important roles science journals played in the BSE story, I feel they are deserving of more academic focus. Through the research in this thesis, I have demonstrated the strategic use of journals by official sources. I have also been able to bring new knowledge to light on the use of in-house public relations services within the structure of Science journals.

Third, I hope my study has contributed to knowledge on science, government and administration and their interactions. I would like to see my work contribute to a wider debate on *official science* and its inter-relationships with the structures of Administration and Government.

2.2 'Mad Cows' to Englishmen: Contributions to BSE-related research

The findings presented in this thesis have sought to understand how stories about BSE and variant CJD came to be reported. In addition I have sought to contribute to existing knowledge in the field of BSE-related research and to re-examine some of the key studies in the context of my findings. This part of the chapter revisits some of the most relevant BSE research outlined in chapter one.

Hargreaves et al (2003) argued that the BSE story had cast a shadow over every food and health controversy since 1997. Clearly it is an issue that the journalists interviewed felt they would cover again in the future. They noted however that health scare stories like BSE were different to scares like the MMR vaccine event because in the case of the latter estimations of future health risks may have consequences for human health. The research presented in this thesis leads me to wonder whether in this respect, BSE, variant CJD and MMR are really so different. Collinge's creative use of figures for strategic advantage is not new - figures are massaged all the time. But this use of figures does make one question the degree of trust journalists and the public can have in Science.

Jasanoff's (1997) concept of civic dislocation was outlined in chapter one. To recap, she defined this as "...a mismatch between what governmental institutions were supposed to do for the public, and what they actually did" (Jasanoff 1997:221). Whilst the analysis of evidence of this dislocation was not within the parameters of this study it was noted that journalists' reports picked up on the sense of crisis by paying particular attention to dissemination processes in their reports on 21 March 1996. Time and form were highlighted by mention of Cabinet meetings, pre-statement briefings and the issuing of the statements themselves. In addition *The Mirror's* political editor noted how the atmosphere was "total chaos" (Maguire 2002: 6).

For Jasanoff part of the reason for this civic dislocation could be found in the way information was enclosed:

Part of the information deficit could be attributed to MAFF's extreme reluctance to disclose data in its possession to scientists, politicians or the public. Only the threat that senior British researchers might discuss their frustrations with science journalists seemed powerful enough to cut through the ministry's cloak of confidentiality (Jasanoff 1997: 225).

This information deficit can perhaps be said to characterise the BSE story. By comparing and contrasting, for example, the press releases from government Ministries with the press release from the *Journal of Pathology* it is plain to see that only one of the releases are willing to provide access to the actual scientific findings they describe. This could be attributed to two factors. First, the enclosed nature of the 'Whitehall Village' combined with the drive for secrecy Weber discussed might account for the fact that neither the MAFF release from 1990 or the DoH and MAFF releases in 1996 offered access to specific scientific findings. Second, the promotional purpose of the journal's press release coupled with the complexity of scientific issues for journalists as scientific generalists, made journalistic access to the findings beneficial.

Sturloni challenged the 'top-down' model of science communications arguing that it was inadequate because media outlets extended the field of debate and so undermine the mono-directional model of information flow (Sturloni 2004¹). Whilst my research findings show this to be accurate in a few instances (for example, *The Mirror's* scoop on 20 March 1996; *The Mirror's* use of public sources in 1990; the number of co-opted stories across the sample on 21 March 1996) her argument cannot be entirely supported through the findings presented in this thesis. Sturloni's view cannot be supported in 1990 and 2004.

1

http://jekyll.comm.sissa.it/articoli/art04_01_eng.htm

Sturloni concluded that media outlets preferred a process of “risk negotiation”, a process that gave media organisations considerably more influence in shaping stories than the top-down model implied. The only time this was observed was through the discussion of figures between the two scientists and *The Telegraph’s* correspondent in 2004. There was evidence in my findings that supported this view. For example, *The Mirror’s* exclusive defied this top-down communication on 20 March 1996. In addition, the co-option effect on 21 March as discussed also suggested that top-down communication was not the only channel available to journalists in this event. It was observed that the coverage on 21 March 1996 might be best described as a news wave (Vasterman 2005). As outlined in chapter one, Vasterman suggested that one of the outcomes of a news wave was “the media not the events are governing the coverage (2005: 510). The co-option of other related stories on the day provides evidence of this news wave. In addition, the qualitative research findings on the 2004 event demonstrated how one correspondent did indeed attempt to *negotiate* risk in Sturloni’s terms, in his attempt to square the figures of Hilton and Collinge in his copy.

