CAMPBELL, F.C.B. 1996. The analysis of environmental information: a study of the dissemination, mediation and interpretation of news. Robert Gordon University, PhD thesis. Hosted on OpenAIR [online]. Available from: https://doi.org/10.48526/rgu-wt-1688400

The analysis of environmental information: a study of the dissemination, mediation and interpretation of news.

CAMPBELL, F.C.B.

1996

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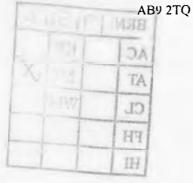
THE ANALYSIS OF ENVIRONMENTAL INFORMATION: A STUDY OF THE DISSEMINATION, MEDIATION AND INTERPRETATION OF NEWS

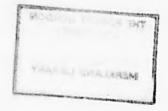
Fiona Catherine Brown Campbell

A thesis submitted in partial fulfilment of the requirements of the Robert Gordon University for the award of a Doctor of Philosophy.

1996

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This work is dedicated to my parents and my sister who gave me support and encouragement when I needed it most. It is also for my friends who provided me with constant reassurance and never stopped believing in me. To you all, thank you.

Abstract

The project arose out of the fact that information changes as journalists gather, interpret and disseminate environmental information. A model was developed describing the flow of environmental information in the media which shows that journalists retrieve information from a complex range of sources and repackage it in an apparently simplified format. The preliminary stage of this model was enhanced to a secondary level by the data elicited from interviewing journalists, media librarians and scientific personnel. This depicted the news process within a specific reporting context, showing the sources (e.g. specialists, libraries, environmental groups) which journalists consult and the methods they use to construct the news. A case study of the Braer oil spill (Appendix VI) has been included in which an in-depth examination of the newspaper coverage was carried out. Qualitative methods used at this stage (the macro level) include semi-structured interviewing, observation and various content analysis techniques. From this work it emerged that journalists use "taken-for-granted", routinised procedures in the news process.

The research aimed to investigate the news process, i.e. at a micro level, implicit in which are the constructional and interpretive methods which Scottish journalists use to create environmental news. It was the primary intention of the work to reveal the ways in which reporters routinise their work procedures and how they apply the "rules" implicit in them. During the course of the research the sources of these rules were identified as academic training, on-site experience and professional roles. The project has examined the techniques used by journalists to evaluate news potential in environmental issues, the practices used to gather information, the sources which journalists select and the storage of information in libraries.

The method implemented in the micro analysis evolved from the work on the Braer case study and was conducted using techniques of ethnomethodology. These were tailored specifically to Scottish journalism and the environment. Tri-lateral discourse sessions (i.e. the researcher and

respondents interact in and through the text) were carried out, where respondents analysed five different environmental cases. Respondents revealed the step-by-step procedures involved in the approach to, researching of and construction of news. From these data the researcher identified a core of rules or procedures which journalists use.

Working within the model of the news process, the research aimed to demonstrate how journalists actually undertake the construction of news by examining their "taken-for-granted" assumptions. The work aims to make a valid contribution to knowledge in that it extends previous research carried out in the field and both the context and method are original in their development.

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Acknowledgements

I should like to thank the following people without whose assistance this research would not have taken place.

Dr. C. Stuart Hannabuss, my Director of Studies, for his unfailing support and guidance. Dr. Dorothy Williams, Professor Alistair McCulloch and Professor Seaton Baxter for their encouragement and reassurance.

Grateful thanks go to all the respondents who took part in the research for their invaluable assistance. Firstly, those from the broadcast and print sectors of the media, in particular, Elizabeth Buie, Auslan Cramb, Alistair Gracie, Tom Little, Ian Lundie, Jonathon Moore, Ruraidh Nicol, Paul Riddell, Graeme Smith, and Mark Stephen. Special thanks go to Carlos Alba for his patience and understanding and for taking the time to discuss the philosophy of journalism with me. Additional thanks go to Paul Adderton, Kamal Ahmed, Arthur Anderson, Mark Coyle, Andrew Jones, Ron Lyons, Alisdair Stirling, and Karen Warner. I am unable to thank the anonymous respondents by name but I have not forgotten the important contribution which they have made to the project.

Secondly, the media librarians, David Ball, Marie Campbell, Peter Chapman, Gertrud Erbach, Alex Gaffney, Duncan Smith, and Moira Stevenson.

Thirdly, environmental and scientific specialists, Dr. Lindsay Laird, Fiona Matheson, Harry Ross, Dr. Alex Sinclair, Barti Synge and Louie Fooks. Thanks also go to the specialists who validated the case scenarios, Professor Seaton Baxter, Fiona Begbie, Richard Brown, Dr. T. N. N. MacLeod and Dr. Maureen Melvin.

Finally, my thanks also go to the members of the research department in The School of Information and Media for their continuous care and support.

Aims of the Research

1. To examine the journalists' information gathering practices and to study the extent to which
their environmental needs are satisfied by sources.
2. To analyse and evaluate the methods by which journalists retrieve and interpret
environmental information.
3. To investigate and analyse the news information provided by media libraries to journalists in
Scotland.
4. a) To uncover the "taken-for-granted", tacit rules which journalists use in the news process to
construct the news product, and,
b) To identify and investigate the sources of these rules.
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Introduction

"If journalism is the first draft of history, then we can appreciate that, as with history, selection and interpretation will take place and that we are dealing not with a world of unassailable facts but with provisional accounts." (Eldridge, 1993, p6)

This study aims to examine the journalist's information gathering practices and to investigate the extent to which their information needs are satisfied by sources. It is the purpose of the research to analyse the news process and examine the tacit rules which journalists use in implementing this process. It is the intention of the research to investigate the information sources used by practitioners, including the media library and the science specialist and furthermore to examine critically and evaluate methods by which journalists retrieve and interpret environmental information. It is also the aim of the project to study the ways in which journalists package environmental information into a suitable format for the audience ie information consolidation or the dressing of information in a popularised form for social consumption.

This thesis aims to explore the construction of environmental news and the information flow which takes place from technical complexity, through retrieval by journalists, to mediation and dissemination via newspapers and television and radio stations. The relationship between science specialist and journalist or what Friedman (1986) calls the "symbiosis" i.e. the co-existence of two extreme, different professions for the single common aim, is examined.

The research, therefore, is a detailed investigation into the ways in which journalists, broadcasters and media practitioners locate and retrieve information and how they interpret it and mediate it to the wider social community. It is also an examination of the media library and its role within the organisation as a support facility and information provider to staff and journalists. Within this context, peripheral consideration is given to the issue of computer aided journalism and the effects of new technology in the industry but this is not one of the main themes of the research.

At a more specific level, the research is an intensive study of the news product and its structures. The thesis contains an in-depth case study of the Braer oil spill which occurred in Shetland in

January 1993. This can be found in Appendix VI (vol 2) and is cross referenced throughout the text.

The main aim of the thesis addresses the ways in which journalists use routine procedures or rules to construct the news. This was accomplished through the combination of a number of different methodologies (see chapter 2). The findings from this section adds another dimension to the model which describes the research hypothesis discussed below (see chapter 3, 10).

The research contains a number of main and sub hypotheses and these are as follows. Environmental information is pluralistic and complex and has information meanings inherent in it. These are changed when journalists and the audience or readership interpret it. Essentially, environmental news is a version of "interpreted" environmental information. It is interpreted by the people who use it e.g. librarians, journalists, editors etc. Theorists in the field (Bagdikian, 1984; Ericson, 1987, 1991) support the view that the new technology involved in the news making process causes the creation of new information meaning structures (see chapter 4), but this research hypothesises that as environmental knowledge is retrieved and interpreted by journalists and news practitioners, the meanings which can be taken from this information, change. Therefore, the information changes according to how it is interpreted.

It is argued that the flow of knowledge is influenced and redirected by the news process (see preliminary stage of model, chapter 3). Primary ie unmediated knowledge is altered into a popularised, commercial form and it appears to have been simplified due to the interpretive, journalistic process. In a news report the information may still be complex but it has been shortened and reduced to a series of manageable concepts, thus implying that some of the intellectual content of the original idea has been lost or changed i.e. that the knowledge has been popularised. The project takes account of the extent to which the news is structured by the placing of values and meanings on the information, for example, issues of bias or the construction of the news product and its implications for the social construction of reality.

The work is not an audience study and has not set out to reach any conclusions about if and how the media affects viewers, listeners or readers as other researchers have (Bell, 1991; Morley, 1986; Tulloch, 1992). The study aims to consider the audience not as an explicit multi-faceted entity but as a collective body or mass which is defined by the perceptions of the journalist, thereby allowing the research to stand as an original piece of work.

For the purpose of setting the research in context it is necessary to provide an overview of the theories and current issues pertaining to the media. It is also important to direct attention to the role which the media has played within the environmental movement in disseminating environmental information to the wider social groups. In order to do this, a brief overview of the environmental movement has been included in the literature review chapter (1).

Chapter 1 News and Information

1.1 Introduction

The literature in the cross-disciplinary fields of mass communication and information science revealed that there had been no previous research conducted into the ways in which environmental news is mediated to the social community by Scottish journalists. More specifically, a prolonged and intensive literature search into the fields of media information gathering and retrieval, news construction and environmental information disclosed that the research which has been undertaken is original.

1.1.1 Research Problem

The research problem was formulated around the information gathering processes, the interpretive and constructional methods and the mediation techniques characteristic of news making, with particular reference to the environment in Scotland. This was made specific in the question - "how do journalists construct, interpret and mediate environmental news in Scotland?"

1.1.2 Hypotheses

Due to the multi-disciplinary nature of environmental information and the wide range of information which is reported in news publication, it has been important to examine the packaging of information, as this packaging is partially responsible for the popularisation of the information. The main research hypothesis argues that environmental information is changed by the retrieval and interpretive methods which journalists use and the medium through which it is disseminated. The work emphasises that this change takes place when the information is dissected, reconstructed and compressed by the news process.

This chapter is entitled news and information and its aim is to clarify points about the distinctions between 'environmental information" and 'environmental news". This is explained in greater detail in section 1.5. Other issues which are to be discussed in this chapter include, news definitions i.e. descriptions of news which have emerged over the years of media research in this area; a discussion of the aims of news, a preliminary examination of news values (an inherent part of the news process), and an overall view of objectivity and bias, two concepts which although abstract in nature are also inseparable from news construction. There is also a brief outline of the social construction of reality function which cannot be ignored when giving an overview of the subject area and which is relevant in the ways in which journalists construct the news. The discussion continues by considering the environment as a topic of concern for the media.

1.2 Environmental Issues as Topics of Media Concern

The environment as an area of interest and study has been evident for centuries (McDowell, 1993; McCormick, 1992). However, it was Rachel Carson's work on chemical pesticides in the 1960s which was instrumental in heightening media coverage of environmental issues. A short historical review shows how the environment has been a matter of concern. It was in the 1980s that coverage of environmental issues such as global warming, the ozone layer, oil pollution and nuclear waste became emphasised and reviewing the issues which the media championed for recently, reveals that journalists are selective in the areas of the environment that they publicise. Burgess (1990) noticed that, for example, the issues of landscape and nature have not been represented as much as other areas.

"The politicisation of the environment and the "greening of the media" in the late nineteen eighties has begun to stimulate more interest within these social science disciplines but they still remain resolutely silent about landscape." (Burgess, 1990, p7)

There is a wealth of information about the growth of the modern environment (McDowell, 1993; McCormick, 1992; Young, 1990; Lowe and Goyder, 1983). Many believe that interest in the

environment as a subject of study began not at a particular point in time or with an explicit beginning but gradually and as a result of "a series of distinctive attitudes and values" (McDowell, 1993). However, Lowe and Goyder (1983) make the point that,

"Environmental groups...are only one indicator of the wider social movement. Other indicators include the degree of sympathy expressed by non-environmental organisations, the burgeoning of environmental literature and the coverage of the environment in the news media." (Lowe and Goyder, 1983, p9)

They indicate something of the role of the media in the development of the environmental movement, implicit in which is the wealth of environmental information which has been generated as a result of this publicity.

The Nineteenth century saw the rise of the first environmental interest groups, for example RSPB and RSPCA and also one of the first media reports on an environmental issue. "The Times appealed for the preservation of our 'old native flora and fauna' (1912)..." (Lowe and Goyder, 1983, p20).

The Latest Environmental Age (1960-Present)

Theorists in the field have classified this period as being many different things e.g. the new environmentalism; the environmental revolution; the post material age etc.

"Environmentalism in the late 1960s and early 1970s was characterised by doom laden warnings of imminent ecological disaster and demands for urgent, often drastic measures to avert this fate." (McDowell, 1993, p17)

It is this period which has produced a phenomenal amount of environmental literature - information which is pluralistic and which exists in a number of different disciplines.

Environmentalism in the 1960s became explicitly political on not merely a national level but an international one as well.

"The transformed movement - New Environmentalism - was more dynamic, more broadbased, more responsive and won much wider public support." (McCormick, 1992, p47)

It was this politicisation, together with the increase in the production of environmental information, which helped to create a greater public awareness about environmental issues. The information to be produced from this age (1960s to present) was again, complex and technical and scientific experts emerged as a result of the newly created specialisms within the cross disciplinary fields.

Rachel Carson's book, "Silent Spring", published in 1962 was instrumental, it is said, in communicating to the general public and causing an environmental awareness about pesticides and chemical insecticides. Carson's publication may be seen, therefore, as one of the first attempts to educate the public. It also shows that the 1960s and 70s were periods of reactive environmental politics in comparison with the passive generations which had gone before.

The beginning of the 1980s reflected a downward trend for the environmental movement, but the mid to late 80s caused a change in the ways of thinking about the issues and witnessed a move 'from the periphery of the political agenda to the centre" (Young, 1990, p138). McDowell agrees as she talks about the movement over the last four or five years,

"...after a feverish rush of environmental activity in the late 1980s, recent trends suggest a general downturn in the green movement. This is reflected in a decline of environmental issues in government agendas and a fall in the fortunes of green political parties." (McDowell, 1993, p20)

The '80s decade was one of excitement and heightened publicity where the environment was concerned and this may be attributed to the media. However, it would appear that issues are losing their appeal and in recent years environmental issues have been mainly taken for granted. This argument is reinforced by the lessening of the coverage of environmental concerns in the media. Environmental policies like recycling and the purchasing of products without CFCs, have been much more widely implemented in our daily lives and the media take a lot of the credit for educating the wider social community ie the audience or readership.

Scientific specialists or experts who emerged from these environmental disciplines have now become part of people's awareness about the environment. These specialists are important sources of primary information for the media, as reporters interpret and repackage this type of information for the readership or audience.

How the flow of environmental information from source to media and media to audience, is established, will be considered later on.

1.3 The Media as Information Providers

"...many people with little formal training in science have a compelling interest in all kinds of science...when non-scientists are looking for scientific information they turn to the mass media." (Friedman, 1986, p218)

The amount of environmental information which has been produced for mass consumption has taken the upward trend, in recent years. It is possible that one of the factors contributing to this, is the mass media. It is undeniable that from the mid '60s onwards, a period of "environmental crisis" (Young, 1990), and a greater awareness about the environment has emerged, encompassing industry and education as well as the traditionally stereotypical 'housewife'. The media, including print and broadcast news; the documentary film, current affairs criticism etc. have been, for the greater part, responsible for this. The Scottish Office report, "Learning For Life: A National Strategy For Environmental Education in Scotland" (1993) indicates that the majority of people take their environmental information from the media.

The report cites the survey of Public Attitudes to the Environment in Scotland stating that the main source of environmental information for people is television with the only other main contender being newspapers. Other main points raised in the report include that in comparison to news items on the environment, television programmes devoted to issues were more specific and therefore preferable.

"Television has had a major role in making many of the population environmentally aware. It has also increased understanding, although one might sometimes wonder if people who have been inspired to explore the real world outside for themselves are disappointed by what they find. It is hardly avoidable that awareness may be based on unbalanced information, often presented in an emotive or partisan way to generate controversy." (The Scottish Office, 1993, p32)

The report also takes notice of the fact that there has been a marked increase in press and magazine coverage of the environment and that there is need for the training of journalists to include how to cover environmental issues. It made a further point that although the media is a useful way of transmitting messages to a large audience, the media are governed by ratings figures which have economic implications. The report, then, puts forward a strong case for using the media not only as a social educator but as a valuable source of environmental information.

Lowe and Goyder (1983) (at their time of publication) state that the media access sought by environmental groups leant towards the national 'quality' newspapers rather than television because of the specific audience they wished to target.

"Newspapers also give greater scope for more detailed comment and analysis of what are often complex and technical issues. A few groups actually expressed themselves wary of television publicity in case their views were over-simplified or distorted, though others saw in television an opportunity to popularise environmental concerns." (Lowe and Goyder, 1983, p 74)

The current situation is vastly different, as the eleven year gap has accentuated. There has been a complete reversal of media roles. Television is the medium which has supplanted newsprint in the environmentalists' favour. This argument is substantiated by the increased influx of television environmental documentaries e.g. Channel Four's Fragile Earth, Encounter and Nature series.

It is undeniable that the mass audience obtains a large proportion of its environmental education from the media. From within this brief historical context, it seems appropriate to give some consideration to previous and current research into the mass media and environmental issues.

1.4 Research

1.4.1 Media Research into Environmental Issues

The late 1980s have demonstrated an increase in media research on the environment. Research has been concerned primarily with the influence of the media on the audience and has concentrated on the extent to which viewers/readers rely on a mediated partial reality. Recent studies have focused on how the media construct meanings about the environment (Burgess, 1990, 1991; Love, 1990), the ways environmental groups devise strategies to challenge hegemony i.e. the ideological domination through the media (Cassidy, 1992), the relationship between the media and sources (Anderson, 1993), and the social construction of reality through the environment (Hansen, 1991). Research on the mass media and the environment has begun to move away from theories like structuralism and academics within the field emphasise the fact that this is, now, a post structuralist age. However, research approaches such as Marxism, semiotics and psychoanalysis still have validity in their application to the environment. Semiotics have been used to investigate issues such as oil spills e.g. identifying signs to reveal meanings manufactured by the media (Molotch and Lester, 1975). Similarly structuralism has been employed in studies (Fiske, 1987) attempting to define the extent to which the audience is influenced by the media.

Key authors who have written on the media's coverage of environmental issues include, Hansen (1990, 1991, 1993) whose work has included comparing television coverage of the environment in Denmark with Britain and Anderson (1993), whose research examines the relationship between the media and their sources. Burgess (1991) has carried out extensive studies into the ways landscape and conservation issues are mediated and the meanings which the media use to inform the public. Dunwoody has researched areas such as how science is mediated by journalists and reporters and their sources; in a study with Griffen (1993) she investigates coverage of risk situations, with reference to three contaminated sites in Wisconsin. Much has

also been written on the ways in which environmental pressure groups harness the media to publicise their causes (Greenberg, 1985; Lowe, 1983, 1984).