This research has contributed new knowledge of the BSE story to the field. It has demonstrated how the event has been transformed into a science and health story, not at the front of the news agenda in 2004 but anticipated by journalists to be so again at some point in the future. The findings have helped to reveal the key structures involved in the dissemination of events at particular moments over 14 years. The study also contributes knowledge on the ways in which information about BSE and variant CJD were disseminated as a series of strategically predetermined events. And it demonstrated how aspects of strategic predetermination were resisted.

Part Three Reflections on the Strengths and Weaknesses of the Thesis

Having drawn some conclusions and assessed my contribution to the field, I now discuss the major strengths and weaknesses of the thesis. I begin first with the strengths. A strength of the thesis can be seen in the way the content analyses have provided a useful overview of the three events and the way these events were presented in press releases and news reports. It has also been useful in providing comparative data across a wide time span and between different sets of data. However these analyses only provided data on two information events (IE3 and IE5 respectively).

The qualitative research was designed to provide a detailed account of one of the events studied and I think it did this very effectively. For example, the content analyses showed how Professor Collinge was the most cited secondary source in 2004 in spite of not being involved in the Hilton study or cited in any press release this researcher could find. The interviews with sources and journalists helped to shed light on his popularity as a source. Thus another strength of this research is the combining of methods to produce different types of data around the same event.

The quality and depth of the interviews is also in my view a considerable strength of the thesis. The additional documents provided by the sources interviewed reinforced this.

Another strength of this thesis can be found in the evidence it has helped to generate on aspects of strategic predetermination. It has provided insights into how aspects of the strategic predetermination of events worked across the three events, and in the case of 2004, when they were used, who used them and to what ends. A final strength of this research is that it includes a focus on a recent event and so updates knowledge on the reporting of BSE.

There are, however, weaknesses to be found in the research. Two clear weaknesses can be identified. First, the small number of sources who agreed to be interviewed restricts the view of how this story came to be reported, since it draws on interviews with only two sources. That said, these sources provided me with important, in depth interviews and documents I would otherwise have been unable to access. There is no doubt that accounts from Professors Collinge, Ironside and Troop would have enriched the findings. But their reluctance to take part does enable me to highlight problems with working in this field for scholars.

A second weakness of this research is that I would have liked to have had access to all information events constructed to enable a close comparison. While I was in possession of the *Journal of Pathology's* press release, the journal paper and the news reports, I had no access to the agreed findings - the information event constructed at the reporting stage. This meant I was unable to *physically* explore the transformation of the findings to journal article. I also did not have access to journalists' original copy prior to submission to their news desks. This would have enabled me to provide a more in depth analysis of the transformations that occurred here too.

At the outset of this research I had hoped to explore the events in 1990 and 1996 in the way I have done in the examination of the Hilton study. It was attempted. However, time and access were very much against me as those journalists and sources available were few and far between.

Access to sources and some journalists proved difficult. It was originally intended that I provide critical case studies of each of the three events. However, the 1996 crisis proved still too contentious an issue to discuss for Stephen Dorrell, Douglas Hogg, as did the 1990 event where I approached John Gummer. In terms of journalists who reported the stories in 1990 and

1996, it was found that too many had retired or died, changed career, or disappeared, while others stated that they could not remember enough detail to be useful.

Perfection is, of course, unobtainable and probably undesirable as it is often through mistakes or miscalculations as researchers that we find creative ways to deal with inevitable research problems. Having completed the thesis, I have reflected on the areas I feel need further refinement, and the problems I encountered. This study was conducted retroactively in that it started with news reports – the final information event in the chain and worked its way back. Ideally, it might have been more fruitful to identify a potential story and follow its transformation in an active situation. The future of BSE still offers the potential for such research.

The future of BSE as a story

What is the future for BSE as a story? Research continues, the population's tissue samples are quietly being studied and silently logged on a new national database. The debate within this closed community currently centres on whether the tissue samples of those who test positive for variant CJD should be told that they are carrying the disease. These developments, these profound ethical questions, however, have so far failed to see the light of day in terms of widespread coverage in the press. BSE, as I have argued, has become de-politicised in the press. But the developments in the story, the debates within science about it, and the structures for funding its exploration are political. The public has been excluded from debates about BSE and variant CJD. The Phillips Report in 2000 was presented as the end of the crisis. Witnesses were called, statements were taken over several years, and in the end, the chief 'culprits' were named and shamed, blame was apportioned, and communication breakdown diagnosed. The government stepped back and refused to apportion any guilt, whilst informally briefing journalists of who they

thought was really to blame for the fiasco. Closure was imposed on the story. Now it only tends to emerge when new scientific research is published on variant CJD, or when another country has an outbreak of BSE. But the problem has not gone away. The foot and mouth outbreak in 2001 was, according to 'dissenting' scientist Richard Lacey, a cover story for a cull of BSE infected cattle. Two cases of variant CJD transmitted through blood transfusions have recently been confirmed. Scientists are researching and exploring a range of BSE/CJD related projects, funded by the DoH and co-ordinated and controlled by a BSE steering group.

There are also a growing number of dissenting voices in other countries. In America for example, the number of deaths from CJD – some 250 per year - is being contested by the families of victims who are now keeping their own counts². The journalists interviewed for the 2004 case study all stated that they expected to write about BSE again in the future. As much as Government and Administration would like it to be, the BSE story is not over yet.

Final reflection

Gauthier claims that because news has come to be seen as “essentially a layering of constructs” scholars have come to see news as having no connection to an independent reality” (2005: 54). This would not be of any concern if it were not for Johnson’s observation. As seen in chapter two, she described the beliefs of power holders she observed during her time as a communications strategist for the Labour Party:

... what happens in the political world does not matter – only perceptions matter. They behave as if politics were not about objective reality but virtual reality and therefore not surprisingly, they rely on the doctors of spin (Johnson 1999: 109).

Bird flu, fundamentalist Islamic terrorism, paedophiles, asbo culture, MRSA - are these all virtual realities? What is reality? Are we adrift on Lippmann's "ocean of possible truths"? Reality is a crucial conception in the study of news. And it should always remain elusive, ambiguous and open to question. But I contend that one has to know *where* and *how* to look for the nearest approximation of it. If one throws away the quest for and belief in *reality* then one has no defence against the reality constructed by powerful elites.

² see <http://www.organicconsumers.org/madcow/cheap10302.cfm>

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Appendix 1.

CONTENT ANALYSIS CODING SHEET 1 News Reports

Item no: NR Newspaper title:

Date:

Author/title:

Headline:

1. Length of article (in words)_____ Page no:

2. Primary source of story_____

3. No of quotations by primary source_____

4 Secondary sources used_____

5. Secondary sources quoted

6. Information event

7. Evidence of dissemination process _____

8. Detail evidence of dissemination process ('time' and/or 'form' in box below)

12. Elements of news value - circle each applicable value evident in news content

Frequency Amplitude Clarity Meaningfulness Consonance Unexpectedness Continuity
Elite nations Elite persons Reference to persons Negativity Competition Co-option
Predictability Prefabrication

Appendix 2

CONTENT ANALYSIS CODING SHEET 2 Press Releases

Item no: PR Issuer:

Date:

Headline:

1. Length of release (in words) _____ Pages - no: _____

2. Primary source of story _____

3. No of quotations by primary source _____

4. Secondary sources used _____

5. Secondary sources quoted

6. Information event

7. Evidence of dissemination process _____

8. Detail evidence of dissemination process ('time' and/or 'form' in box below)

12. Elements of news value - circle each applicable value evident in press release content.

Frequency Amplitude Clarity Meaningfulness Consonance Unexpectedness
Continuity Elite nations Elite persons Reference to persons Negativity Co-option
Predictability Prefabrication



News Release ^{HAN.}

Ministry of Agriculture, Fisheries & Food, Whitehall Place, London SW1A 2HH. Press Office: 01-270 8973. Out of hours: 01-270 6080. Fax: 01-270 8443.

177/90

10 May 1990

SPONGIFORM ENCEPHALOPATHY IN A CAT

Pathologists at the Bristol Veterinary School and MAFF's Central Veterinary Laboratory at Weybridge have diagnosed a sub-acute spongiform encephalopathy in a five-year-old Siamese cat originating from the Bristol area.