Other important papers in this field range from general ideas about how the media covers the environment (Hansen, 1990) to specialised issues e.g. Sellafield nuclear power station and its effect on the community (MacGill, 1987); Chernobyl (Luke, 1987; Friedman, 1987; Rubin, 1987; Patterson, 1989), oil spills like Santa Barbara, Exxon Valdez and Braer, (Molotch and Lester, 1975; Wills and Warner, 1993; Davidson, 1990; Steinhart and Steinhart, 1972; Daley and O'Neill, 1991; Gundlach, 1977).

With this substantial increase in investigation into the media and environmental issues, it is evident from the literature search that, there has been a greater amount of consideration given to the role of the press in dealing with the environment. Einseidel and Coughlan (1993) studied the social reality factor manufactured through the Canadian press, investigating the meanings framed by the environmental news structure and the ideology which is conveyed through this. Hansen (1993) wrote about the press coverage of environmental issues with special reference to Greenpeace, in which he investigated a series of examples ranging from seal culling to nuclear power.

Where studies of the effects of environmental news coverage on the audience have taken place, methods such as content analysis have been employed. This research includes issues such as risk perception and analysis (Sandman 1988; Walters, 1989; Wilkins, 1987; and Burkhart, 1991, 1992). It must be pointed out, however, that these studies although, valuable in their contribution to the wider understanding of the mass media and environmental issues, are, for the majority, written from within a national or international context. To date there has been little written on the role of Scotland's media in the dissemination of environmental information to the social community. It was in the light of this knowledge that the research aimed to identify journalistic source and information strategies and attempted to ascertain to what extent

the reporter objectively tried to formulate environmental news with a specific image of the audience in mind. This is explained in detail in Chapter 2.

1.5 News and Information

These terms are not synonymous, rather the latter is a metamorphic progression or evolution of the former. News and information are part of a process which is explained in micro, analytical detail in the following chapters (6-11).

A clear understanding of "news" definitions has been essential for this research and is considered below.

1.5.1 What is news? Some Definitions

News is, predictably, a concept which has been overdefined. It is almost impossible to find a new way of describing it in order to shed new light in a thoroughly researched area. However it has been crucial to provide an explanation of "news" to set the research in context.

"[News is]...factual information that its viewers need in order to be able to participate in their society." (Fiske, 1987, p281)

Some practitioners defined news as follows (this evidence is taken from the Tri-lateral Interactive Discourse sessions, see chapters 6-11 and appendices IX-XV),

"...a news story is something that is a current event. A news story would be the fact that a report had been published that day or the day before highlighting higher pollution in the North Sea than they had seen or ever thought before. Or it would be say an announcement by the government that it was going to decommission half of the fishing fleet or it would be about oil spills or something...so it is about an event that has happened. A current event." Elizabeth Buie, The Herald.

"News defines itself. What I see as news and what a newspaper editor sees as news are totally different things because we serve different areas and have different remits and so on. What I see as news is what I see that is of interest to the transmission area i.e. from Shetland...to Fife and out to the outer islands. It is a case of judging what is happening within the area at the time and trying to

judge if that's important to the lives of people living within that area." Alistair Gracie, Grampian Television

Three further definitions of news are put forward by Hall (1970), Ericson (1987) and Fowler (1991).

"...the news is a product, a human construction, a staple of that system of "cultural production"...we call the mass media...the news is not a set of unrelated items; news stories are coded and classified; referred to their relevant contexts assigned to different (and differently graded) spaces in the media and ranked in terms of presentation, status and meaning." (Hall, 1970, p1056)

This is not a straight forward definition because implicit in this idea is the belief that the news media use interpretive measures to indicate which issues should have greater priority. Hall suggests that the system for choosing stories is subjective to that media, and that there is some measure of information control involved.

"News and other "information" are knowledge. They have been interpreted in context and given particular meanings. They may be given meanings as they are transformed and used in additional contexts as distinct from "information" in the original context. They are knowledge in all contexts in the sense of being given an objectivated, real meaning that is used in action and has social consequences." (Ericson, 1987, p11)

Ericson suggests that the information which exists originally is caused to change as it is interpreted and different meanings are placed on it. Original information exists but journalists add objective meanings which causes its information meaning structure to change. The metamorphosed information becomes "real" knowledge/information i.e. "real" in the sense that the information can be used to direct society. Therefore, it has real implications. These ideas have been drawn upon and referred to in this research and will be expanded on in later chapters.

Fowler (1991) defines news in this way,

"...news is socially constructed. What events are reported is not a reflection of the intrinsic importance of these events, but reveals the operation and artificial set of criteria for selection. Then the news that has been selected is subject to processes of transformation as it is encoded for publication, the technical properties of the medium - television or news print for example and the ways in which they are used are strongly effective in this transformation." (Fowler, 1991, p2)

Fowler takes the ideas of Hall and Ericson further by suggesting that not only is the order of news schedules unrelated to the significance of events due to meaningless news values referred to by media personnel, but that the information meanings are changed as senior journalists/editors review it and refine it for the broadcast or the press media. Implicit in these ideas are the issues of bias, and information interpretation but also it is suggested that the media play some subversive, manipulative perhaps even ideological role. From the evidence gathered from media personnel during the thesis, trends have emerged, however, to suggest that the bias is an inherent part of the news process and cannot easily be avoided.

McQuail (1993) in his comprehensive review of objectivity cites news as.

"...a continuing guide to and summary of recent or current events and items of immediately useful information. It is produced under strong 'pressure of events', under conditions of intense competition with other media, which have their own versions of the day's agenda and from which it is difficult for any one medium to stray. News has also to meet quite restricting 'product specifications' which are built into the news form and embedded in the normal expectations of audiences." (McOuail, 1992, p275)

News is new, fact based, a social educator, of interest to society therefore applicable to people's lives ie localised. The majority of the audience is interested in issues which are closest to their own situations. Indeed some factions of the local audience view national news as unrealistic, far removed and a "window on the world" but someone else's world" (Fiske, 1987, p289).

These particular definitions of the theorists Hall, Ericson, Fowler and McQuail are detailed and contain complex assumptions. These assumptions state that, firstly, news is a cultural product which is constructed in a particular way and that it is not a selection of unconnected issues which are chosen at random and ordered at will. Rather it is a product of a rigorous routine during which stories are judged against a set of standard criteria to assess their value or newsworthiness. They are then "ranked according to presentation, status and meaning" (Hall, 1970, p1056) i.e. news is controlled in that it has a structured hierarchical order. All the theorists agree that news is a product. There is a lot of negativity implicit in the news definitions and academics do tend to concentrate on what news fails to do or the imperfect

nature of the news process. McQuail (1993), conversely, indicates that, news is "useful information" and that it provides a "continuing guide to and summary of recent or current events" (p275). He states, as other theorists in the field do, that news must adhere to "strict product specifications" which are part of the routine, but also takes this further by saying that news is also confined by the "normal expectations of the audience". In other words, news cannot appear different either in terms of presentation or content because the audience would find it unacceptable.

Another major consideration which has emerged is that the original information goes through a **process of transformation** as new information meanings are added. The knowledge which exists in a primary ic unmediated, complex and technical form becomes interpreted, simplified knowledge.

The theories of news appear within many different academic contexts e.g. social construction of reality, hegemonic reality, subliminal manipulation of the audience, information change etc. News is, therefore, a complex arrangement of information which has been constructed in a specifically new way by journalists placing their own meanings (cultural and social) on it, and reflects an understanding or a perception of social reality.

1.6 What are the aims of news media?

The research was designed to focus on the news process in Scotland. It was decided that the study required a specificity which would not have been achieved by examining news in general at a national level. The study has taken into consideration both print and broadcast media and in doing this a holistic picture of the news media structure in Scotland has emerged.

Scotland's media consists of (on the broadcast side), a national television and a radio network (BBC), the ITV network which is compartmentalised into three regions (Grampian, Scotlish and Border) and the IRN (Independent Radio Network) which is also divided into regions. Scotland

is served by two main national quality broadsheets, The Scotsman and The Herald. The Press and Journal; The Inverness Courier and the Dundee Courier and Advertiser are examples of regional and local newspapers. In addition to this there are Sunday papers e.g. Scotland on Sunday. The decision has been taken to disregard tabloid newspapers.

Locally the North East of Scotland is served by the Press and Journal and Evening Express, Grampian Television, BBC Scotland and Northsound Radio. In addition to this network the audience is made aware of national developments via BBC and ITN bulletins.

Local news is constrained by parochial values which regulate the selection of issues. The stories chosen must be a reflection of local audience interests or be directly related to the area in some respect (see chapters 6-10).

1.6.1 Newspapers

"Newspapers and periodicals serve society in diverse ways. They inform their readers about the world and interpret it to them. They act both as watchdogs for citizens, by scrutinising concentrations of power, and as a means of communication among groups with the community, thus promoting social cohesion and social change. Of course, the press seeks to entertain as well as to instruct and we would not wish to dismiss this aim as trivial, but it is the performance of the serious functions which justifies the high importance which democracies attach to a free press." (Dahlgren and Sparks, 1991, p58)

This definition of the aims of a free press are common to most news organisations and local or regional news also have this as a basis.

1.6.2 Broadcast

"News and factual programming is a key element of the service Grampian is offering to an area as large as Switzerland and where daily newspapers are often out-of-date by the time they reach readers in more remote areas." (Grampian Television, p3)

Currency of information is vital and often local newspapers are unable to supply everyone with this service. Where this happens another facet of the local news network takes over to bridge the gap.

1.7 The Media as Information Seekers

The ideas of the media as providers of information or educators of the wider social community have been taken into account, but what about the flow of information from source to media? The ways in which journalists seek information and the sources they consult are vital parts of the information chain which links complex environmental issues with the audience or readership.

An important consideration of this work has been the way in which journalists search for information and the kinds of sources that they use. These questions have been addressed through conducting a number of semi-structured interviews with news personnel at local and Scottish national levels. The role of the media library within the organisation cannot be divorced from the remit of the research, therefore. It is a vital part of the journalist's information strand and it is worthy of in-depth consideration. Eagle (1992) edited an invaluable text on information sources for the media, which includes material on journalists' information sources within an international context, focusing on the Netherlands and the United States. It provides a unique insight into the relationship the journalist has with the library and emphasises the importance of the resource as a support facility.

A great deal has also been written on the media library as an information repository (Semonche, 1993; Arundale, 1986; Vergusson, 1985; Nev, 1988) and specifying Scotland (Heaney, 1986; Oppenheim, 1991). Related issues in the field include, the influence of electronic news sources on the news process (Neuwirth, 1988), and the application of technology to media libraries (Crowley, 1988).

How journalists seek their information, what information strategies they implement (Joseph, 1993; Hesketh, 1993; Nicholas, 1987a, 1987b; Gamage, 1993) and information management (Orna, 1990; Duncan, 1993; Arundale, 1991) has also been considered in detail.

Koch (1991) provides an academic overview of the information dimension to news making by concentrating on the technology involved in its creation e.g. online databases and CD-ROM facilities. Other writers in this field include, Stanbridge (1992); Jacobson (1989); Briscoe and Wall (1992); Stover (1991); Levinton (1990); Ojala (1991); Leonard (1992); Arundale (1989).

It is evident, then, that there has been great interest in the areas of new technology and its application to the media library. However, it should be noted that this recent research has taken place generally at a national or international level, often using large newspaper organisations as case studies. There has been no work completed using Scotland's media network, which therefore, allows this research to break new ground in this field.

1.8 Technology and the News Process

The research gives peripheral consideration to the effect of technology on the news process. Much has been written in this area and it has been hypothesised by practitioners in the field that journalists' information gathering habits have been altered due to the new technology which has been implemented (Weaver, 1991; Johnston, 1984; Bagdikian, 1984). A number of other ideas are put forward by practitioners. The use of technology is inseparable from news sense or news judgement (Musburger, 1991). The advantages of technology, like clarity, speed and accuracy outweigh the disadvantages (Khoo, 1986; Mansfield, 1991). These points are considered generally by the research within the context of the Scottish media. However, it was evident from the findings from the data, gathered from media library respondents, that the emphasis on news technology is not substantial; few organisations have access to online or CD-ROM facilities even through the library; and apart from the widespread use of word processors there is very little confirmation of the use of information technology.

1.9 News Construction

Hall, in his article, "The World at One with Itself" reminds us that news is a humanly constructed product. He states that news is not just information which spontaneously appears in a random order.

"Journalists and editors select from the mass of potential news items, the events which constitute "news" for any day... News selection, thus, rests on inferred knowledge about the audience, inferred assumptions about society and a professional code or ideology." (Hall, 1970, p1056)

Downs (1972) suggested that society in America was regulated by an "Issue Attention Cycle", where certain issues would come to the forefront of the social agenda, maintain this level for a period of time and then slip down the hierarchy and fade away.

"The cycle begins when, perhaps through a dramatic event, a piece of investigative journalism, or the revelations of a crusading individual, the general public is suddenly made aware of the existence and evils of a particular problem which may well have been festering unnoticed for a considerable time." (Lowe and Goyder, 1983, p31)

Downs divides the cycle into five main stages, starting with what he calls the pre-problem stage. This is where a disagreeable social situation exists but it is unknown to the general public. It is at an expert level where specialists are aware of and disturbed by it. Stage two is the alarmed discovery and cuphoric enthusiasm level where due to some dramatic events, the public is made aware of the problem and is alarmed by it. There is, at this stage the desire to have an instant solution to the problem. Realising the cost of significant progress is the next step, where the cost of the solution is extremely high. Gradual decline of intense public interest follows the other steps which Downs describes like this,

"As more and more people realize how difficult, and how costly to themselves, a solution to a problem would be, three reactions set in...discouraged ...threatened...bored...And by this time, some other issue is usually entering Stage Two; so it exerts a more novel and thus more powerful claim upon public attention." (Downs, 1972, pp 39-40).

The final stage, is the post problem stage. An issue which has been supplanted, moves off the agenda and remains as an issue of lesser concern (Downs, (1972); quoted in Hogwood, (1992), p1-2). Downs used this political theory and applied it to environmental issues which he thought were robust enough to stand up against the cycle. He believed that because of advantages such as the visibility of the environment; the fact that technology could combat environmental problems; that the costs involved need not necessarily be redeemed through taxation etc., environmental issues might be saved from their eventual demise more gradually (Hogwood, 1992, p2-3). Lowe and Goyder (1983), are in agreement with Downs' model but suggest that,

"...other issues, like their predecessors, are not random and unconnected, but are part of a bundle of related concerns to do with material well being and physical security, concerns such as unemployment, inflation, Britain's industrial decline, social disorder, international tensions and the arms race. Moreover, rather than being caused simply by media fashions and the fickleness of public interest...these shifts in attention are related to changes in social values" (Lowe and Goyder, 1983, p32).

Hogwood (1992), rightly, asks the question 'is there an issue attention cycle in Britain?" Interestingly, he concludes that the model does not apply to any of the political issues he tested. Therefore there is no evidence to suggest that there is not an issue attention cycle pertaining to environmental issues in Britain today. It would seem reasonable to apply the five categories highlighted above, to environmental concerns. The Braer oil spill received world wide coverage at the time and after extensive analysis of a local paper, it was noticed that the movement of the issue down the news agenda was fairly rapid (see Appendix VI). Only ten days after the incident, the story had been all but dropped from the newspaper and after only 5 days the issue had moved off the front page. Although this coverage is lengthy for a daily paper, this issue would seem to fit with Downs' model. However, is the fact that the story was removed from the news schedule, a true reflection of the attention span of the audience or is it a 'suggested', mediated account of the said attention span?

None of these were environmental issues.

1.9.1 News Values - News Criteria

News values which govern the information gathering and story construction procedures are inherent in the news process. It is against this list of criteria that journalists measure the newsworthiness of an event and judge whether or not to include it. Hetherington (1985) developed a "seismic scale" of news values. This list included categories such as, 'drama', 'scandal', 'proximity', 'surprise' etc. It was against this scale, he suggested, that he was able to decide where to rank stories in the news hierarchy. Lowe and Goyder (1983) suggest that environmental issues, by their nature, are newsworthy, due to their aesthetic values.

"There is the strong emotive and moralistic appeal of issues which can be presented as a simple conflict of good versus evil." (Lowe and Goyder, 1983, p76)

Lowe and Goyder make the point, therefore, that one of the main reasons for media's fascination with environmental concerns is that these issues are not always political but are human interest. However, the news practitioners interviewed during the T.I.D. sessions believe that the environment as a news story tends to appear lower in the news agenda because the issues are generally classed as long term problems which take a long time to develop. It is the environmental disaster which takes precedence at the top of the news agenda.

Different newspapers have different news values and editors have different perceptions of news sense or news judgement. Patrick (1990), defines this as,

"... the ability to assess a story in the light of the educational, social, political and cultural standing of the readers of his or her newspaper or magazine and in the context of any other interest the publication is designed to serve." (Patrick, 1990, no pages)

Musburger (1991) says that the news process is composed of various 'mental stages', one of which is called "news judgement" or editorial control.

"...final editorial control will lie with the news producer or news director. But each shot you [the videographer] frame and each sequence you shoot will require

your making a judgement of its newsworthiness, its legal status and the part it will play in the assignment." (Musburger, 1991, pl1)

In making a value judgement like this the journalist is implying a subjectivity on the information by adding his/her own interpretation and bringing his/her own cultural and social values to it. This would seem a reasonable statement, in light of the fact that information changes according to the ways in which it is selected and interpreted.

McQuail (1993), discusses news values within the context of the information industries. He believes that it is necessary to have realistic criteria to work to. Boyd (1993) in pitching his advice to journalism students, summarises news values thus,

"...when a story has both proximity and relevance, the reaction it provokes in you will depend on your upbringing, environment, education, belief and morality. In other words, news values are subjective and for most news editors, the selection of news is more of an art than a science. Stories are weighed up by an instinctive process they would put down to news sense." (Boyd, 1993, p4)

This comment is validated by the views of the journalists interviewed during the T.I.D. sessions, (see chapter 8).