Keith Meldrum the Ministry's Chief Veterinary Officer has written to the 'Veterinary Record'. A copy of his letter is attached.

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90/5.10/2.1



Ministry of Agriculture, Fisheries and Food

Whitehall Place, (West Block), London SW1A 2HH
Tel: 01-270-3000 Direct line: 01-270- GTN: 270
Telex: 889351 Fax: 01-270-8125

Dear Sir

Your readers will wish to be aware that pathologists at the Bristol Veterinary School and the Central Veterinary Laboratory at Weybridge have diagnosed a sub-acute spongiform encephalopathy in a five year old neutered male Siamese cat originating from the Bristol area.

The animal was referred to the Bristol Veterinary School by a veterinary surgeon because it showed nervous symptoms including unsteadiness on the feet and incoordination. Typical lesions of spongiform encephalopathy were found in the brain following post-mortem examination. Such findings have not been reported previously in domestic cats.

Inquiries into the case will continue, but there is no evidence that the condition is transmissible nor is there any known connection with the other animal encephalopathies.



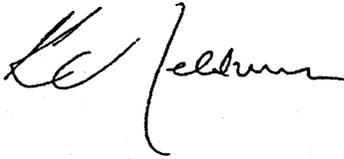
160

90/5.10/2.2

Veterinary surgeons in practice will wish to be aware of this finding and to consider the possibility of a spongiform encephalopathy when cats with nervous symptoms are presented for examination.

I would be grateful if all relevant details of any confirmed case could be given to the Divisional Veterinary Officer of the Ministry of Agriculture, Fisheries and Food.

Yours faithfully

A handwritten signature in cursive script, appearing to read 'K C Meldrum', written in dark ink.

K C MELDRUM
Chief Veterinary Officer

Appendix 4 20 March 1996

DEPARTMENT OF HEALTH

30

Press release

96187

20 March 1996

CJD AND PUBLIC HEALTH - STEPHEN DORRELL STATEMENT

Stephen Dorrell, Secretary of State for Health today made the following statement to the House of Commons:

"With permission, Madam Speaker, I would like to make a Statement about the latest advice which the Government has received from the Spongiform Encephalopathy Advisory Committee. The House will be aware that this Committee which is chaired by Professor John Pattison was established in 1990 to bring together leading experts in neurology, epidemiology and microbiology to provide scientifically based advice on the implications for animal and human health of different forms of spongiform encephalopathy.

"The Committee provides independent advice to Government. Its members are not Government scientists; they are leading practitioners in their field and the purpose of the Committee is to provide advice not simply to Government, but to the whole community on the scientific questions which arise in its field. The Government has always made it clear that is our policy to base our decisions on the scientific advice provided by the advisory committee. The Committee has today agreed new advice about the implications for animal and human health of the latest scientific evidence. Copies of the Committee's advice, together with a statement from the Chief Medical Officer which is based on that advice, have been placed in the Vote Office.

"The Committee has considered the work being done by the Government Surveillance Unit in Edinburgh which specialises in Creutzfeldt-Jakob Disease. This work, which relates to the 10 cases of CJD which have been identified in people aged under 42, has led the Committee to conclude that the unit has identified a previously unrecognised and consistent disease pattern. A review of patients' medical histories, genetic analysis, and consideration of other possible causes have failed to explain these cases adequately. There remains no scientific proof that BSE can be transmitted to man by beef, but the Committee have concluded that the most likely explanation at present is that these cases are linked to exposure to BSE before the introduction of the specified bovine offal ban in 1989. Against the background of this new finding the Committee has today agreed the series of recommendations which the Government is making public this afternoon.

[more]

-2-

"The Committee's recommendations fall into two parts.

"Firstly, they recommend a series of measures to further reduce the risk to human and animal health associated with BSE. My Rt Hon Friend the Minister of Agriculture, Fisheries and Food will be making a statement about those measures which fall within his Department's responsibilities immediately after questions on this Statement have been concluded.

"In addition the Committee recommended that there should be urgent consideration of what further research is needed in this area and that the Health and Safety Executive and the Advisory Committee on Dangerous Pathogens should urgently review their advice. The Government intends to accept all the recommendations of the Advisory Committee in full; they will be put into effect as soon as possible.

"The second group of recommendations from the Committee offers advice about food safety on the assumption that the further measures recommended by the Committee are implemented. On that basis the Committee has concluded that the risk from eating beef is now likely to be extremely small and there is no need for it to revise its advice on the safety of milk.

"The Chief Medical Officer will be writing today to all doctors to ensure that the latest scientific evidence is drawn to their attention. In the statement by the Chief Medical Officer which we have placed in the Vote Office, Sir Kenneth Calman poses to himself the question whether he will continue to eat beef. I quote his answer. "I will do so as part of a varied and balanced diet. The new measures and effective enforcement of existing measures will continue to ensure that the likely risk of developing CJD is extremely small."

"A particular question has arisen about the possibility that children are more at risk of contracting CJD. There is at present no evidence for age sensitivity and the scientific evidence for the risks of developing CJD in those eating meat in childhood has not changed as a result of these new findings. However, parents will be concerned about implications for their children and I have asked the Advisory Committee to provide specific advice on this issue following its next meeting.

"Any further measures that the Committee recommend will be given the most urgent consideration. As the Government has repeatedly made clear, new scientific evidence will be communicated to the public as soon as it becomes available."

Notes to Editors

1. The Spongiform Encephalopathy Advisory Committee (SEAC) reviews the evidence, including the science and details of individual CJD cases.

2. The National CJD Surveillance Unit was established at Western General Hospital in Edinburgh in May 1990 under the direction of Dr R Will. It is funded jointly by the Department of Health and Scottish Office.

[ends].

**Press release**

96186

20 March 1996

**CJD AND PUBLIC HEALTH - STATEMENT BY
THE CHIEF MEDICAL OFFICER**

Sir Kenneth Calman, Chief Medical Officer said today:

"The statement by Spongiform Encephalopathy Advisory Committee (SEAC) of the description of a new variant of CJD which has a distinct clinical and pathological appearance, is a cause for serious concern. While there is no direct evidence of a link between BSE and this new variant, pending further research, I agree with SEAC that the most likely explanation is that these cases may be linked to exposure to BSE before the SBO ban in 1989.

"I have always sought and followed the advice from the experts in this field, notably SEAC, and ministers have always followed this advice.

"While the theoretical risk has always been acknowledged, and the measures which have been introduced to control the spread in cattle, have had as their basis the reduction of any possible risk, these new findings are important.

They have a number of implications:

- these new findings suggest that there may have been an association between eating bovine products, which may have been contaminated by infected brain and spinal cord, and a risk of developing CJD before the introduction of measures in 1989.
- there remains, however, no scientific evidence that BSE can be transmitted to man by beef. However, risk analysis suggests that even the likelihood of the extremely small risk of transmission increases when non-muscle parts from older cattle are eaten. It is essential therefore that the source and quality of beef is clear and that the public can be assured of these measures.
- current measures must be rigorously enforced. This is at the heart of the issue. SEAC will recommend that effective training measures should be introduced and consider this further.
- further research is urgently required and this will be funded.

(more)

Richmond House 79 Whitehall London SW1A 2NS

Telephone: (Department of Health) 0171-210 3000 (Press Office) 0171-210 5221 Fax: 0171-210 5433/4

SEAC
13 paras - CMO

"For this reason it is considered that an additional measure, the de-boning of beef in specified plants with full supervision by the Meat Hygiene Service in cattle over 30 months of age should be introduced. This will significantly reduce the likelihood of extremely small risk of transmission from non-muscle parts of the carcass. These will be prevented from entering the food chain. This will be discussed further by SEAC.

"Meat or meat products on the shelf or in carcass form do not need to be removed or destroyed.

"There is nothing to lead the Committee to change its advice on the safety of milk. It is considered to be safe.

"The implications for the public who may be worried about contracting the disease have also been considered. At present the overall numbers are very small, but there is as yet no indication as to the likely numbers of patients who may contract the disease in the future. There is currently no clinical test for the disease and today all doctors will be contacted and given further background on the new information.

"The question that will be asked is whether or not I will continue to eat beef. I will do as part of a varied and balanced diet. The new measures and effective enforcement of existing measures will continue to ensure that the likely risk of developing CJD is extremely small.

"There is at present no evidence for age sensitivity and the scientific evidence for the risks of developing CJD in those eating meat in childhood has not changed as a result of these new findings. However, parents will be concerned about implications for their children. SEAC has been asked to provide specific advice on this issue.