He continues by saying,

"Every editor would agree that the greater the effects of a story on listeners' lives, their incomes and emotions, the more important that item will be. And every editor knows that if a news service is to win and hold an audience, the bulk of its stories must have impact on most of the people most of the time." (Boyd, 1993, p4)

News sense is an elusive concept which editors possess. It has been described by news people as being a kind of sixth sense which is instinctive (according to themselves) and is acquired through experience. Fowler (1991) observes that news values are qualitative concepts which are not only connected with the selection of the information but also with the interpretation of items. In other words, an issue is only selected if it conforms to an established criterion within a certain context, thus indicating that selection via news values is an ideological process. Coote (1981)

includes examples in her definition of news values. She talks about a hierarchy of values and indicates, also, that they are criteria which have been formulated for and by the patriarchy.

"We concur in decisions about what is a 'good story' and what is not, what is central and what is peripheral, what is 'hard' news and what is 'soft'...These [news values] have been developed of course by white, middle class men, generation upon generation of them, forming opinions, imposing them, learning them and passing them as Holy Writ. We have inherited a hierarchy of news values. What are the major stories of the day?...A 'hard' story is generally deemed to be one based on facts, on something precise which has happened in a particular sphere already labelled as 'important'. A story based on description, individual experience, nuance - a 'human interest' story, perhaps; or something which has happened in a sphere not labelled 'important' - may be considered good, but is nevertheless 'soft' or 'offbeat'. Why? Where did these ideas come from? Are they objective, universal or simply man-made?" (Coote, 1981 quoted in Hartley, 1982, p80)

Environmental news is very often covered from a human interest perspective, for example, the seal culling in Canada, the Braer oil spill in Shetland and the Exxon Valdez oil spill in Alaska. Environmental news is viewed by the audience and news practitioners alike as being "soft" because this type of reporting is so different from the "hard" journalism of crime or politics (see chapter 8). But it is clear that environmental information is complex and technical, pluralistic and also multidisciplinary. It is often composed of "hard", scientific data and quantifiable as well as qualitative facts, therefore why does it receive apparent, "feminine" handling? "Feminine", that is in the sense that the facts are often "softened" with a human interest style format as opposed to the "masculine" approach to subjects such as crime or politics. For example, pictures of seals before and after the culling call up deep human emotions of anger, pity and sadness but this is not always balanced by an explanation of the environmental rationale behind this action.

Environmental "disasters" demand media attention immediately (Lowe and Goyder, 1983, p76). Sea disasters such as the Torrey Canyon which spilt 117000 tons of crude oil when it crashed on the south west coast of England and the blow-out at the Union Oil Company platform in Santa Barbara. California in 1969, monopolised the media. Although there have been far more serious oil spills since then, these two examples remain the two most publicised incidents in environmental history (save perhaps for the Braer, Jan. 1993). Analysis of press coverage of the

Exxon Valdez 'disaster' (Daley and O'Neill. 1991) suggests similarities with coverage of the Braer. The widespread use of the word 'disaster' at times early in the situation, when it was unclear as to whether it could be termed as so, was a major factor, as was the fact that initial coverage indicated themes of confusion, the underplaying of official reassurance and the victim role played out by the public (Daley and O'Neill, 1991, p45). These points would underline the features common to both "disasters" (see Appendix VI for an in-depth discussion of the Braer).

1.9.2 Objectivity, bias?

In his thorough analytical review of the media, McQuail (1993) divides the issue of objectivity and bias into two parts, the Cognitive or Informational aspects and the Evaluative dimensions whereby the audience make valued judgements about the world based on the information disseminated to them by the news media. He states that the standard of information quality against which news should be measured is based on the ability of the audience to formulate a concept of reality.

"... - the degree to which different observers might agree on the 'facts', the degree to which reports can be acted on with some confidence, the degree to which they are likely to prove consistent with personal experience." (McQuail, 1993, p124)

Tuchman (1972), rightly, suggests that in order to discuss objectivity comprehensively, three important factors have to be taken into consideration. These are 'the news procedures as formal attributes of news stories and newspapers', 'judgements based on interorganisational relationships' and 'common sense used to assess news content' (p678). Her study concludes that there is no clear relationship between the aim (objectivity) and the method (news process) and that,

"objectivity refers to routine procedures which may be exemplified as formal attributes...and which protect the professional from mistakes and from his critics...the word objectivity is being used defensively as a strategic ritual." (Tuchman, 1972, p678).

Koch (1991) believes that news is not a set of impartial facts which have been linked together as part of a larger context, he maintains that news is someone's interpretation of an issue or concept. He states that today's journalism is unable to present the facts in an unbiased manner and that this is due, largely, to the media's information production and data retrieval techniques.

"For news to be 'objective' it must treat all sources equally. To serve as an unbiased source of information, media outlets must be able consistently to describe events not as one or another specialist group wants them to be portrayed but rather in some way distanced from those partial, limited interpretations." (Koch, 1991, p5)

This argument is enhanced in light of the fact that the media are implicitly involved in monitoring each other. This was revealed as a result of the review of local news media (see discussion of model, chapter 3). Through this model and from the evidence gathered from news practitioners in the field, findings suggested that the media do not use paperbased sources of information to any great extent and that one of the primary sources is other media i.e. television news channels including satellite, daily newspapers and radio. Thus, in effect, there is a communal store of information which is drawn upon and upon which decisions for stories are made. Effectively the media, then, are information providers not only for the audience but also for themselves.

Fiske (1987) explains the positive objectivity critique by saying this,

"[Objectivity] plays an important role in the ideology of news and the reading relations that news attempts to set up with its audiences. The impossibility of objectivity and the irrelevance of notions of bias (based as they are upon an assumption that non-bias is possible) should be clear, but should not blind us to the ideological role that the concept of 'objectivity' plays." (Fiske, 1987, p288)

Fiske states that the objectivity is impossible as the news process itself is subjective. Journalists through their retrieval of information, interviews with sources, construction of the news, place different meanings on the information causing its format to change and altering it so that it becomes, subjectively, an organised collection of facts. This suggests that the information is biased eg the Soviet coverage of Chernobyl was biased because the news information was selected by the government which had a hidden political agenda (Luke, 1987). 'Bias' is a term

often associated with negative views of the news process because it implies a subversive role which the media plays to influence the audience ideologically. According to McQuail (1993) and Fiske (1987), the bias which is implied in news reports is often unintentional and more often than not unavoidable. Fiske also says that in his opinion, the notion of "objectivity" is an impossibility the fact remains that news is ideological.

Ideology is the made up belief systems perpetuated by the dominant social power groups e.g. government. Hartley (1982) argues that ideology is implicit in news discourse,

"Implicit in this notion is the idea of a relationship between the two poles of "objectivity" (mediated) reality and the "subjective" (experienced) reality. This relationship determines what meanings will finally be produced out of the interaction between these two poles. It follows that both poles have a say in the "dialogic" production of meanings and this goes for ideological meanings as much as for any others." (Hartley, 1982, p142)

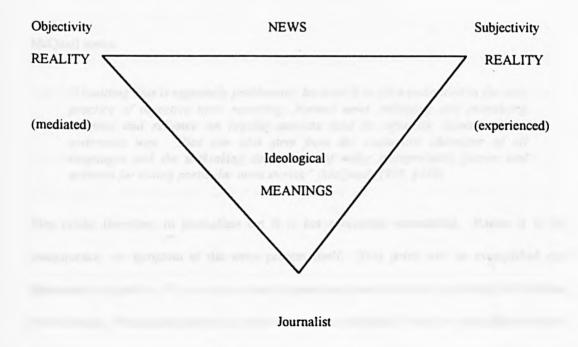


Fig. 1 The Model of Objectivity (after Hartley, 1982)

Thus, Hartley is saying that the ideological meanings implicit in news text emerge as a mixture of the mediated and experienced concepts of reality. Further, the journalist adds meanings to the issue due to the nature of the news process.

The alternative view to the positive objectivity critique is the belief that there is no such thing as objectivity (McNair, 1994), the idea is simply a mythical routine which has no validity. McNair agrees with Fiske (1987) when he starts his critique of objectivity by stating that "journalism is not and never can be a neutral, value free representation of reality" (p31). He agrees with many of the other theorists and academics (Hall, 1970; Fowler, 1991, Fiske, 1987) that news and the journalism profession are social constructions and that news is ideological and cannot, therefore, be value free (McNair, 1994). He also believes that news has to be about conflict which generates negativity because this is more newsworthy and newsworthiness is linked to economic and organisational considerations (see chapters 6-10).

He says,

"Western news media...are required to win audiences with entertainment as well as information. Entertainment is often about drama and drama is more often than not, about conflict and negativity." (McNair, 1994, p21)

McQuail states,

"Unwitting bias is especially problematic because it is often embedded in the very practice of objective news reporting...Normal news collecting and processing routines and reliance on regular sources tend to influence selection in a systematic way. Bias can also stem from the evaluative character of all languages and the unthinking deployment of wider interpretative frames and schemes for telling particular news stories." (McQuail, 1993, p190)

Bias exists, therefore, in journalism but it is not necessarily intentional. Rather it is the consequence or symptom of the news process itself. This point will be exemplified and discussed in Appendix VI, where an extensive case study analysis on the grounding of the Braer can be found. Within this section it is evident that The Shetland Times had the difficult task of reporting on a major environmental issue which occurred on the island. Language is ideological and it is an element common to each discourse particularly news. Therefore, bias is unavoidable in the media. The social constructionists' argument, however, implies that,

[&]quot;...journalism, regardless of the integrity of individual journalists and editors is always a selective, partial account of a reality which can never be known in its entirety by anyone" (McNair, 1994, p31).

The study of journalism itself as a profession, has always been founded on the fact that "...information was produced; selected, organised, structured and, therefore, biased" (Collins, 1990, p20).

"There is an enormous volume of potentially relevant information (requiring selection more than collection) which has to be processed under pressure of time. Sources may not readily supply information and there is often intense competition with other journalists for the same information. Information has also to be selected and presented to please consumers and to attract attention, thus emphasising form more than content." (McQuail, 1993, p185)

Boyd (1993) not only implies the fact that the information is biased due to the process but also indicates and reinforces the idea that news is an extremely structured product which is assembled under the pressure of competition from other journalists and advertisers.

"Journalism...is often said to be our "window on the world", our means of contact with a world which, though shrinking is still largely beyond our direct personal experience. It provides the information from which we draw our "cognitive maps" of reality." (McNair, 1994, p18)

Theorists writing or studying in the field of the sociology of journalism (Fiske, 1987), frequently make reference to the "transparency fallacy" or the fact that news (particularly television news) acts as our "window on the world". Academics usually, point out that in fact news is not a window on the world, for this suggests some heightened sense of reality, when in fact, the media can only provide a simulation or interpretation of reality. The audience's ability to make sense of "our own personal environment and the world at large is through discourses which themselves have made us what we are" (Hartley, 1982, p141-2). Hence the ideological function discussed above. The ways we perceive our own local space, is by using what McNair (1994) calls our "cognitive maps" of reality. The idea of these "cognitive maps" was devised by Hall. We use these to construct our social reality i.e. what is real seeming to ourselves.

The primary aim of this study is not to discuss the cognitive processing abilities of the audience, and an intellectual examination of cognitive mapping techniques is beyond the scope of this research. However an examination of the news at this level cannot omit a reference to the social construction of reality.

1.9.3 The Social Construction of Reality

"Journalists as reporters of news are at the same time social actors, with a key role to play in shaping our perceptions of what news is and how to react to it." (McNair, 1994, p19)

News uses cultural maps to help the audience understand "the unusual, unexpected and unpredicted events which form the basic content of what is 'newsworthy'" (Hall, 1978, p19).

Hartley (1982) states that implicit in these cultural maps (used by both journalists and the audience) are the beliefs that society is compartmentalised in similar ways to a newspaper. E.g. sport, politics, crime etc. He calls this fragmentation because the world is split up, therefore, into a series of manageable chunks and is categorised by subjective themes. He says that journalists assume that the world is managed by and contains individual persons " who control their own destiny [and] therefore that actions are the result of their personal intentions, motives and choices" (p82). This negates the belief that social groups act and perform newsworthy responses or actions. The news also assumes that culture or society is ranked hierarchically in an order of importance. "Some people, events, spheres are more important than others. And the hierarchy is centralised both socially and regionally" (Hartley, 1982, p82).

The final important category which journalists take for granted is the idea of consensual reality.

"...consensus requires the notion of unity: one nation, one people, one society, often translated into "ours", "our" industry, "our" economy, "our" nuclear deterrent, police force, balance of payments etc. within the notion of unity goes the notion of diversity, plurality, fragmentation. The different spheres of society interlock in institutions, organisations and personnel, each within the notion of fragmentation goes the notion of hierarchy, with all the spheres ranked in order of importance and all of course represented by their associated personalizations." (Hartley, 1982, p82)

Consensus, then, is the idea that society is united in its view of the national identity. The nation's role in international conflict is represented by a "them-and-us" situation which is constantly reinforced by the media's interpretations. The Braer coverage by Scottish newspapers tended to use this technique in an effort to imply an air of solidarity particularly with the people of Shetland (see Appendix VI). Again, this research, although taking note of

the work which has been carried out into cultural and cognitive maps, does not seek to extend and develop these pyschological themes.

Another feasible hypothesis, explored by Cohen, for the social construction of reality is that the fiercer the competition between the media, the greater the desire to simplify the content in order to attract a larger audience (Cohen, 1990). Many of the subject specialists who were referred to by the press during the Bracr incident are of the opinion that the intellectual content of some environmental issues is lost due to the fact that journalists reduce the concepts to the lowest point of comprehensibility, although, this is unavoidable in practical journalism.

"The job of a reporter is to render jargon and officialese meaningful to the lay reader." Carlos Alba, The Press and Journal

However, news events are portrayed with less complexity than they are when they occur in real life. This reinforces Cohen's theory (see Braer, Appendix VI). Fiske (1987) explains how the reality factor works, by saying,

"Realism does not just reproduce reality, it makes sense of it - the essence of realism is that it reproduces reality in such a form as to make it easily understandable. It does this by ensuring that all links and relationships between its elements are clear and logical, that the narrative follows the basic laws of cause and effect and that every element is there for the purpose of helping to make sense: nothing is extraneous or accidental." (Fiske, 1987, p24)

MacGuen and Coombs (1981) rightly suggest that there may be a case for supposing that individuals make decisions and judgements based on their own objective environments and not simply on the media's interpretations. However, they also point out that due to the concentrated nature of issues reported by the press, the audience experiences an image of reality. Due to the way news is selected, it is often biased towards negativity. It has been suggested that the way crime, for example, is covered, causes the reader or viewer to believe that the world is more violent than it really is.

"Crime committed in the immediate neighborhood can be expected to give sufficient cause to provoke concern in the average citizen about self protection...Thus, while only fractions of the population are victims, we expect

changes in the crime rate to bring the issue to the attention of entire neighborhoods and thus affect the aggregated national concern with law and order." (MacGuen and Coombs, 1981, p87)

How realistic is it to say, then, that environmental issues have a similar impact on the audience? Environmental news, particularly 'disasters', is generally framed pessimistically and coverage is intense thereby reinforcing the negative images which surround issues. It may be likely, then, that the audience does indeed receive a picture of reality but whether this influences them negatively or misinforms them, is another matter and conclusions cannot be drawn without evidence from an effects study. The research of MacGuen and Coombs (1981) was not conclusive in this. They say,

"The public clearly appears much more sensitive to the symbolic representations of public life than to any measure of the world they were actually experiencing." (p 88)

They do not say that the media's accounts of the environment, affects people in a negative or detrimental way.

This chapter opened with a discussion of the aims and objectives of the research project. These were to consider the journalists information gathering behaviours and the sources consulted by them when producing news. They further included, to study the media library as an information resource at a Scottish national and local level and also the ways in which the journalist retrieves and interprets the information. A major consideration of the work is to examine the news process itself through the use of model building (see chapters 2 and 3) and the gathering of information through semi-structured interviews with media practitioners. An overview was provided of how the information changes as it is retrieved, constructed and mediated to the audience or readership.

A central component of this chapter has been to indicate and examine the relationship between the media and environmental issues and in order to accomplish this, it was necessary to provide a brief historical overview of the environmental issues which the media covers. Viewed historically, it is evident that media research in the environment has only recently come to the forefront of communications studies. This may be in direct response to the heightened publicity of the environment, given by the media in the late 1980s.

The chapter has dwelt, at some length, on definitions and discussions of new theories put forward by media academics, using illustrations and examples of oil or sea 'disasters''. These included ideas such as news as a construction, the interpretation of information, and the metamorphosis of information meanings. Implicit in these ideas are issues such as the influence of the media on the audience or readership and the ideology conveyed through news.

An attempt was made not only to convey the idea that the news media are providers of environmental information but also seekers of this information. There was a discussion of the role of the media library within the context of research which has been previously carried out, and indicates areas still to be covered. thus allowing the research to advance knowledge in a new area.

It was suggested that Britain may have an issue-attention cycle as regards the environmental agenda, a topic which will be raised in a subsequent chapter. The idea that new technology affects the news process has been considered briefly and it has been interesting to compare points identified in the literature with findings gained from interviews.

The discussion of the news process continued with an examination of news values and the news hierarchy. Linked to this was a detailed account of objectivity and bias, in which important themes such as self-examination by the media and the ideological implications of partiality which are embedded in the news process.

The final section referred to the social construction of reality. Ideas of fragmentation of the environment and the cognitive maps of reality which the audience uses to make sense of the world have been highlighted and developed.

The subject of the mass media and environmental issues has been introduced to set the research in an appropriate context. It is evident that, to date, there has been a lack of research carried out into the media and the environment in Scotland. This study has attempted to reveal the current situation and to demonstrate how Scottish journalists gather information, which sources they use and what strategies they implement to reconstruct environmental issues for the wider social community.

Chapter 2 Methodology

Introduction

Methodology may be defined as the systematic study of methods ie principles and practices used in a specific discipline.

The aim of this chapter is to provide not only an overview of how the research has been carried out, but also the justification for the selection of certain types of methods. It includes, definitions of the research approach, and an extensive discussion of ethnographics. This was essential, due to the fact that the research is constructed around a method of qualitative ethnographics.

The chapter continues with a discussion of the literature search (2.2), and the source strategies which were used have been highlighted and reviewed. There is an in-depth discussion on model theory and building (2.3). A comprehensive analysis of the models emerging from the research follows in chapter 3. This section is one of the main components of the work and its importance is stressed.

Part 2.4 is a discussion of the case study methodology, which attempts to apply practically, the theories which have been defined by the models (chapter 3). It demonstrates how the basic content analysis techniques have acted as a basis upon which to develop and apply the ethnomethodological case scenario approach, used to uncover the tacit rules journalists implement during the news process.

Part 2.5 is an examination of qualitative research techniques focusing on interviewing methods, both of which have been considered in some depth. Following this there is an investigation of how

the evidence was gathered empirically, and how this has been analysed using Glaser and Strauss' (1967) method of grounded theory (2.6).

2.1 The Research Approach

2.1.1 Qualitative Research

The term "Qualitative" is an all embracing one and may be said to cover a number of other methods such as anthropological ethnomethodology, ethnographics, symbolic interactionism (Marshall and Rossman, 1989). This type of research concentrates on eliciting people's perceptions of their social environment and is commonly found in subject areas such as politics, public policy studies, sociology, psychology, and media studies, among others.

"...qualitative research...entails immersion in the everyday life of the setting chosen for study, that values participants' perspectives, that views inquiry as an interactive process between the researcher and the participants, and that is primarily descriptive and relies on people's words as the primary data." (Marshall and Rossman, 1989, p11)

In a subject where the study of perceptions of groups of people, as well as processes was central to the research, qualitative methods were the most appropriate. This research investigates information gathering strategies of Scottish newspaper journalists; the media library as an important resource and support feature; and the news construction process. The information about these topics could not be elicited from respondents using a quantitative approach such as survey and questionnaire sampling because the number of people in each target group (journalists; librarians; environmentalists) was too small.

Qualitative methods are comprised of interviews; observation and written material (Patton, 1990).

"The data from interviews consist of direct quotations from people about their experiences, opinions, feelings and knowledge. The data from observations consist of

detailed descriptions of people's activities, behaviours, actions and the full range of interpersonal interactions and organisational processes that are part of observable human experience." (Patton, 1990, p10)

These techniques have only been highlighted here and will be described more fully later in this chapter.

Qualitative methods were the most relevant for the study of not only the ways in which journalists gather environmental information, but also for the examination of the ways in which journalists participate in the news process.

2.1.1.1 Ethnography

The study was designed using a methodology of qualitative ethnographics. Therefore it seems reasonable and appropriate to provide a brief overview of the ethnographic methodology.

Ethnography is a methodological technique which served to help the researcher to analyse the ways in which groups (and specifically the groups studied - journalists, librarians) in society function culturally (Patton, 1990). Ethnography is an "umbrella" term used to describe a method which is qualitative in nature and therefore produces large amounts of descriptive data which reveals the reality that society receives and accepts. The two most commonly used techniques to gather information are interviewing and participant observation although there are a number of other methods which can be put into practice when carrying out a study of this type.

There have been various studies and critiques produced by academics in the field, namely anthropologists and sociologists, such as Hammersley and Atkinson (1983), Glesne and Peshkin (1992), Silverman (1985) and Patton (1990). Hammersley defines the role played by the ethnographer like this:

"The ethnographer participates, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking

questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned." (Hammersley, 1983, p2)

Silverman (1983), interestingly, believes that ethnography as a technique cannot be divorced from the theoretical approaches of sociology because practice is influenced by theory. He identifies three main approaches which "share a common method of grounding and validating their observations" (p97). These are cognitive anthropology, interactionism and ethnomethodology (discussed below). This type of anthropology relies on formal descriptions which are "...conceived as adequate and replicable accounts of routine social events within specific cultures" (p97). In contrast, the interactionist theory pursues the view that "...creation and change of symbolic orders via social interaction" (p101) is important. There is a belief that social reality is received through symbolic representation. For example, the plight of the seals in the oil in Shetland is an image recorded in photographic terms and is, therefore, "real". This approach makes wide use of participant observation as a research technique. Participant observation involves researchers trying to become like their subjects of study in order to blend into the professional or social culture undetected. Silverman describes it thus,

"It involves taking the viewpoint of those studied, understanding the situated character of interaction, viewing social processes over time, and can encourage attempts to develop formal theories grounded in first-hand data." (Silverman 1985, p105)

It is by using this observation technique that the partiality of data is overcome and a complete account of the true nature of the situation is revealed. Silverman suggests, however, that there is an assumption implicit in this that, only one reality exists and that this technique handles description as "multiple mappings of this reality" (p105).

The validity of ethnographics as a social science technique is often a matter of debate because of its qualitative nature.

"Ethnography has sometimes been dismissed as quite inappropriate to social science, on the grounds that the data and findings it produces are "subjective", mere

idiosyncratic impressions that cannot provide a solid foundation for rigorous scientific analysis." (Hammersley and Atkinson 1983, p3)

It is a common view, which has become mythologised over time, that quantitative techniques are more effective and have greater validity than qualitative ones. This is underlined by the idea that "less is more", ie that quantitative data is more succinct and robust than its qualitative counterparts. Pro-quantitative researchers put forward arguments which suggest that methods such as interviews and observation are unfounded and "artificial".

Hammersley and Atkinson (1983) provide a critique of the positivist and naturalist movements which influence ethnography. Naturalism has inherent qualitative distinctions which suggest that the research should be carried out not within the artificial constraints of the interview or the experiment but "naturally" within the context of the social world. Hammersley and Atkinson (1983) state that the "research should be carried out in ways that are sensitive to the nature of the setting" (p6). The justification they give for a naturalist perspective is,

"...the social world cannot be understood in terms of causal relationships or by the subsumption of social events under universal laws. This is because human actions are based upon, or infused by, social meanings: intentions, motives, attitudes, beliefs." (Hammersley and Atkinson, 1983, p7)

They justify and defend the method quite rightly. Human culture is constructed using social meanings and reason. The audience "interpret stimuli in terms of...meanings, they do not respond merely to the physical environment"(p7). People interpret news by taking meanings from the information and framing it within their own personal context. Eg farmers in Yorkshire will take different meanings from news about the Braer than farmers on Shetland will.

Conversely, positivism is more commonly associated with the natural science theories. It is a quantitative methodology which emphasises the ability to test theories and so positivism is more appropriate when trying to find out how many farmers in the UK shared the same information meanings as those in Shetland rather than what they understood from those meanings.

2.1.1.2 Ethnomethodology

Ethnomethodology attempts to ascertain to what extent people make sense of their environments. It focuses on how perceptions of social norms are routinised and how awareness or understanding of reality is constructed. It has been defined thus,

"Ethnomethodology gets at the norms, understandings and assumptions that are taken for granted by people in a setting because they are so deeply understood that people don't even think about why they do what they do." (Patton, 1990, p74)

As they practise the news process to construct the end product, journalists carry out routine procedures. In doing this they use implicit, largely unwritten and taken-for-granted (ie taken-for-granted by journalists) rules which govern the ways in which they carry out the news procedures. The construction of news is routinised by the repetition of the same sequence of procedures and consequently, journalists execute them tacitly. One of the main aims of the PhD was to uncover these unwritten rules and to identify where they originated from.

Ethnomethodology is a technique which is grounded in phenomenology. This is defined by Hughes (1990) as being,

"...concerned to elucidate human interaction by empirical examination of those processes through which meanings are produced in social practice...[it is] content to describe the procedures of meaning production in any social activity it cares to examine rather than address the meanings themselves...Ethnomethodology is a formal sociology interested in the properties of intersubjectivity as exhibited by social actors in the day-to-day world." (Hughes, 1990, p143).

It is a widely used technique in sociology and social anthropology and is the subject of a substantial amount of literature (McNeill, 1990; Silverman, 1985; Patton, 1990; Garfinkel, 1956; 1964; 1967; Douglas, 1971). It originated from Garfinkel who referred to it as "...the availability to a member of common sense knowledge of his society as common sense knowledge of the "whatever" (Turner, 1974, p16)

There are two types of ethnomethodology - linguistic and situational. This project makes use of the situational approach (Cohen and Manion, 1980, p32), which entailed studying the practical work environment of the journalists. Ethnomethodology allows the researcher to uncover the unobtrusive rules and procedures of society and to indicate how these are self perpetuated by social actors. It is, therefore, a technique which may be applied to the situation under examination ie the news process and the procedures which journalists employ tacitly in order to construct the news product.

"The member of society uses background expectancies as a scheme of interpretation. With their use, actual appearances are for him recognizable and intelligible as the appearances-of-familiar-events. Demonstrably he is responsive to this background, while at the same time he is at a loss to tell us specifically of what the expectancies consist. When we ask him about them he has little or nothing to say." (Turner, 1974, p36).

This type of methodology has further significance for this research project, particularly in the study of how journalists construct environmental news with a specific image of the audience in mind. It was evident that journalists perform routine tasks of gathering information and writing the stories without thinking of the logistics of the job itself. Therefore, it was valid to assess the tacit journalistic rules which are used to formulate the news for a specific audience. Ethnomethodology has provided a way to do this. A more detailed examination of the methods used to meet this objective can be found at section 2.5.

This type of qualitative approach is not justified in research in the physical and natural sciences but it is in its application to social science areas which rely on perceptions and interpretations of social phenomena. This research investigates the procedures which journalists employ to gather environmental information and the processes involved in the construction of news. Theories of news making have been depicted using model building methods (see 2.3). These theories have been "tested" (although not in the quantifiable sense) through comparison with the large amounts of data gathered from respondents in the media, the environmental sector and media librarianship, (elicited by means of semi-structured interviews). These techniques although not purely natural, have been

devised so as to keep them as sensitive to the setting as possible. This research, therefore, finds greater sympathy with the naturalist approach of ethnography than with the positivist one.

2.1.2 Problems in defining the research area.

Once journalism had been identified as the key area of research, it was discovered that this subject was too wide for a manageable study. The decision was taken to narrow the subject field by concentrating on the flow of environmental information from source to audience via the news process. A number of different topics such as legal and financial information, had been considered prior to this decision. However, the environmental field was selected because of its topical nature and the unique pluralistic, multidisciplinary feature of the information. Having established the topic, and on reviewing the wealth of material on the subjects (see 2.2), a further decision was taken to specify the research area again. It was suggested that the project should concentrate on Scotland. Therefore, the research problem was crystallised into a question, "how do journalists construct, interpret and mediate environmental news in Scotland?" (see page iv).

2.1.3 Rationale

Journalism and the environment were both areas from which information was accessible and visits to practitioners, librarians and environmentalists could be arranged relatively easily. Thirty eight interviews were carried out and precautions were taken to ensure that the setting was as "natural" as possible. The interviews were conducted, for the greater part, in respondents' place of work, so that they would be comfortable with the situation, to maximise access for participation and so that as little pressure as possible would be placed upon them. Also, the venue for the interviews had to be convenient for media personnel due to their busy schedules and this was more often than not at work (see 2.5).

At a later stage in the research, in-depth ethnomethodological experiments were carried out with journalists in order to uncover the taken-for-granted rules they use during the news process. These have been termed as Tri-lateral Interactive Discourse (T.I.D.) sessions by the researcher to distinguish them from in-depth interviews proper. These are described at 2.5.3.

Thus it is evident that qualitative ethnographics was the most appropriate method to use in light of the subject being studied. This chapter now goes on to examine the nature of the information gathered from the literature.

2.2 The Literature Search

For the purpose of disclosing how much literature had been written in the field and to gain a wide ranging overview of the subject, a thorough, comprehensive literature search was undertaken. The first three months of research time was devoted entirely to this task and thereafter it became a regular ongoing review process.

The survey and analysis of the literature was accomplished by the use of paper-based or hardcopy, CD-ROM and online sources. During the preliminary research period, the volume of literature became so immense that it could be managed only by subdividing it into topics or themes. The main headings included.

- (a) News (theoretical and practical)
- (b) Research methods
- (c) Environmental information and the mass media
- (d) Media libraries and information sources

The headings are general and can be subdivided into more specific topics. The category of "research methods" includes, for example, indepth interviewing; qualitative data analysis; news analysis; language analysis; ethnographics etc. It was, however, necessary for the literature search to remain general at first, in order to reveal the amount of material in the area. This search strategy became more specific over time and items were selected and retrieved with greater accuracy.

The literature consisted of mainly, monographs and journal items, although a small number of theses, conference papers and grey literature were located in addition to this. An early stage in the literature investigation involved searching for other theses written in the area and also identifying areas of current research which might overlap this one. Search strategies were formulated for analysing sources such as ASLIB Index to Theses; British Reports, Translations and Theses; Dissertations Abstracts, and Current Research in Britain.

Searches were undertaken at a variety of university catalogues, including The Robert Gordon University, University of Aberdeen and University of Bath. CD-ROM sources were consulted such as DIALOG, LISA (Library and Information Science Abstracts), ERIC (Educational Resources Information Center), Social Science Citation Index databases. Similarly, the British Humanities Index 1985 - present (paper based copy) was searched. In addition to these secondary sources, primary ones like The Guardian, The Independent, The Scotsman and The Herald newspapers were also referred to.

Searches were conducted online to DIALOG, where a number of different databases like, Enviroline; Environmental Bibliography; Energyline (general environmental files), Reuters; The Independent; The Times and The Sunday Times; The Magazine Index; The National Newspaper Index: Newsearch and Newspaper and Periodical Abstracts were consulted. Searching was confined to environmental topics such as oil pollution, sea "disasters", air pollution so as to narrow the definition of the topic. It was necessary to set boundaries to the research to use the search time

effectively and to prevent extraneous material from being retrieved. These databases revealed a wealth of subject specific material. The environmental ones in particular demonstrated the very diverse, multi-disciplinary nature of the information.

The subsequent step in the research process was to absorb the theoretical information from the literature and try to construct a diagramatic model which indicated all the facets of the news process. There follows a discussion on model theory and detailed explanations of the models created within the research may be found in chapter 3.

2.3 Model Theory

In the introduction (page 2) it was stated that a model approach would be used to describe the various research hypotheses, this decision was made because model theory was the most relevant way to explain, explore and develop these hypotheses.

"A model is always an approximation, usually a simplification and hopefully an aide to insight." (Borko, (1967) in Lippitt, 1973, p1)

There are numerous definitions of models and their functions put forward by academics across a multi disciplinary spectrum (Lane, 1993; Lippitt, 1973; McQuail and Windahl, 1993; Hogwood and Gunn, 1984; Rivett, 1980). The consolidation of opinion derived from these theorists suggests that a model is a method by which abstract theoretical concepts can be depicted for the purpose of analysis (Lippitt, 1973, p2).

"As man perceives himself and his environment, he will sort out his feelings by comparing himself and his environment with other objects and relationships. In perception the sense of vision is not only importantly available to the mind but is also indispensable for its functioning. If the process of perception were to be nothing more than the reception of information, one would expect that the mind would be unaffected by not having such input on a continuous basis." (Lippitt, 1973, p5)

The use of different methods is important and used in conjunction with each other, a variety of techniques can complement the research. Thus models are, not only, a useful way to represent complex theoretical concepts but enhance the research process to a greater extent if used alongside empirical techniques such as interviewing or observation.

"The purposes of such abstract model building remain those of representation, simulation, explanation, prediction, experimentation and hypothesis testing." (Hogwood and Gunn, 1984, p42)

During the course of this research three stages of the model evolved (preliminary, secondary and tertiary). Communication studies often rely on model building techniques to demonstrate relationships between concepts and to achieve a holistic perspective of a situation. Public policy and management are also areas where model theory is an important consideration. Indeed, the functions of public policy models are "to explain, understand, interpret and organise data concerning the making of decisions by public bodies" (Lane, 1993, p70). This remit could easily translate into media research terms. In the investigation of these approaches, research was carried out in the policy area as well as concentration on the media side. Some public policy models, it has been discovered, bear considerable relevance to the research. Background reading in the various approaches such as incrementalism (Lane, 1993); garbage can (Greenaway, 1992); implementation (Sabatier, 1986; Lester [et al] 1987) etc have proved useful in influencing the thinking involved with the model building which has occurred in this project.

An example of an established communication model is Gieber and Johnson's familiar (1961) model of Source-Reporter relationships, where the collaboration between these two groups is studied in order to examine to what extent this relationship is influential in the news process.

2.3.1 The Models

Copies of the models can be located in chapter 3.

The preliminary stage of the model depicts the flow of environmental information from source to consumer. This information is termed as primary due to the fact that it has not yet been retrieved by journalistic, editorial or librarianship staff. It is, therefore, unmediated at this point. This part of the model describes the different levels or progressions which the information goes through as it is changed into environmental news. The scale at the right hand side shows the metamorphosis from the complex, pluralistic state to the distillation and apparent simplification of the information as it becomes news.

The secondary stage of the model evolved as a result of the data gathered from the first set of semi-structured interviews with journalists, librarians and information officers. With this additional knowledge, new information was added to the existing model. It was placed within a more specific context and so a progression from the preliminary stage (which exists in an abstract context) occurred. The basic format remains constant at this stage but the context has changed. This part of the model concentrates on the interaction between sources and journalists and indicates that as the news is constructed journalistic staff create it with certain images of the implied audience in mind. This provides the basis for the third and final stage of the model.

The tertiary stage depicts the integrationalist approach to the tacit rules which journalists employ when evaluating, researching and constructing the news. This model evolved from the evidence gathered from the T.I.D. sessions with journalists, where rules were identified and categorised typologically (editorial, evaluative, operational and constructional/interpretive). Although the nature of this part of the model is three dimensional it has been translated into and presented in a two dimensional way. This level is an extension of the other two and completes the work by

describing, in a more detailed way, the news process which journalists use to disseminate and mediate the end product.

Thus, the models evolve from the general to the specific, beginning with a macro level view of the news process. There follows a mini view of the local news structure (ie the application of the macro model to a specific, practical setting). Finally there is a micro view of the news process which extends and develops in greater detail the other two levels of the model thus completing the composite model.

2.4 Case Study

2.4.1 Introduction

The main research question of the work was, "how do journalists mediate, interpret and construct environmental news in Scotland?" The research started with the key hypothesis that as journalists construct and disseminate the product to the audience or readership an interpretation of social reality is created. This interpretation is subjective because news is constructed within the context of the journalist's perceptions of the issue. The project has focused on the journalist's role within the news process and the ways in which this role influences the construction of the product. Further, the research took account of the methods by which journalists package the information into an intelligible yet popularised form for social consumption. Therefore, the case study which focuses on the Braer oil spill (Jan 1993) is an analysis of the construction of the environmental news product (see Appendix VI). The case study includes various aspects of content analysis such as language analysis, and this study provided the basis for the case scenario approach (T.I.D.) used to identify and elicit journalists' "taken-for-granted" rules.

This analysis has utilised a number of traditional methodologies such as content analysis which constitutes a hybrid of both quantitative and qualitative techniques.

"The best content analysis studies use both qualitative and quantitative operations on texts. Thus content analysis methods combine what are usually thought to be antithetical modes of analysis." (Webber, 1990, p10)

In addition, semi-structured interviews (see 2.5) were carried out with journalists who had covered the Braer. This provided evidential support for the content analysis being under taken at the time.

These various approaches have been described in detail below.