"Further discussion will take place over the next few days and additional measures may be considered in the future. As has been said before, should any new scientific evidence become available it will be communicated to the public as soon as possible."

(ends)



Ministry of Agriculture, Fisheries & Food, Whitehall Place, London SW1A 2HH. Press Office: 0171-270 8973. Out of hours: 0171-270 8080. Fax: 0171-270 8443.

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News Release

99/96

20 March 1996

BSE: PUBLIC HEALTH TOP PRIORITY SAYS HOGG

Additional moves to protect public health were announced today following the receipt of advice from the Spongiform Encephalopathy Advisory Committee (SEAC).

SEAC recommended that beef for human consumption from cattle over 2½ years of age should be deboned in licensed plants. This will be done. Most beef eaten in GB is from cattle under 2½ years old.

Agriculture Minister Douglas Hogg's action is designed as an extra safety net to prevent infection entering the human food chain.

The decision follows a report from SEAC of a previously unrecognised disease pattern of CJD in ten people aged under 42. Although there is no direct evidence of a link, on current data and in the absence of any credible alternative the most likely explanation at present is that these cases are linked to exposure to BSE before the introduction of the SBO ban in 1989.

Mr Hogg said: "I decided to act now because we cannot take risks with public health. CJD is a rare disease and cases of BSE in cattle have fallen for the last three years. All cattle with clinical signs are slaughtered and destroyed, and all tissues in which BSE may be present in clinically unaffected cattle are seized and destroyed. The new measure is a prudent and balanced response to new information. In view of what I have announced, we believe that British beef can be eaten with confidence."

Mr Hogg made his announcement in the House of Commons. A full copy of his statement is attached.

END

NO CHECK AGAINST DELIVERY

DRAFT STATEMENT

BSE - AGRICULTURE

1. With permission, Madam Speaker, I would like to make a statement about BSE.
2. In view of the statement which my Rt Hon Friend the Secretary of State for Health has just made, the House will wish to know the action I propose to take to ensure the risk to the public is minimised.
3. The additional recommendations just made by SEAC that most immediately affect agriculture departments are that carcasses from cattle aged over 30 months must be deboned in specially licensed plants supervised by the Meat Hygiene Service and the trimmings kept out of any food chain; and that the use of mammalian meat and bonemeal in feed for all farm animals be banned.
4. The Committee go on to state that if these and their other recommendations are carried out the risk from eating beef is now likely to be extremely small.
5. The Government has accepted these recommendations and I will put them into effect as soon as possible. Any further measures that SEAC may recommend will be given the most urgent consideration.
6. Also, and with immediate effect, I have instructed that existing controls in slaughterhouses and other meat plants and in feed mills should be even more vigorously enforced.
7. I do not believe that this information should damage consumer confidence and thus the beef market. But I should say that support mechanisms exist in the Common Agricultural Policy and the Government will monitor the situation closely. I will naturally report developments to the House.
8. Madam Speaker, I recognise that there will be public concern, but the Government's Chief Medical Officer advises us that there is no scientific evidence that BSE can be transmitted to man by beef. Indeed he has stated that he will continue to eat beef as part of a varied and balanced diet as indeed shall I. In view of what I have announced, we believe that British beef can be eaten with confidence.

STATEMENT BY SPONGIFORM ENCEPHALOPATHY ADVISORY COMMITTEE

The Spongiform Encephalopathy Advisory Committee have considered 10 cases of CJD which have occurred in people aged under 42 which have recently been identified by the CJD Surveillance Unit, Edinburgh. The Committee have concluded that the Unit has identified a previously unrecognised and consistent disease pattern. A review of patients' medical histories, genetic analysis to date and consideration of other possible causes, such as increased ascertainment, have failed to explain these cases adequately. Although there is no direct evidence of a link, on current data and in the absence of any credible alternative the most likely explanation at present is that these cases are linked to exposure to BSE before the introduction of the SBO ban in 1989. This is cause for great concern.

CJD remains a rare disease and it is too early to predict how many further cases, if any, there will be of this new form. Continued surveillance is of the utmost importance and the Committee are actively seeking further data from both the UK and abroad to help assess the full significance of the Unit's findings.

The Committee emphasised it is imperative that current measures to protect the public health are properly enforced and recommend constant supervision to ensure the complete removal of spinal cord.