2.4.2 Content Analysis

"Content analysis is a research method that uses a set of procedures to make valid inferences from text. These inferences are about the senders of the message, the message itself or the audience of the message. The rules of this inferential process vary with the theoretical and substantive interests of the investigator. (Webber, 1990, p9)

Despite the fact that the methodologies used, reflect a hybrid of quantitative and qualitative techniques, the case study is small, qualitative and specific. This is due to the fact that, it analyses small numbers in select groupings. It is not, therefore, an exercise with quantitative, "number crunching" properties. It was selected at the beginning of the research because it was a topical, current, "parochial", environmental issue which could be followed through as it was picked up by local, Scottish, news media.

The method is appropriate for the case study due to the fact that it allows for in-depth examination of the news as a constructed entity. Through the synthesis of this product into its component parts, the method provides detailed analysis at a microscopic level. Further, as a technique, content analysis has been proven to be a reliable, established and favoured method within communication research.

However, although it allows for a precise, specific examination of the end product, the method is limited in that it does not allow for critical investigation into the taken-for-granted procedures or rules which journalists employ during the news process. Content analysis fails to reveal the processual decision-making implicit in this process. Therefore, it was with this knowledge in mind that a decision was taken to develop and apply a more extensive, robust, valid methodology to bear out the claims of the thesis. This was accomplished by using ethnomethodology and qualitative interviewing. A case scenario approach was devised using a mixture of hypothetical and real environmental issues, (see T.I.D. sessions, 2.5.2). This allowed the researcher to identify the journalistic rules used in the news process.

Consequently, it can be seen that the content analysis of the Braer text, together with the semi-structured interviews carried out with journalists, allowed the ethnomethodological case scenario approach to develop. This underlines the fact that the methodologies of the work, which aim to test empirically the hypotheses of the research, are integrally related in a robust and practical way.

2.4.3 Techniques

2.4.3.1 Diachronic Analysis

This technique involves examining coverage at particular points in time and comparing the results. "Diachronic" is a term which refers to the ways in which newspaper coverage may change over a set period of time. In this case, The Shetland Times was compared with The Press and Journal during the period extending from the 6 to the 22 of January 1993, focusing on the 8; 15 and 22. Due to the fact that The Shetland Times is a weekly newspaper, it was feasible to study the dates of issue which happened to be those mentioned above.

2.4.3.2 Comparative Analysis

The comparative analysis involved comparing these two newspapers in order to examine coverage of the oil spill. The newspapers were carefully selected because they satisfied a number of criteria.

Firstly, The Shetland Times is a local paper i.e. local to the site of the incident, situated at a central point of crisis, therefore, it was interesting and valid to study the text produced by local news media. Would The Shetland Times prove to be integrally involved, perhaps biased with the issue? The Press and Journal is a regional paper and its distribution is on the mainland. It is widely read therefore the dissemination of information is greater than that of The Shetland Times.

Secondly, although The Shetland Times is a weekly newspaper, and The Press and Journal is a daily paper, there is no negative bearing on the analysis because this demonstrates the different aspects of coverage of the issue.

Thirdly, both papers are Scottish and due to the fact that the research focus is pertaining to Scotland, the selection of the text had to reflect this.

The time period for the analysis is three weeks approximately, from 6 January (the day after the incident, but the beginning of the news coverage) to 22 January 1993. This time period was specified because it was necessary to study the coverage of the incident itself. Newspaper reporting of, even, a high impact issue is generally (although it varies) not longer than two weeks. It was surmised that possibly The Shetland Times would prolong coverage for a greater length of time than The Press and Journal, as the incident would have a more profound impact on the readership of Shetland.

2.4.3.3 Applications of Content Analysis

The amount of coverage given to the Braer by both papers has been measured by a content analysis technique. By using a grid it was possible to record how much of the story gets front page attention; how much is confined to inner and back pages etc. The table depicts the movement of the Braer story through the Press and Journal (Appendix VI). The issue moved off the front page fairly rapidly as other stories received prior coverage.

Findings emerged to the effect that, The Shetland Times produced a prolonged coverage of the Braer in comparison to The Press and Journal, and that, the story moved off the front page of the Press and Journal completely, after only ten days, becoming superseded by other issues which were higher on the news agenda.

For the purpose of comparing the Press and Journal (daily) with The Shetland Times (weekly) it was necessary to divide the three week period into weekly segments. Therefore, an overview of The Press and Journal's weekly news was analysed against the week's issue of The Shetland Times. This time consuming effort produced a considerable wealth of informational analysis which has been condensed to include the important salient points in an Appendix (VI).

The methods for this study have been based on traditional aspects of content and comparative analysis. A diachronic dimension has been added by investigating particular points in time, it can be seen more clearly how the issue is treated by each paper and after differing lengths of time.

A more detailed account of how the text has been appraised must be included for clarification purposes.

2.4.4 Language Analysis

It was observed that the language of the two papers differed considerably after the first week of coverage and that where language was similar the vocabulary was vivid. Techniques for this part of the analysis were based on work carried out by Fowler (1991) and Van Dijk (1991) which emphasised the validity and reliability of this method.

Firstly, the language was examined critically by investigating the relationship between vocabulary descriptors (i.e. "vivid" terms used to describe the incident as opposed to neutral ones - e.g. "nightmarish wreck" not "Braer incident") and their position in the paper - front pages, inside pages, comment etc. The nature of the descriptors serves to exaggerate or seemingly increase the story's magnification, making it appear "larger-than-life". It was decided to ascertain whether there was any significant correlation between the increased number of descriptors and the positioning of these at the beginning of the papers. This was carried out in order to test the hypothesis that bold, sensational headlines and reports on the cover stories draws a greater readership. This work involved counting these terms and noting their position in each paper. The figures were transcribed onto weekly graphs (although sometimes only a selection of these graphs e.g. the ones which show significant trends have been included in the discussion). It has emerged that the above hypothesis has been proved correct. The number of descriptors significantly decreases as the reader not only progresses through the article but also follows the issue through the paper.

Following on this investigation, the work focused, with a greater level of specificity, on individual descriptors. From the general study of vocabulary descriptors, it emerged that certain terms had been used on multiple occasions by each paper. The terms were used to describe the event itself and included both negative and neutral ones.

Disaster	Trauma	Tragedy	Oth. (Ng)	Spill	Slick	Incident	Oth. (Neu)
45	9	13	23	13	15	8	17

Fig 2 Table of vocabulary descriptors

Examples of Other (Negative) and Other (Neutral) were, "nightmare"; "devastation", "blackest" and "Braer"; "the tanker"; "the accident" respectively.

These occurred repetitively within the text, therefore it was decided to try and chart the number of times they were used in the articles, as in the above table. Again, the information translated easily to bar graph format (weekly). It has been found that the use of negative terms was greater than the use of neutral ones for the first week but not for the second and negligible in the third. The use of the word "disaster", by the press to describe the spill and its implications was consistently high for the entire period of analysis. The press persisted in using it, despite advice from subject specialists or experts (also interviewed) who maintained that this type of labelling was invalid and use of the term implied that the press had evaluative intuition about the situation, which was not the case.

2.4.5 Information Content and Emotional Emphasis

The information content referred to the ideas of objectivity and bias put forward by McQuail (1992) who suggested that the audience made value judgements about the world based on news information (page 24).

In an attempt to discover the division between the information content and emotional emphasis of an article, it was necessary to generally categorise each story under the labels - Human interest, Technical, and Political. Human Interest involves the interaction between the people of Shetland

e.g. stories about the wildlife, or industry. Technical refers to stories about the ship or the operations surrounding it e.g. the salvage operation. A sub-category of this is Technical (R) where an article often has a retrospective tone, e.g. "Braer Captain "took the right action". Finally, political which is a section involving the interaction between politicians themselves and between the politicians and the people of Shetland.

The Technical and Political categories of stories tended to be higher in information content than the human interest ones which were very emotive. This is verified by evidence from the newspaper text.

2.4.6 Subject Specialists or Experts

It was discovered through interviews that journalists rely on scientific subject specialists as sources of information when covering environmental issues. It was for this reason that the decision was taken to examine the use of experts or subject specialists during the Braer crisis.

The methods for investigating the use of experts by the press (how often and why they are referred to), involved counting and noting (in case of duplication) every person who had been referred to or quoted as an authority figure (be it political, environmental...). Those who were only mentioned casually and disregarded for the remainder of the story were omitted. Having drawn up a list of names, these were then, coded according to different categories. This coding was necessary to categorise the experts into different bands to facilitate analysis and to allow for the application of grounded theory. These codes were as follows:

 $E_{(A)}$ - Scientific experts or subject specialists e.g. university; research unit...

E_(B) - Environmental experts e.g. Greenpeace; RSPB; Friends of the Earth...

E_(C) - Political experts. This category was subdivided as follows:

E_{(C)1} - National Government Official

 $E_{(C)2}$ - Regional Government Official i.e. Grampian

E_{(C)3} - Local Government Official

E_{ICM} - Party Politician Specified e.g. Lib. Dem. or Lab.

 $E_{(C)5}$ - Other e.g. overseas political involvement

 $E_{(D)}$ - Technical experts e.g. Harbour Master; Marine Official; Salvage expert.

E_(E) - Industry expert e.g. fisheries authority; retail officials...

These statistics were translated into the graph format, located in the text. The evidence revealed which type of experts or subject specialists each paper favoured.

Collectively, these discursive sections provide the structure for the case study. The underlying objective of this study was to highlight the ways in which a small section of the Scottish media covered the Braer oil spill by producing accounts of the type of vocabulary used; how information based the reports were; and what authority figures were used to validate the sincerity and accuracy of the reportage.

For a discussion of the coverage of the Braer oil spill incident as produced by The Press and Journal and The Shetland Times newspapers see Appendix VI.

2.4.7 Pictures and Graphics

The decision was taken not to analyse picture text due to the fact that the timescale of the research would not allow pictures and graphics to be studied. Also this type of analysis requires a greater indepth examination than simply a peripheral consideration which is what it would have become, had this pictorial analysis been included.

The case study, then, is a detailed, specific examination of an environmental issue which relates to the North East of Scotland. It attempts to validate theories devised through the models which have been grounded in the data, gathered empirically.

A more detailed discussion of the research techniques used in the research follows.

2.5 Research Techniques

2.5.1 The Interview Method

There are countless definitions put forward by researchers on interviewing methods and techniques, (Marshall and Rossman, 1989; Glesne and Peshkin, 1992; Hammersley, 1983; Manheim and Rich, 1991). However Michael Quinn Patton describes the process simply as,

"The purpose of interviewing is to find out what is in and on someone else's mind. The purpose of open-ended interviewing is not to put things in some else's mind (for example, the interviewer's preconceived categories for organizing the world) but to access the perspective of the person being interviewed. We interview people to find out from them these things we cannot directly observe." (Patton, 1990, p278)

The aim of interviewer when using this method of qualitative research is to make it acceptable for the interviewee to include the interviewer in his or her domain or environment and not to unduly influence the respondent when collecting evidence (Marshall and Rossman, 1989, p279 and 295). Interviewing is a method, therefore, which is capable of eliciting the subjective information a person has about the world, or in other words, discovering that person's perceptions of social reality.. This research project was very focused and, therefore, designed in a structured manner, using small numbers of respondents. There was no scope for large scale quantitative analysis, hence the need to use a qualitative technique. The preliminary interviews were semi-structured in nature and this method of interviewing yielded a large amount of qualitative data. Interviews were conducted with a number of different groups of personnel (see subsequent sections). Journalists were questioned primarily about their coverage of the Braer oil spill (Jan 1993). The data gathered from these sessions helped to substantiate the content analysis being carried out at the same time. The combination of these two methods (content analysis and interviewing) provided the methodological

base for the development and application of the ethnomethodological case scenario approach (see T.I.D. sessions).

Patton (1990) states that there are three different types of qualitative interview - "informal conversational interviews"; "general interview guide approach" and "the standardized open-ended interview". The first is as it suggests a more "relaxed" method, where a desire for the "maximum flexibility to pursue information" is required (Patton, 1989). The design is unstructured in that the interviewer can follow up at will any angles which are interesting and "most of the questions will flow from the immediate context" (Patton, 1990). The second is a semi-structured method. A basic outline of issues to be covered in the course of the interview is briefly discussed at the beginning of the session. This schedule acts as a checklist but there are no set questions written in advance (Patton, 1990).

"The interviewer is thus required to adapt both the wording and the sequence of questions to specific respondents in the context of the actual interview." (Patton, 1990, p280)

The third method is more structured than the other two. The language is carefully worded and the respondent is guided through the same questions in the same sequence. There is little flexibility but the technique allows for less bias or variation (Patton, 1990).

This study employs a combination of these techniques, relying on the conjunction of methods two and three i.e. the general interview guide approach and the standardized open-ended interview.

Patton (1990) recognises the validity of combining the techniques.

"...a number of basic questions may be worded precisely in a predetermined fashion, while permitting the interviewer more flexibility in probing and more decision-making flexibility in determining when it is appropriate to explore certain subjects in greater depth or even to undertake whole new areas of inquiry that were not originally included in the interview instrument. It is even possible to adopt a standardized openended interview format in the early part of an interview and then leave the interviewer free to pursue any subjects of interest during the latter parts of the interview." (Patton, 1990, p287)

Thus, interviewing allows the researcher not only to elicit subjective information from the respondent (Patton, 1990), but enables him/her to amass a large amount of data in a short time. It also lets the interviewer immediately probe for further information at any point and together with observational methods allows for comparing description with fact (Marshall, 1989). It is for these reasons among others that interviewing was chosen for this study.

The role of the interviewer can appear passive due to the fact that interviewing is not directive (Hammersley, 1983) but this is not the case. The role is an active one where the interviewer is constantly applying what is heard to the context of the research profile. Glesne and Peshkin (1992) maintain that,

"Good listening, which is at the heart of effective interviewing, is an act of submission. That is listening in an interview situation requires literally giving oneself over to what the respondent is saying and feeling and wondering about. Good listening interviewers are tuned into their respondents, fixed and fully attentive to what they are saying." (Glesne and Peshkin, 1992, p82)

2.5.1.1 Selection of Interviewee Subjects

Initially, for the purposes of disclosing key personnel in the fields of both the environment and the media, directories pertaining to these subjects were systematically searched (see page 43).

While searching through the media directories it was taken into consideration that the journalists/editors should be, for the majority, Scottish as the study was to reflect the reporting of environmental issues by the Scottish media. Approximately three months into the research, letters were sent out to editors of The Herald. The Scotsman, The Independent and The Press and Journal (Aberdeen). These papers were targeted because The Herald and The Scotsman could both be termed as national Scottish newspapers, one of which served the West and one the East of the country (both now consider themselves to be Scottish nationals). The Press and Journal was selected

For a list of these directories see Appendix 1.

not simply because it was a local newspaper and situated near at hand but because it is a regional paper serving Grampian. The Inverness Courier and The Dundee Courier were omitted from the selection process for the reason that they are local papers and similar in format to The Press and Journal. The researcher did not wish to limit the study by focusing on local papers only.

Simultaneously, preliminary visits were taking place at Friends of the Earth (Scotland), The National Trust for Scotland, and The Scottish Agricultural College. Interviews were conducted with information officers and technical secretaries. The purpose of these preliminary visits was to gain background information about the relationships between the environmental organisations and the media and to establish links with the people in this field so that they could reveal other important contacts. It was also an opportunity to test the interviewing techniques and to assess whether the newly compiled questions would elicit the preferred type of information. This test proved to be quite successful and provided the author with more confidence. As a result of these first visits, new contacts emerged e.g. information officers at Greenpeace and environmental officers at The National Trust for Scotland. After four months of research the media interviews began, having received confirmation from the editors of the newspapers as well as those in the broadcast media. The media interviews took place irregularly, with a concentration in the first month (April 1993) which continued sporadically over the summer. Other interviews with media librarians and subject specialists (experts) (see below) were being carried out simultaneously.

The interviews which took place, totalled approximately thirty eight and were categorised into three groups. These were Media Personnel which can be subdivided into Journalists; News Editors and Documentary Producers. Librarians were in the second group who all work in the media and subject specialists were in the third group, the majority of whom were consulted by the media about the Braer Oil Spill which occurred off the coast of Shetland in Jan. 1993 (this analysis appears in Appendix VI). It was impossible to interview all the experts who were consulted about the Braer,

therefore one from each main area of concern e.g. fishing; sheep farming; agriculture etc. was selected. These were scientific experts which was the category specifically chosen to study.

The preliminary test group of interviews (explained above) consisted of Environmental Press Officers. The selection of media personnel started with the sending of standard letters which explained the project. Many of these personnel suggested other contacts to interview. The selection process, therefore, did not involve searching the directories for the names of all the journalists in one organisation to target in a pseudo-quantitative way. It was felt that this would render a great deal of repetitive material as the journalists would receive much the same training in the company. Instead a qualitative approach, known as snowball sampling, was adopted where a "chain" of contacts emerged quickly as people identified other media personnel in the field who would be able to help. A network of individual contacts was built up rapidly, all of whom were made aware of the research definition. The media contacts emerged as a result of these "chains". The reason for this is that the media operate using contacts and nearly always rely on people for information rather than sources which are paper-based ² and were therefore able to supply the names of people appropriate to help with the study.

2.5.1.2 List of Respondents For T.I.D. Sessions

A number of journalists in the broadcast (encompassing radio and television) and press sectors of the media were contacted and asked to be respondents in this part of the research. (For a full listing of contacts please see Appendix II). This was accomplished by the method known as snowball sampling, which involved using personal contacts (respondents from previous interviews) to build up the sample (see 2.5.1.1). Other recognised forms of sampling eg stratified, random were rejected for their quantitative emphasis. These contacts included both environment correspondents and non-specialist correspondents who had covered the environment at some point during their careers. The

For a complete list of interviewees see Appendix II.

sample included, reporters from a regional newspaper (the Press and Journal), an evening newspaper (Edinburgh Evening News), both national Scottish newspapers (the Herald and the Scotsman), a local news agency (North Scot) and a Scottish Sunday newspaper (Scotland On Sunday). The broadcast section included journalists from BBC Scotland in Glasgow and Aberdeen, Grampian Television, BBC Radio Scotland in Aberdeen and Northsound Radio, a local commercial radio station. Many of these journalists had previously been interviewed at an earlier stage in the research and these respondents were contacted again. The sample was compiled from Edinburgh, Aberdeen and Glasgow, the main Scottish media centres, in order to make the study Scotland wide and not to confine it to the North East. The sample was small and select but was complete and representative of the media in Scotland. All the Scottish environment journalists were contacted and those who were willing to take part were included.

2.5.1.3 Interview Pragmatics

"The common characteristic of...interviewing is that the persons being interviewed respond in their own words to express their own personal perspectives." (Patton, 1990, p287)

Generally interviews took place during working hours due to the fact that this was the most convenient time for respondents. Although with the media personnel, particularly the press, very often interviews and telephone calls would have to be scheduled either before 11.00 in the morning or after 8.45 in the evening. The reason for this was, simply, that the time in between these points is extremely busy for reporters on a paper - researching stories, interviewing and later on writing up pieces for editors. However, this time restriction did not produce any major problems for the research.

Interviews would last, approximately, one hour in length, however, very often sessions would run on and could last up to two hours at a time. These longer meetings were generally infrequent, though the researcher did try to keep the length of interviews the same, so as not to generate unequal

amounts of data. In the event of the respondent sometimes having much more information to give, additional T.I.D. sessions were set up. Thus, multiple sessions were sometimes employed.

The venues for the interviews were, (as has been already mentioned), at subjects' places of work. This was decided because it was felt that the setting was more "natural" and would allow the respondent to be more at ease, therefore more able to give information freely. Interviews were carried out with personnel individually on a "personal" (face-to-face) basis where possible and the information which was divulged was kept completely confidential.

2.5.1.3.1 Question Construction and Sequencing

Question construction involved returning to the definition of the research problem in order to ascertain what the project was trying to find out. This meant re-examining the aims and objectives and trying to decide not only what it was the research wanted to discover but how to design interview questions which would elicit this particular information from the respondents. The themes of the research like, how news is constructed; what sources of environmental information journalists use; if they have information seeking strategies, what they are etc, were analysed again and questions formed around them.

The interview schedules were the same for each group (librarians, journalists, subject specialists). Questions would vary according to each subject group, however, there were themes common to all groups. Questions were designed using an open ended format. These examples were taken from the interview schedule used for subject specialists.

How do you feel about people like yourself being asked to comment on and discuss the implications of environmental issues?

Would you mind telling me about your involvement with the media during the Braer oil spill?

These types of questions avoided the fixed response "No" and "Yes" and enabled the respondent to talk for as long as s/he wanted. In this way a large amount of evidence was gathered which allowed for extensive qualitative analysis. This reaffirms the ethnomethodological principles which state that respondents should be allowed to describe the world in their own words thus permitting the researcher to infer conclusions about how respondents form their conceptions of reality. This type of method underlines the relevancy and reliability of this method for this study.

2.5.1.3.2 Recording of Data

2.5.1.3.2.1 The Semi-structured Interviews

Recording the data from these particular interviews was accomplished by a long hand method and no differences were noted between each different group of interviewees. During these particular interviews, notes were written out³ due to the fact that many of the respondents did not wish the researcher to use a tape recorder. This was not a problem, although it did take very much longer and it was felt that because the interview was proceeding at a rapid pace, sometimes, information was being lost. This problem was partially alleviated by asking the respondent to slow down and allowing the interviewer to catch up. Where answers seemed to have an indefinite quality to them, clarification was asked for and qualifying answers were recorded.

2.5.1.3.2.2 The T.I.D. sessions

The decision was taken reject examples of non-verbal communication e.g. gestures, as substantial data which could be coded and from which conclusions could be drawn and to concentrate on the oral communication of information.

For a complete set of transcribed field notes see Appendix III.

The sessions with each respondent were recorded using a tape recorder for the purpose of allowing accurate transcription of the data. Each respondent's permission was sought before this was undertaken and where they wished to discuss an issue "off the record", they were able to stop the recorder or request that the information not be reproduced. The transcripts of each journalist's session was made available to them so that they could refer to what they had said if they wanted to.

Each session lasted between an hour and an hour and three quarters. Again, the researcher tried to ensure that each session was of an average length to prevent any biasing of the data. The appointments took place at the university, at the respondents' place of work, and on occasion at the home of the researcher (this was at times when it was impossible to use either of the above).

2.5.1.4 Anonymity (Semi-structured Interviews)

During the interviews, as far as possible, the respondents exact words were noted. However, in the analysis of evidence, where quotes have been used (see chapter 5), these have not been directly attributed to named sources as some respondents requested to remain anonymous. In keeping with their wishes, it seemed appropriate to treat all other subjects, within the group, the same. The scientific respondents have been given letters to keep them distinct from the journalists who wished to remain anonymous, who have been allocated numbers (respondents A-E; as opposed to repondents 1-3).

2.5.1.4.1 Anonymity (The T.LD. Sessions)

As with some previous interviews (see above) a number of respondents requested anonymity during the T.I.D. sessions. The reason for this was linked to the policy of the organisation they work for. As a result, where references have been made to their comments throughout the work, there are numbers which indicate which respondent is speaking (eg respondent 1-3). The identities of these

people have been revealed to the supervisory team in confidence and their names will not appear anywhere in the work.

2.5.1.5 Problems

Maintaining rapport without compromising researcher/subject distance and encouraging respondents without injecting partiality, lessened as the researcher became more confident and proficient at interviewing.

During the preliminary interviews (on occasion) certain questions in the schedule were not immediately understood by respondents. Consequently, the author revised these questions to increase their clarity and to elicit responses from the journalists, scientists etc.

2.5.2 Tri-lateral Interactive Discourse Sessions (T.I.D.)

This is a method exclusive to the research which has similarities with in-depth interviewing techniques. The work of Parsigian (1987) which identified the step-by-step procedures journalists carry out when information gathering for news, proved to be relevant when designing this part of the methodology.

One of the main objectives of the work was to uncover the unwritten, tacit "rules" which journalists employ in order to execute the news process. It was also within the remit of the work to discover the sources of these "rules". It was decided that a method drawing on ethnomethodological techniques (Garfinkel, 1967) would be used.

"...sociology operates with a "realist" view of the nature of reality. Realism suggests that social structures are "real" in the sense that they are partially independent of individuals and their perceptions." (Bhaskar, 1975, p34).

The sociologist Bhaskar (1975) adopts this realist position underlining the fact that "society must be regarded as an ensemble of structures, practices and conventions which individuals reproduce or transform but which would not exist unless they did so" (p34). These concepts are crystallised in the practice of journalism and more specifically in the everyday common-sense rules which are applied in order to construct the news. The area of ethnomethodology, a technique which is grounded in phenomenology presented itself as an appropriate method (see 2.1.1.2). It is defined by Hughes (1990) as being,

"...concerned to elucidate human interaction by empirical examination of those processes through which meanings are produced in social practice...[It is] content to describe the procedures of meaning production in any social reality it cares to examine rather than address the meanings themselves...Ethnomethodology is a formal sociology interested in the properties of intersubjectivity as exhibited by social actors in the day-to-day world. (Hughes, 1990, p143).

Ethnomethodological practice was revealed in the T.I.D. sessions as the journalistic respondents used the scenarios to explain and describe the routine tasks involved in the news process (see below). By exploring their professional tasks through the case scenarios the respondents were able to define their perceptions of journalism and news construction in their own words. Out of this the concept of "intersubjectivity" discussed by Hughes (1990) above, where commonalities were uncovered between all the respondents, was identified.

This ethnomethodological technique was modified and tailored specifically to Scottish journalism and the environment and may be seen to extend the more traditional methodologies (content analysis; semi-structured interviewing) used in the work. This was accomplished by the case scenario approach which as far as the researcher is aware has never been applied to the study of journalism before and remains, therefore, within this context as an original method⁴ (after

The researcher is aware of the work of the Glasgow University Media Group into the miners' strike, where a sample of students were asked to imagine themselves as journalists and to write a news item based on a set of television images. The purpose of this was to examine the role of the media in affecting particular groups of the audience. It is a method which is distinct from the one implemented in this research.

Parsigian, (1987)). T.I.D. sessions took place with a number of journalists and the data received was coded using grounded theory (Glaser and Strauss, 1967).

2.5.2.1 Environmental Cases

A set of five different environmental case scenarios were devised to present to journalists, in order to uncover the taken-for-granted rules which are used to construct the news. These cases were developed as a result of the case study of the Braer incident (see page 47) which was a real reporting situation which journalists reacted to.

Four out of the five cases were realistic but hypothetical issues and the fifth was a real development (selected from recent media coverage), taking place in the Cairngorms in Scotland. To have had all the cases hypothetical would have made the study a controlled experiment and it would have been impossible to relate the research to the real world (therefore, the real issue was necessary as a control variable against which to test the journalists' responses). It was hoped that the journalists would react in a different way to this third case, so that conclusions could be drawn about how journalists mediated the environment in Scotland. However, no steps were taken to ensure that this would happen as this would have created an artificial situation and may even have skewed the data from the sessions.

The Braer incident acted as a role model which helped the researcher define the hypothetical cases, (particularly case 5). By using it as a basis for the other scenarios (except case 3 - the real issue), the elements of realism and authenticity became implicit within these cases.

2.5.2.1.1 The Case Scenarios

These cases (see Appendix IV) have been related to the types of issues known to have taken place in the oil, fishing, farming and conservation sectors. This enabled the local North East dimension to remain with the work as well as reflecting the broader Scottish spectrum. This provides a consistency in the research in that examples are included which are related to issues like the Braer and other oil related incidents. The case scenario approach (as far as the author is aware) has never been applied before within this context and the method remains therefore unique to this research.

2.5.2.1.1.1 Composition

The choice of topics for the cases was based on a knowledge of media friendly issues. This knowledge was built on retrospective research into the types of environmental issues covered by The Scotsman and The Press and Journal. The themes for these issues were: use of chemical pesticides in agriculture (1); the effects of air pollution on respiratory diseases (2); the development of a funicular railway through the Cairngorms (3) (real issue); overfishing in the North Sea (4) and oil pollution in an inland estuary (5) (see Appendix IV for cases). The topics were selected at random and the researcher had no previous knowledge of them. This was deliberate so as to avoid biasing the study with any preconceived opinions. Each topic was individually researched at a detailed level.

News values were built into the case scenarios for the purpose of uncovering journalists' reactions to story potential. Information about news criteria and values had been gathered through semi-structured interviews with broadcast and press journalists and news editors. For example, it was known that the nuclear pollution from Sellafield which may cause cancer would not receive coverage on Grampian Television although it probably would on the BBC. Environmental issues do not generally receive publicity by North East media to any great extent unless there are some elements of

geographic relevance implicit in these. For example, the following scenario might receive coverage: an Inverurie woman was seriously injured by a falling branch from a diseased tree, which was previously undiagnosed by conservation experts, at an National Trust for Scotland property near Dundee. The issue has political implications for the NTS and journalists would see a social responsibility in reporting the incident. However, the story might not have received a high position on the news agenda if the woman had been English or French. The author included criteria like, locality of issue (geographic relevancy), "newsworthiness" i.e. how serious the issue is and the timeliness of the issue.

The purpose of the case scenarios was to act as yardsticks against which variants could be assessed from respondents' data. They each consisted of a hypothetical scenario (an unnatural situation, but with natural properties). These natural features triggered valid responses from the sample of journalists because they were recognisable and realistic. In addition to the basic one page scenario, constructed as a press release⁵ a further sheet of technical information was supplied which filled in the knowledge which journalists sometimes acquire and refer to during the research stage of the news process (operational rules, see chapter 9). This was to provide an aide memoire of information sources for the journalists. These were all scientific as this is the type of information respondents use.

These cases were constructed using a consistent procedure. In all of the scenarios, there is a main event which takes place initially and thereafter the political and social personnel who are involved are interlinked. The background information was compiled by using online databases (because of their subject specificity), library subject searches and literature/sources indicated by experts.

⁵ The press release was structured using an actual press release format and was validated by an information officer from an environmental group.

2.5.2.1.1.2 Content Validation by Scientific Personnel

The information included in each case was validated by scientific and medical personnel who specialise in these areas (for a specific listing of these people, see Appendix V). Some of the scientists who were selected were lecturing or teaching staff at the Robert Gordon University and the University of Aberdeen. These were personnel who would possess the relevant depth of subject knowledge (the medical and environmental angles) and who would be aware of the current arguments surrounding these environmental issues. This selection took place because personnel were not involved in researching one particular argument belonging to these issues.

The validation process set out to authenticate each scenario and to provide the authorisation that the scientific information was correct as stated. It ensured that the scenarios were realistic and factually sound.

2.5.2.1.1.2.1 Validation by Journalists

This validation is professional validation by respondents rather than a methodological validation as above.

All the respondents approached the stories in similar ways and they agreed that the cases were the type of scenarios which they would cover. The validity and relevancy of the method for this part of the study is reinforced by this comment,

"When you get an offshore explosion you've no idea...you can't go and look at it. All you get is this basic information. You might not know if they're men or women, if they're dead or how many helicopters there are. It's very basic. Gradually more information comes through as the day goes on but you've got to write a story first off on the minimum of information. So to some extent this kind of press release or scenario is not unusual at all. It's not unusual to have something full of holes." Ian Lundie, North Scot

Generally, the respondents accepted the scenarios as press releases and acknowledged that much of their information about stories does come in this format. However another respondent at North Scot was fairly certain that the stories would not come to the agency in this manner. This contradicted what a senior colleague at the same organisation (see quote above) said about the sources of the stories. The respondent maintained that story information would come as a tip off from other media. His statement underlines the validity of the news process model (chapter 3) which shows that the media monitor each other for information about stories. It is evident that different types of stories come to the attention of the journalists by different routes. In the case of the chemical pesticides (case 1) which is a "serious incident" type as opposed to a "disaster" type (case 5) or a "claim/counter claim" (case 3), some respondents suggested that the story would come in as a tip off. It may be concluded that, in reality, cases 1 and 5 which can be perceived as having hard news angles would come to the news room as a tip offs but cases 2, 3 and 4 might be more likely to have a press release format. However, all the respondents seemed at ease with the fact that for the purpose of the study all information about the stories should appear as press releases to maintain consistency.

2.5.3 Data Collection

Data was collected in T.I.D. sessions, in order to verify the research statement i.e. that journalists use tacit rules to construct the news. The term "tri-lateral" originated from the fact that the researcher (1) and respondents (2) interact in and through the text (3) (thus the reference to the three elements within the methodology). This is a method which the author implemented, drawing on techniques of in-depth interviewing which are summarised in the following quotation.

"...in-depth interviewing is conversation with a specific purpose - a conversation between researcher and informant focusing on the informant's perception of self, life and experience, and expressed in his or her own words. It is the means by which the researcher can gain access to and subsequently understand the private interpretations of social reality that individuals hold." (Minichiello, 1991, p87)

The characteristics of in-depth interviewing described above indicated how a method such as this would be appropriate for eliciting data from respondents. It has proved an effective way of gaining a critical understanding of people's perceptions of reality or in this case perceptions of the news process. This reaffirms the relevancy of the ethnomethodological approach to this research. Alfred Schutz stated that only by understanding how people think can researchers determine the ways in which they behave. People behave in particular ways due to their interpretations of reality or own definitions of the world (Minichiello, 1991, p94).

"...what we are actually interested in is people's experience of social reality through their routinely constructed interpretations of it. If the researcher develops theories which are not grounded in the informant's experience of social reality, then he or she runs the risk of constructing and imposing on that informant a fictional view of their reality." (Minichello, 1991, p94).

It has been necessary in certain places to "tidy" up respondents quotes. An example of this has been included in a methodological appendix (VII). Although certain extra words have been omitted at no point has the sense or meaning of the quote been altered.

2.5.3.1 Dynamics of Discourse Sessions

The sessions were divided into three parts:

- **2.5.3.1.1** Tri-lateral discourse sessions where, journalists were presented with cases.
- 2.5.3.1.2 The construction experiment respondents were asked to write up one of the cases as they would for an article.
- 2.5.3.1.3 A follow up semi-structured interview was carried out with editors and senior

production staff to develop the knowledge in certain areas which had arisen from the discourse sessions.

2.5.3.1.1 The cases were presented to each respondent in the same order to maintain consistency and also so that the real issue was "hidden" amongst the hypothetical ones. This unobtrusive testing strengthened the reliability of the experiment because journalists were less aware of the real issue and therefore approached each case the same way. Each respondent analysed the five cases and for each case revealed the step-by-step procedures involved in the approach to, researching of and construction of news.

2.5.3.1.2 In addition to the intensive discourse sessions (described above), the respondents were asked to take away the first case (chemical pesticides) to write it up as a news story or script. The response from journalists on this matter was supportive as the majority of the sample agreed to take part in the exercise.

2.5.3.1.2.1 Response Rate

Originally, twelve out of the fourteen respondents agreed to take part in the experiment (the other two refused). However, it soon became apparent that retrieving the finished article from the journalists would prove difficult due to their heavy work schedules. Ultimately eight people completed the exercise and this data has revealed trends which substantiate the hypotheses (chapter 10).

2.5.3.1.2.2 Method

The case scenario was produced as a press release type document which served as an aid to respondents during the construction process. The assumption was made that in using the accompanying information sheet much of the research or information gathering for the story had already been completed. The situation was created as closely to journalistic practice as possible but it was still artificial in the sense that journalists would not ordinarily take all their information from a press release. They would verify the story connections independently e.g. between the pesticides and the illness, or the air pollution and the asthma and they would interview certain people (but sometimes only a selection of people) involved in the incident.

What this part of the study showed was the structure of the news story as defined by the journalists. It demonstrated exactly which segments of information, from the case scenario, respondents rated as being important and which were not important i.e. an information selection and rejection pattern. The exercise acted as a check against which the interview data could be compared, further strengthening the validity of the data. It was a test which was conducted independently of the discourse sessions and which enabled the researcher to assess what information journalists regarded as important and how they rated certain aspects of the scenario. Further, it revealed how important journalists rated scientific or environmental information. It allowed the author to see, for example, whether journalists might be more prone to use the commercial name "Benazalox" rather than the word "pesticide" or "herbicide", or the word "carcinogenic" rather than "cancer".

The method used for this experiment is described as follows. In order to make sense of the respondents' work, it was necessary firstly to dissect the case scenario and the accompanying information sheet into small segments (approx. 16). These information pieces or variables were given keyword labels which described their content and ranged from "pesticides", "cancer" and "police" to "named victims" and "scientists". It was possible to evaluate the story construction,

sentence by sentence, selecting the keywords or variables and assigning a percentage to each one. This determined how far through the story each segment or variable appeared, thus allowing the researcher to conclude approximately what the respondent had selected and rejected and how important he or she rated each information byte.

In Britain, generally, a journalistic newspaper report or script includes the most important information in the first paragraph allowing the more superfluous data to appear further down. Therefore, the categories with the least percentage values translated as the information carrying the most importance. This technique is called the "inverted pyramid".