The Committee also recommend:

- a. that carcasses from cattle aged over 30 months must be deboned in licensed plants supervised by the Meat Hygiene Service and the trimmings must be classified as SBOs.
- b. a prohibition on the use of mammalian meat and bonemeal in feed for all farm animals.
- c. that HSE and ACDP, in consultation with SEAC, should urgently review their advice in the light of these findings.
- d. that the Committee urgently consider what further research is necessary.

The Committee does not consider that these findings lead it to revise its advice on the safety of milk.

If the recommendations set out above are carried out the Committee concluded that the risk from eating beef is now likely to be extremely small.

20 March 1996

This is not part of the statement but is for information of EHDs ?

ACDP - Advisory Committee on Dangerous Pathogens
SBOs - Specified Bovine Offals

Appendix 5 May 2004

Contact: Jaida Harris
Tel: 01243 770674
Email: jharris@wiley.co.uk

New study raises questions about the number of people in the UK who could be incubating vCJD

X April 2004: A team of UK scientists found that 3 out of 12,674 stored appendix and tonsil samples showed evidence of the prion protein associated with vCJD, but urge caution about the way these results are interpreted. The research is published this week in *The Journal of Pathology*.

The study aimed to help health policymakers estimate the numbers of people who could become ill from vCJD by assessing the possible numbers of people in the UK who might be incubating the disease. Based on the three positives and calculations in the highest risk group (those aged 10-30), the researchers estimate that about 3,800 individuals in the UK would test positive.

Although the scientists are certain that prion proteins were present in three samples, only one showed a pattern of prion accumulation that resembled that seen in tissue of known vCJD cases. The other two had different patterns of accumulation, so their significance is uncertain. However, prion protein accumulation has not yet been described in any other disease, so data from these two samples cannot be dismissed.

Lead author of the paper David Hilton, who works in the Department of Histopathology at Derriford Hospital, Plymouth, said "Our findings need to be interpreted with caution, but cannot be discounted. There is still much to learn about vCJD and presence of the protein in these tissue samples does not necessarily mean that those affected will go on to develop vCJD. It is important that we clarify the significance of these findings by prospective screening of fresh tonsillectomy tissue"

In contrast to these high estimates of possible future incidence, clinical cases of vCJD remain low and seem to be in decline. "Although the numbers of cases are currently in decline, the possibility of further rises cannot be excluded," say the authors.

"The study it also reinforces the importance of measures taken by the UK Department of Health to reduce the risk of spread of vCJD via blood products and surgical instruments," they add.

Continued Overleaf

Notes to Editors

Hilton D. A., Ghani A.C., Conyers L., Edwards P., McCARDLE L., Ritchie D., Penney M., Hegazy D., Ironside J.W. Prevalence of lymphoreticular prion protein accumulation in UK tissue samples. *The Journal of Pathology*. **Reference to be added**

About the Journal

The Journal of Pathology is the official journal of the Pathological Society of Great Britain and Ireland. The Journal publishes high quality, influential papers in the fields of pathology and clinico-pathological correlation as well as experimental pathology relevant to the understanding of human disease. The main interests of *The Journal of Pathology* lie in the pathophysiological and pathogenetic mechanisms of human disease and in the application of such knowledge to diagnosis and prognosis.

The Journal of Pathology is published monthly by John Wiley & Sons and is available in print (ISSN: 1096-9896) and online (ISSN: 0022-3417) via Wiley InterScience at www.interscience.wiley.com/thejournalofpathology

For further information or to request a full copy of this paper, please contact Jaida Harris on 01243 770674 or by email jharris@wiley.co.uk