2.5.3.1.3 The follow up interviews were carried out with a sub set of the sample consisting of senior production journalists and news editors. (where interviews took place with two journalists from the same organisation, the follow up was carried out with the more senior of the two). The purpose of these interviews was to extend the knowledge gathering in certain areas. These areas included, for example, training, definition of news, news categorisation, the role of the journalist within the news industry. The data acquired at this stage substantiated the "rules" uncovered at the in-depth (T.I.D.) stage e.g. the selection and rejection of information; the use of populist scientific terms as opposed to jargon.

2.6 Analysis of Data

2.6.1 Grounded Theory

Grounded Theory is, in the words of Glaser and Strauss (1967), "...a way of arriving at theory suited to its supposed uses" (p6).

"Generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research. Generating a theory involves a process of research. By

contrast the source of certain ideas, of even "models" can come from sources other than the data". (Glaser and Strauss, 1967, p6) (My emphasis)

Grounded Theory is, essentially, a way of creating theory from data or evidence empirically, within social research. It is an appropriate method, therefore, to implement into this research programme, because it is most relevant to qualitative rather than quantitative research, and Glaser and Strauss (1967) maintain that when used consistently it can yield results that are reliable and valid. They also stress the exclusivity of grounded theory as the only possibility for field research. In addition to this, however, according to Layder (1993), they "view more "remote" forms of observation, semi-structured interview and documentary materials as having equivalent weight as research instruments, depending...on the exact circumstances of the research." (p43).

2.6.1.1 Formal and Substantive Theory

Grounded theory involves two other theories which are substantive and formal in nature.

"...formal theory must first proceed through and emerge from, a substantive grounding in data...Substantive theory is theory "developed for a substantive area such as patient care...financial organisations". By contrast formal theory is theory "developed for a formal or conceptual area of sociological inquiry such as status passage, stigma, deviant behaviour...organisational careers" (Glaser and Strauss, 1971: 177-8 quoted in Layder, 1993, p42).

This research project has defined both formal and substantive theories. The former may be described as the changes in knowledge at different levels in the news process; retrieval of information by journalists; and the idea that librarians play an intermediary role in the flow of information which is used in news. The latter or substantive theories are more specific and include, environmental journalism of Scottish news media and the reporting of oil related events by local print media.

Grounded theory is, however, not a technique which can be isolated from other qualitative approaches and "...may be seen as an "end-product" of research which draws on all or some of the elements contained in the other approaches..." (Layder, 1993, p50).

2.6.2 Analysis of Evidence

Large amounts of data were gathered from personnel in the media, environmental and librarianship sectors through the use of techniques such as semi-structured interviews, T.I.D. sessions and document analysis (see 2.2). The application of grounded theory involved dividing the respondents into professional sections ie librarians, journalists and environmentalists.

Within each professional section the evidence was coded by labelling the naturally occurring themes. For example, the interviews with journalists were coded by grouping trends together which were emerging from the interview schedule using categories such as journalists' perceptions of their role in the dissemination of environmental information; or, journalists' perceptions (image) of the audience.

2.6.2.1 List of Code Categories (Semi-structured Interviews)

In order to elicit relevant types of information, questions were phrased in particular ways using open ended styles (see 2.5). A number of questions were asked, and common themes emerged from the analysis. As a result this made the task of coding easier. This type of coding⁶ is the same as the one used for analysis during the case study. The data was arranged into logically occurring themes eg information sources used by journalists; news values; packaging of "green issues". These were coded, for each set of interviews for example the interviews with journalists:

⁶ This coding is different from the ethonomethodological coding used to analyse the transcripts of evidence from the T.I.D. sessions, see Appendix VIII.

- 1. **J-J** This refers to journalists perceptions of themselves and their colleagues ie their self perception, which may be seen to be the evaluation of their own role, both within the organisation and in the wider dissemination of information. A specific trend in the data which emerged was that journalists perceived a number of different roles which had different criteria.
- 2. **J-I** This category coded journalists perceptions of the information. Eg information gathering strategies. What information sources eg personal and library based are contacted or searched. This was to try and discover what information is needed.
- 3. **J-I**(L) This relates back to (2) above but specifies the librarian as information provider and often as intermediary. It also identifies the library as an important information resource.
- 4. J-J(S) This refers to journalists' views on specific journalism ie the Braer Case Study.
- J-J(S)-A This relates to the journalists' views on specific journalism but also includes conceptualisation of the audience. This is not an explicit set of direct opinions on the audience rather they are impressions expressed when considering another topic.
- 5. J-J-A These are the reflections of the journalists' on journalism and the news process (macro model) with a specific image of the audience in mind ie the self perceptions of their own roles and how this influences the audience. This is a more explicit description of the audience and how news affects it
- 6. J-E This refers to the journalists' perceptions of experts or subject specialists.
- 7. J-E-A These are the journalists' perceptions of experts with a view of the audience in mind ie how journalists' views of experts might affect the audience.

8. **J-En** The last group of codes relates to the journalists' reflections on environmentalists/pressure groups.

J-En-A This is the journalists' perception of the environmentalists with an image of the audience in mind.

It was interesting to gain an insight into how different groups of personnel perceived each other (eg journalists' perceptions of experts, environmentalists, etc.)

Once the coding categories had been established, they were arranged in the most logical order. The list became as follows:

J-J	J-I(L)
J-J(S)	J-E
J-J-A	J-E-A
J-1	J-En
	J-En-A

Different themes were drawn from the questions asked of respondents in each professional group and the analysis was constructed around these. The evidence was arranged through coding and conclusions formulated using this. The analysis does not appear in a separate section of the thesis: rather, parts of it have been included in discussions pertaining to the media as information seekers, and the subject specialist as information source to journalists (chapters 4 and 5).

2.6.2.2 The method of Coding

Researchers can end up with a lot of different codes which are very specific due to the fact that each particular category has to be covered. This can mean that each grouping is very small, but it also

means that every angle/theme which is important, can be considered. For example, consider, J-I and yet $J-I_{(L)}$ ie evidence pertaining to journalists' information gathering practices and also journalists' information gathering practices through the intermediary of the librarian.

This coding routine has been performed for each of the groups of respondents but the journalists' category has been used, here, as an example.

2.6.3 Interactive Discourse Analysis (T.I.D. Sessions)

Discourse analysis is an important feature of the research methodology. Techniques such as content analysis were relevant and appropriate for the case study of the Braer oil spill (see Appendix VI) but these methods were limited in their ability to identify the tacit rules implicit in the news process. It was necessary, therefore, to devise a new type of method of analysis and apply it to the study of the journalistic process.

On completion of the discourse sessions, the data was transcribed verbatim. This was, then, analysed using grounded theory described above.

"The aim of data analysis is to find meaning in the information collected...[it is] the process of systematically arranging and presenting information in order to search for ideas." (Minchiello, 1991, p285)

As suggested by theorists in the field, a general statement was developed about the topic ie that journalists use tacit or taken-for-granted rules to construct the news and this was revised and modified in light of the new information which was gathered from the T.I.D. sessions. Conclusions were drawn from this information and explanations provided (Glaser and Strauss, 1967). These can be found in Appendix VIII.

Grounded theory is a robust methodology which has both validity and reliability for this research. It has been used appropriately where quantitative methods would have lacked relevancy.

2.7 The Formation of a Typology

From the coded discourse data the researcher inferred "rules" from the procedures described by respondents. These "rules" were divided into a typology of categories: Evaluative, Operational, Interpretive, Constructional and Editorial. For a detailed discussion of this typology see Chapter 6.

"...the forming of a set of types based on a model...is referred to as a typology....Every field will not lend itself equally well to the development of a typology, but when variations on types can be observed, a typology can be a powerful way to express it." (Baker, 1986, p251)

It was important to study the rules typologically for a number of specific reasons. Firstly, it allowed for a detailed and analytical synthesis of the different rules which have been elicited from the evidence. The typological approach enabled the researcher to arrange these rules thematically by dividing them into naturally occurring themes. The typology facilitates this process and allows the logical, chronological progression between the categories. Further, it was easier to cross reference the rules and their sources in a typological format. Consequently, the typological information provided a new dimension to the model and this was due to the fact that the typologically arranged material was clearer to define, understand and use as a critical instrument.

2.8 Conclusions

This chapter has sought to demonstrate the author's working knowledge of and ability to apply successfully, a wide range of research methods and techniques. From this it can be seen that the project has utilised a combination of traditional and innovative qualitative methodologies. These methods provided a vehicle for analysing the various research problems which were how to

investigate the information gathering techniques, the interpretation and mediation processes inherent in environmental news construction in Scotland. These methods include content, comparative and diachronic analysis, semi-structured interviewing, as well as a specifically tailored variation of ethnomethodology (tri-lateral interactive discourse sessions) whereby a three-way interaction is analysed according to the more conventional grounded theory method. This technique evolved as a new empirical method from the content analysis work conducted into the press coverage of the Braer oil spill and has proved to be a valid, robust and reliable way of extending the work from a simple examination of the textual product to an in-depth, critical analysis of the tacit, evaluative, research, constructional and interpretive procedures implicit in the news process. The extensive discussion of the methodologies utilised in the research project has served to demonstrate how each technique has a valid integral role to fulfil and how the methodology functions collectively and holistically within the research framework.

Chapter 3 Research Hypotheses and Model

Introduction

The research problem was concerned with the ways in which journalists in Scotland, interpret, construct and mediate environmental news. It was from this overarching question that the objectives of the research were designed (see page iv). These objectives were to examine journalists' information gathering and interpretive practices, to study the sources of environmental information and to identify the tacit rules (and sources of these rules) used in the news process. From these objectives, the main and sub hypotheses of the research developed. These hypotheses, discussed briefly in the introduction to the research, are as follows.

Firstly, that information is pluralistic, complex and technical. It is, therefore, represented in a number of different formats. Secondly, this information changes as it is retrieved or gathered, packaged and disseminated (by journalists, librarians). Further, this information is influenced and redirected by the news process.

These main hypotheses refer to the information chain and information exchange. There are, in addition, two important sub hypotheses which refer more specifically to the information/news process and to the information/news product.

These are, firstly, that journalists use "taken-for-granted" or tacit rules in the news process with which to gather information, construct and interpret the environmental information for news. Secondly, the information is simplified by journalists for mass consumption. It is, thereby, reduced, condensed, distilled and repackaged as a different product.

The use of a model was a technique by which it was planned to explain, and explore the hypotheses of the research and, further, so that findings could be elicited.

News Construction Model

The research was designed to acknowledge and examine ideas such as news existing as a hegemonic reality i.e. that news originates not only within an organisational context but also within a political one and that through news, knowledge manifests itself in the reproduction of values and concerns, thereby indicating that news is not just a constructed reality but one constructed within a particular context. There was evidence to suggest that journalists interpret information within these contexts when they make selections and reductions of the information as they write. The information which journalists gather from various sources is changed through the processes attached to news construction.

The communication model was developed so that it could be tested in the field against information gathered from news personnel. It describes one of the fundamental hypotheses of the research which suggests that as environmental information is retrieved and interpreted by journalists, the meanings which can be taken from this information changes.

The model exists in a number of different stages and this chapter is concerned with describing the progression and revision of the research hypotheses in pictorial form. This section is divided into three parts, the preliminary, the secondary and the tertiary phases of the model.

The preliminary stage of the model is a flow chart diagram which shows the diverse levels of knowledge which are altered as a result of retrieval and interpretation. Although the layout appears to be abstract, in conjunction with the explanation which follows, a holistic account of the hypotheses is provided. The design is similar to that of the model produced by Ericson et al. (1987) who demonstrated the selection/production sequence in two different media - newspapers and television.

3.1 The Preliminary Stage

The function of this stage of the model was to try and explain the flow of environmental information from sources to audience through the news process. The flow diagram represents a group of numbered concepts which interact with the flow of knowledge. The lines allow the reader to be taken through the various concepts.

3.1.1 General Hypotheses Reflected in Model

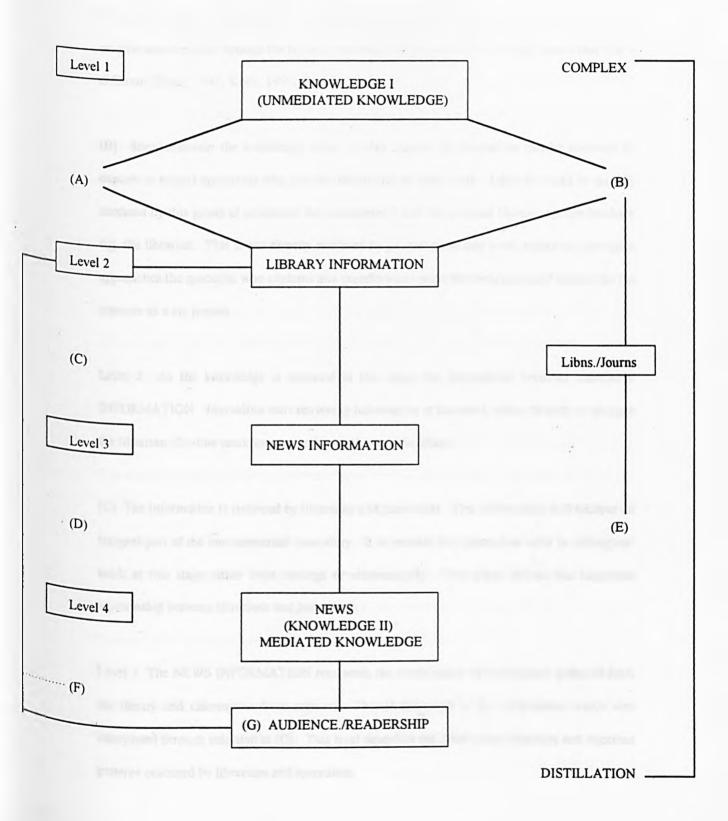
Environmental information is pluralistic and complex. It is changed as people e.g. journalists. librarians, the audience/readership interpret it. As environmental knowledge is retrieved and interpreted by journalists and news practitioners, the meanings which can be taken from this information diversify. It is purported that information changes according to how it is used and interpreted.

It is also proposed that the flow of knowledge is influenced and redirected by the news process. Unmediated knowledge (unmediated by news media) ic information existing in environmental directories, academic works is altered into a popularised, commercial form and it appears to be simplified due to the interpretive journalistic process (see tertiary stage). In a news report the information may still be complex but it has been shortened and reduced to a series of manageable concepts thus implying that some of the intellectual content of the original idea has been lost or changed i.e. that knowledge has been popularised.

3.1.2 Explanation of Detail

Knowledge exists on a number of different levels. KNOWLEDGE I represents the unmediated environmental information which exists in bibliographics and directories and is accessed by subject specialists or experts. However experts modify or simplify this complex, technical information for journalists when they interact with them. This is the first level.

Fig 3 Mediation of Environmental Knowledge Through The News Process
(Preliminary Stage)



- (A) The knowledge is retrieved and compiled by CD-ROM and on-line distributors e.g. ENVIROLINE; ENERGYLINE; POLLUTION ABSTRACTS; WATERNET etc. As this information is retrieved by these distributors and therefore, interpreted, the information changes and it is accessed by library staff in media libraries or sometimes directly by journalists themselves. This is not retrieved to any great extent by journalistic staff in Scotland as few have on-line access except through the library. National and international coverage shows that this is different (Eagle, 1991; Koch, 1991; Gamage, 1993).
- (B) Simultaneously the knowledge which is also created by specialists can be retrieved by experts or subject specialists who use the information in their work. Often it would be directly accessed by this group of academics but sometimes it will be retrieved through an intermediary e.g. the librarian. This is not directly retrieved by journalists at this level, rather the journalist approaches the specialist who explains and therefore interprets the environmental science for the reporter as a lay person.

Level 2 As the knowledge is accessed at this stage the information becomes LIBRARY INFORMATION. Journalists start retrieving information at this level, either directly or through the librarian. On-line searches are conducted through the library.

(C) The information is retrieved by librarians and journalists. This information will become an integral part of the environmental news story. It is possible that journalists refer to colleagues' work at this stage either from cuttings or electronically. This point defines the important relationship between librarians and journalists.

Level 3 The NEWS INFORMATION represents the combination of information gathered from the library and information from contacts. This is the result of the information which was interpreted through selection at (C). This level describes the information selection and rejection patterns practised by librarians and journalists.

- (D) NEWS INFORMATION is interpreted by journalists at this point. The interpretive rules are detailed by the tertiary stage of the model. It is interpreted by the journalist and this is also constrained by editorial influences. The product after this stage will be the news.
- (E) This part of the model depicts a period of interaction between journalists and experts. A point of conference where final details can be checked before the news report is completed.

Level 4 The interpretation of NEWS INFORMATION creates level 4 or NEWS. This is the mediated information or KNOWLEDGE II which the audience/readership consumes. This is the final dissemination point which creates an awareness within the social community.

- (F) Often NEWS copy is put back into the library as source materials for other journalists to use at another time. This is an internal information cycle. Information is diluted and distilled in that it is re-retrieved from the library by journalists to incorporate into news information. The model argues that the information meanings change each time information is retrieved and interpreted.
- (G) The audience/readership or social community to whom the NEWS is being disseminated. The research considered the audience not as an explicit, multi-faceted entity but as a collective body or mass which is defined by the perceptions of the journalist. Therefore the model must reflect this fact. The secondary stage of the model demonstrates that the journalist writes and practices the news process (preliminary stage of model) with perceptions of the implied audience in mind. It, therefore, addresses the subject of the audience/readership only in so far as the audience plays an integral part in the process of news production.

KNOWLEDGE I has changed four times and each time has had new information meanings placed on it. This stage of the model represents the hypotheses at a general level.