APPENDIX 6 interview Schedule and Questions to Respondents

Interviewee	Organisation	Date first contacted	Outcome
Professor Richard Lacey, microbiologist	University of Leeds (Emeritas Professor)	6.11.02	Interviewed 3.12.02
Stephen Dorrell, MP	Conservative Party (Constituency Office)	2.11.02	Declined 17.11.02
John Gummer, MP	Conservative Party (Constituency Office)	2.11.02	Declined 11.11.02
James Erlichman, Consumer Affairs correspondent	<i>The Guardian</i>	6.11.02	No reply
Michael White, Political editor	<i>The Guardian</i>	6.11.02	No reply – on sabbatical
John Mullin, Deputy editor	<i>The Scotsman</i>	6.11.02	No reply
Paul Brown, Agriculture correspondent	<i>The Guardian</i>	6.11.02	Declined ¹ 6.11.02
Jaida Harris, press officer	Wiley Interscience	11.1.05	Left employ and untraceable
Dr David Hilton, histopathologist	Derriford Hospital	4.09.04	Interviewed 1.10.04
Amanda Nash, press officer	Derriford Hospital	1.10.04	Interviewed 1.10.04
Kevin Maguire, Political correspondent	<i>The Guardian</i>	6.11.02	Interviewed 15.11.02
Professor Pat Troop, director	Health Protection Agency	10.1.05	Accepted: 12.1.05 Declined: 17.1.05
Professor James Ironside, Clinical Neuropathologist	CJD Surveillance Unit	10.1.05	No reply
Professor John Collinge, Consultant in charge	MRC Prion Unit	10.1.05	Interviews set up: 21.11.05 ² Cancelled: 21.11.05, 2.12.05
Pallab Ghosh, science correspondent/Chair	BBC News/Association of British Science Writers	27.11.04	Input via correspondence received: 29.11.04
Dr Geoffrey Pearson, Senior Lecturer	Bristol Veterinary School	6.11.02	Input via correspondence: received 16.12.02
Senior science correspondent	<i>The Daily Telegraph</i>	10.1.05	Interviewed 14.1.05
Senior science correspondent	<i>The Times</i>	19.1.05	Interviewed 26.1.05
Health Correspondent	<i>The Guardian</i>	10.1.05	Initial brief phone interview conducted 21.11.05
Health Correspondent	<i>The Daily Mirror</i>	10.1.0	Left employ and untraceable
Health Correspondent	<i>The Sun</i>	10.1.05	Interviewed 19.1.05

¹ Declined on the grounds that the issue had moved away from his area into health but gave the author some useful contacts

² The interview was rescheduled for later that day and then cancelled

Interviews – Questions A: Sources

Each source had a different role to play in the BSE story and so questions are tailored specifically to each. That said, structurally the interviews are very similar and can be divided into the following topic areas:

1. Context/background: role played in BSE story
2. Role in the dissemination process
3. Experiences of the process of dissemination
4. Implications of BSE in a wider context

Interviews – Questions B: Journalists – The Hilton study respondents.

As each respondent's report is different I have specific question to ask as well as general questions. The general questions are:

1. How did you decide what the story was about/which angle to take?
2. How did you hear about the research (press release, contact/source etc)?
3. Do you recall if you had a specified amount of space allocated to the story?
4. What was your feeling about the importance of the story to a) your news editor b) your readers?
5. How did you go about researching and writing the story – who did you contact? How? Why?
6. Where did you feel the story fitted in to the BSE story as a whole – significance/importance?

Specific questions in addition to the above:

Telegraph

1. The Telegraph had three stories related to BSE that day on the same page – why?
2. Where did you obtain the figures (1,300-16,000)
3. What contact did you have with Dr Hilton?

Guardian

1. Of all the reports sampled, the Guardian took the HPA angle – why?

Times

1. The Times chose to put this story on the front page – why?
2. The Times was the only publication to describe the findings of the research using the word 'time-bomb' – why was that?

Sun

1. Why did you use the specific headline?
2. The figure was rounded up to 4,000 – reasons?
3. Reasons for word count, page, page position? (Exactly the same as *the Mirror* – were you aware of this? Note: difficult for them to know but I think it is worth pointing out to them)

Mirror

1. Reasons for word count, page, page position? (Exactly the same as *the Sun* – were you aware of this? Note: difficult for them to know but I think it is worth pointing out to them)

Notes

As the only available 'source' of the story in *the Mirror* on the 20 March 1996, Kevin Maguire falls between 'source' and 'journalist'. Thus his questions relating to the 1996 story are a hybrid of the two interview approaches outlined above.

In addition, Pallab Ghosh was contacted for his views on the SIRC guidelines on science reporting for this thesis. This part of the research was also the subject of a conference paper, *Do We Need Science Reporting Guidelines? Implications for Researchers in a Pan-European Context*, presented to the First European Conference in Communication, University of Amsterdam, November 2005.

The other journalists listed in the table who were approached for interviews but who declined were selected for their experience of BSE across the three periods studied in this thesis.