3.2 The Secondary Stage

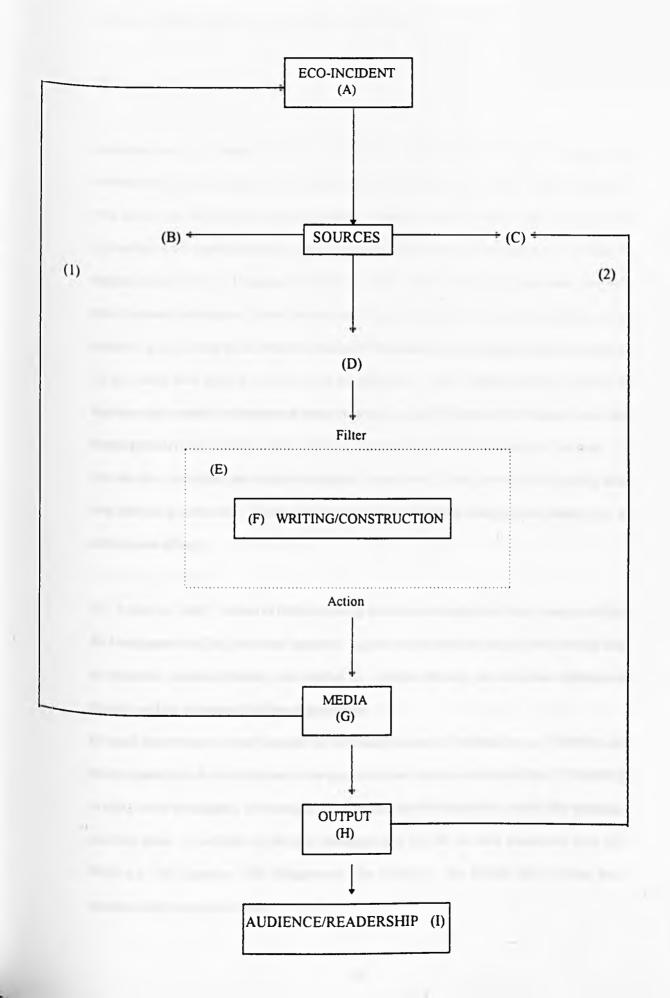
If the preliminary stage of the model may be seen to exist as a macro definition, the secondary and tertiary stages may be viewed as mini and micro levels respectively. This is due to the fact that these latter two stages have emerged from a combination of the preliminary stage of the model and also the evidence being gathered through empirical methods. This translated what was known about the news process within a specific context into pictorial form and was designed as a result of mind mapping the evidence which was emerging. It depicts the creation of the news story from the starting point i.e. the identification of an environmental issue, and follows the journalists through the news process. This entails the gathering of information from personal (human) sources and non-personal (library and electronic) sources, the interpretation of the event and the dissemination of the end product. The case study on the Braer oil spill (see Appendix VI and the methodology documented in chapter 2), has direct significance for this model in that the secondary level may be applied to this example of the spill. It is evident that at this level the model has been redefined and revised as new information has been added and the emphasis realigned from an information-specific focus to a professional-practice focus.

This stage of the model is again a flow diagram, which indicates pictorially the generation of the news story from the point of commencement i.e. where the ecological incident occurs and where reporters are dispatched to the scene of the action, through the gathering of information from sources and the news process to product dissemination to the audience. The straightforward design of the chart and the use of directional arrows enable the reader to understand with greater awareness the movement of news information.

3.2.1 Explanation of Detail

(A) The starting point, at which, the environmental "disaster" or incident e.g. the Braer takes place. Due to the sudden and unexpected nature of the impact of the event the issue is treated as

Fig 4 News Process Structure (Secondary Stage)



extremely newsworthy by media practitioners i.e. news editors, and reporters are dispatched to the scene to gather information about the situation (route 1).

(B) Human Sources

Journalists rely on human contacts as opposed to paper-based or electronic sources of information. Reporters seek out and gather information about the issue by interviewing their own contacts in the area and experts or subject specialists from universities or research units. Journalists, also, contact emergency services (this substantiates evidence found by a number of authors in the field e.g. Hausman, 1992; Boyd, 1990) which help at the scene and can often reveal valuable information, due to the fact that they are the first to arrive at the incident. Local people (e.g. in the case of the Braer, the people of Shetland) and eye witnesses who were present as the event took place are interviewed for comment. Later (unless present at the time) reporters can contact environmental pressure groups, to get background information about the issues (primary and related) and to obtain a particular point of view about the incident. To counter this, very often, government sources are interviewed (in this case the local council, local and national government). These latter sources can be contacted through press conferences or information officers.

(C) These are "other" sources of information e.g. libraries which can hold large amounts of data for background material and other "disasters" against which parallels can be drawn and be used as examples (contextualisation, see chapter 6). Media libraries are important information deposits and act as support facilities to journalists.

Of equal importance to some reporters are electronic sources of information e.g. CD-ROM and on-line databases. It is evident that a few journalists use information sources like FT PROFILE to check other newspapers, for example. The Herald uses this resource to search The Scotsman and vice versa. In addition to this most newspapers in the UK are now transferred onto CD-ROM e.g. The Guardian; The Independent; The Scotsman; The Herald which makes them easier to search more effectively.

- (D) This is the story material which has been gathered at the three points above. It is preparatory material some of which will be used to write the article. This is a stage where information is selected or rejected and interpreted, therefore changed (see preliminary stage).
- (E) It is evident (see chapter 10) that, as journalists formulate the story they write with images of the audience in mind. This is best described by the model as a filter action. The concept of the audience is at this stage an implied entity. Its image is that of an abstract concept which journalists perceive and aim to make explicit through their construction of news. Having gathered all the material at these other stages, journalists mentally target the audience/readership by selecting a level at which to package the environmental information. This image of the audience is reflected in the evaluative, operational, constructional/interpretive criteria implicit in the news process. Specifically, the evaluative criteria, for example, news values include details such as parochialism or the effort taken to ensure that news items are of interest and relevance to the news consumer. The way also that language is selected at a level that the reader can understand and in general the comprehensibility of the article as a whole are important constructional/interpretive features. This filter action which is implicit in the information strategies that the journalist has carried out, makes important assumptions about the audience for example that the audience is only able to "digest" or absorb a certain amount of technical information.
- (F) The News Process is described generally by the preliminary model stage. It demonstrates the different levels of knowledge which exist at each stage of the News Process from the complex and technical at the unmediated knowledge I to the apparent simplification of environmental information at the dissemination stage. At this secondary model stage, the writing process, which is implicit within the construction process, exists only within the context of this specific filter action. This process is critical to the understanding of the audience as an implied entity.

- (G) It is evident from the data gathered by the researcher through interviews and discourse sessions, that the media monitor each other constantly, in order to keep up to date with events as they happen. This substantiates evidence found by (Ericson, 1987; Hausman, 1992). Print media refer to broadcast news throughout the day and in the event of a "disaster" occurring can "hold" the front page or space within the paper to accommodate it. Similarly broadcast media routinely survey every daily newspaper to check up on facts and story angles. Effectively there is a recycling of information due to this continuous referral process which occurs. In the North East of Scotland, the daily and evening newspapers, The Press and Journal and The Evening Express monitor the television (BBC and Grampian Television) and radio (Northsound) output all day and vice versa.
- (H) This stage in the model refers to the output or the finished news product which is disseminated to the audience via newspaper, television or radio. After transmission or newspaper production, the output is collected and sent to the library where video tapes or newspapers are filed by subject. Often newspapers are not kept in their entirety but are cut up into important, relevant articles. These articles are now being transcribed onto microfilm, microfiche and CD-ROM. Old output is collated in the central deposit of the library for future reference where journalists can access it for other stories. This is essentially, again, a "recycling" of information whereby other journalists' work is referred to (see route 2).
- (I) The model shows this as another point of interaction with the audience. However, at this stage the audience exists as an explicit entity. This is the multi-faceted, collective body that consumes the news product, becomes aware of the environmental issues which affects them and that accepts or rejects the interpreted information which has been disseminated directly to them. The research does not follow the audience as a mass entity in order to ascertain what effects the news product has on it but aims to discover the audience through the perceptions and understanding that the journalist has.

Collectively, each stage of the model provides a unified overview of journalistic practice and complements the others in achieving a sense of understanding about the news process. The stages have evolved from the general to the specific, beginning with a macro (information perspective) level view of the news process. There follows a view of the news process structure (i.e. the application of the model to a specific, practical setting). The chapter is concluded with a general examination of the tertiary level of the model which demonstrates the interaction of the different rule categories implicit in the news process. The tertiary stage is discussed in full in chapters 6-10.

3.3 The Tertiary Stage

This stage of the model has been built on the strength of the evidence gathered from the T.I.D. sessions with journalists and indicates specifically how environmental issues are evaluated, how information is gathered, how the news product is constructed and its meanings structured by journalists. It seeks to complete the news process model, providing a comprehensive explanation of the inter-related factors which constitute the rules used by reporters. The preliminary stage demonstrates the differing levels or states of knowledge which metamorphose as a result of information retrieval and reinterpretation. The secondary stage exists in parallel with this but at this specific secondary level it is contextualised by the addition of the hypothetical reporting situation. Essentially, the secondary stage indicates the movement and the mechanics of the news process when applied to a specific type of environmental coverage i.e. "disaster". It depicts, on a general level, some of the routine work practices which journalists carry out.

The tertiary stage is a detailed analysis of the news process and conveys an account of the rules which journalists use from an integrationalist perspective. It has been argued that journalists implement the news process through the execution of a number of different routine procedures. The research has identified the fact that there are taken-for-granted rules which govern the ways

in which journalists carry out the news process. The construction of news is routinised by the repetition of the same sequence of rules and consequently, journalists perform them tacitly.

It became evident that the rule categories used by journalists are often used in combinations and influence each other i.e. they are not mutually exclusive. For example, the constructional and interpretive categories are both always used together as they are primarily concerned with the writing of the story. Therefore, despite the fact that the third category on the tertiary model is termed as constructional, it is implicit that this will include also the interpretive rules.

The tertiary stage of the model is described in chapters 8-10.

Chapter 4 The Media as Information Seekers

This chapter seeks to investigate and explain the hypotheses as described by the model (specifically the preliminary stage, but also the secondary and tertiary stages) which suggest that the ways media librarians retrieve and repackage information through an information selection and rejection process, changes the information state. Further, the purpose of this chapter is to demonstrate the influence of the journalistic news process on the flow of information from originating source to the dissemination point at which information consumers receive the news product. It, also, however, aims to describe and critically examine the media library as a valuable information deposit and support facility to journalists and the diverse range of information sources both human and impersonal which are referred to by news practitioners, (see chapter 9 and tertiary stage of model, chapter 3).

The work investigating news information sources has been undertaken through the completion of semi-structured interviews with Scottish media librarians and information officers. Selections of evidence emerging from these interview sessions have been included to substantiate the arguments in this chapter. Therefore, the theories have been grounded in empirical data. Further interviews (see chapter 2) have been carried out with subject specialists or experts in their capacity as information sources for journalists and this discussion of the relationship between journalists and experts can be found in the following chapter.

Computer aided journalism and the use of on-line technology will be referred to as part of the information exchange between media libraries and news practitioners i.e. journalists and editors. This will, however, only receive peripheral coverage in the work, due to the fact that this subject does not provide the main focus of the research.

4.1 Journalists and Information Seeking

The range of information sources which journalists use are wide and varied. All respondents emphasised that they closely monitor other media as sources of information. In addition to this, information is gathered from conversations, phone-ins [where the public phones in with news or information], the daily news diary¹ and the emergency services.

"The ambulance service, the police, the fire brigade, the mountain rescue service etc. are checked on the hour every hour to see if there have been any accidents, disasters." Respondent 1

These sources substantiate the evidence found by others in the field (Boyd, 1993). Another information source is the press release which is evaluated quickly for a news angle.

"The newsroom is inundated with press releases...Environmental organisations like Friends of the Earth and Greenpeace send out press releases but these are rarely used because news has to be a balanced composition. It is or should not be a medium for organisations who are only interested in self promotion." Alistair Gracie, Grampian Television

The respondents were asked about the information sources they used when reporting the news. Many replied using their experiences of the Braer oil spill as a basis for the discussion. These sources were varied and ranged from local people, to government ministers. The crisis was covered thoroughly from the information gathering angle. The following evidence demonstrates the wide variety of information sources used during the incident and describes the information strategy which was brought into play at the time.

"Initially we contacted the coastguard and the coastguard helicopter for the information on the ship, to see if it had actually crashed on the rocks. We, then, tried to get hold of eyewitnesses who had been there for some time. The owner came up I think. We found out about supply boats that were doing the salvaging. Once it crashed we talked to the pollution control unit which was situated about 50 miles away. I took some time to get down as the weather was bad. We contacted the marine engineers who were trying to salvage the ship. They were

This is used in TV and radio to record up and coming events. It is useful in planning out the schedules.

from the Department of Trade and Transport. Then, we also contacted the people who owned the salvage company." Respondent 3

The information strategy changes at this point. The researcher was told that news conferences were arranged so that the information flow became more structured from expert to journalist.

"The Shetland Islands Council was very good, very helpful and they organised news conferences twice a day. They brought in everyone from the experts to Government officials. These conferences were to keep journalists up to date with what was happening. The problem with news conferences, usually is that when you ask a question, everyone hears it and the answer as well. If you're writing a feature, you don't ask the question. Usually every journalist is at the press conference and it's a race to get to the contact to get an interview, but this time it was excellent. The council brought everyone together. We also got to the environmental groups and their experts, who were fine. Our objective was to be responsible and not scare people." Respondent 3

The next stage of the information gathering strategy was to talk to the Shetlanders, on whom the Braer had direct implications. Again, the journalist is receiving an interpreted version of the information via the subject specialist intermediary.

"We talked to local people who were affected by it - those who use agriculture and fishing for their livelihoods. We contacted fishermen in particular, at first and also local representatives of the fishing and farming unions." Respondent 3

One of the most significant findings from the interviews carried out with journalists was that most of the sample made little or no use at all of the library facilities for environmental or any other types of information. The following selection of evidence substantiates this.

"We do not use libraries. We use experts, e.g. scientists for background, technical information."

"We don't really use libraries. Grampian has archives and a good social record dating back about thirty years but it has no libraries." Alistair Gracie, Grampian Television

Only one respondent maintained that the library was an important resource and relied on heavily.

"During the Braer, I needed to look out library footage of other oil disasters. The Braer was similar to the Torrey Canyon in Cornwall or the Exxon Valdez intrinsically because they impacted rural communities." Respondent 3

Apart from the fact that the journalist was looking for other previous examples of the Braer which suggests that she contexualises her current assignment with "templates" of past information strategies i.e. uses the same routines which were applicable in similar reporting situation, (see Chapters 8, 9), the respondent indicates that the library plays an important role in the news construction process.

"Media libraries play a vital role in setting news in context, in providing background information and in verifying facts." (Ellis and Oppenheim, 1993, p95)

However, the evidence from the interviews with journalists begs several questions, the main one being, why are Scottish reporters not using the library, more often? Is this due to the fact that there is a lack of information services being provided or that there is a reluctance to use new technology to up date retrieval methods? Libraries are good hardcopy source deposits (this is evident from the discussion below), but according to the users i.e. journalistic and editorial staff, human sources of information always take priority. Is this simply because of the influence of the pragmatic factors identified above? Why is this so and what are the implications of this on the construction of news? This will be given careful consideration in the subsequent discussions in this chapter, whilst trying to identify and evaluate the importance of the library in the Scottish media

4.2 Training of Journalists in Information Skills

There appears to be no clear cut policy on the teaching of information skills to journalists, other than the tuition on in-house systems. Journalists are apparently unaware of the basics of information retrieval, searching electronic databases, applications of search logic, and search terminology and syntax.

"Data is made available to journalists from full text newspaper databases and data is produced in-house. In the case of FT PROFILE, library staff act as gatekeepers to the information. We do not train journalists because they are taught information seeking in their journalism courses. They ask different questions from information professionals and so they are not trained here." Moira Stevenson. The Scotsman

This contradicts the evidence gathered from journalistic respondents and information disseminated through journalism course documents. Is it a possibility that librarians would feel inadequate professionally if journalists became proficient at searches? Would the media's management feel the need then to eradicate the information providing service?

Some Scottish media institutions do provide information skills training for journalists but not many.

"BBC Scotland does not provide training for journalists at present. Eventually we will give access to The Herald database in the television and radio newsrooms. We've got passwords for it just now. As for FT PROFILE, the staff prefer to do on-line searches. We could not let journalists have free reign to that. It would be too expensive. The amount of training they receive depends on how computer literate they are. We will offer training and show them how to search but we'll expect to undertake the more complex searches." Alex Gaffney, BBC Scotland

Stanbridge (1992) states that the information skills of journalists are close to non-existent and that despite the fact that they may have access to on-line facilities, they do not possess the relevant knowledge to be able to make their information searches profitable.

"Daily news reporters working under pressure usually bait their hook with a random keyword or two and are quite happy with anything they catch that adds some colour or gives a slant to what they are writing. Very few have any idea of how to use even elementary truncation, let alone more advanced use of search language." (Stanbridge, 1992, p47)

4.3 The Role of Libraries in the News Process

"The main function of a media library is to provide an information service to the editorial staff...Their users demand an instant and comprehensive service...Media libraries play a vital role in setting news in context, in providing background information and in verifying facts." (Ellis and Oppenheim, 1993, p95)

It is evident that the library generally acts as an information support service to journalists in Scotland. Media libraries are large, important information deposits. However, how well these are organised and the material in them, arranged, varies from organisation to organisation. The degree of library support in the larger Scottish media institutions e.g. BBC Scotland may be described as being the vital core of the information network. There are, however, a few examples of the library e.g. The Press and Journal, Aberdeen, being an extraneous entity which is underused and not updated but which might be used if technologically revolutionised.

Joseph (1993) underlines the importance of media libraries in enabling journalists to do their jobs properly.

"...a library...provides a comprehensive service to the editorial department. The more efficiently a newspaper can support current information on a subject with past information on the same subject, the more effective it will be". (Joseph, 1993, p70)

Joseph's work into how Indian journalists use libraries reveals that in spite of the fact that many journalists are not satisfied with their own library services, they are unwilling to use other facilities for information. This is influenced by the pragmatic factors e.g. deadlines implicit in the news process. This is a finding substantiated by this research and is discussed more fully above.

News policies are upheld within and reinforced by news organisational culture. One of the main policies which affects the library's information service to journalistic and editorial staff, is the editorial meeting which provides feedback to senior personnel (including chief librarian) on the previous day's news product.

In both the broadcasting and print sectors, regular (daily) editorial meetings are held. These meetings are generally chaired by the editor/assistant editor of the paper or news team and involve all section heads and senior journalists. This starts with an overview of the paper of the day. The editor criticises parts of it and points out good and bad areas in the copy. Attention is

turned to different lists which correspond to each section (Arts; Home; General) and which contain titles of possible stories he or she thinks are likely to appear and which should go in. Decisions are made loosely at this stage, and since there are more meetings of a similar nature later in the day, these decisions can be reversed. The section heads give a concise, but detailed analysis of the main events taking place in their subject areas and which stories are the strongest. The purpose of the news meeting is to provide an overview of what might happen, during the course of the day.

The librarian is present at these meetings in his/her capacity as information co-ordinator to journalistic and editorial staff. However, the librarian cannot really predict the enquiries that he/she will get.

4.4 The Information Service Provided by Librarians

Trends reveal that both librarians and journalists contribute to and influence the construction of news by the fact that the selection of information (the nature of the process) is being done subjectively. Also, after retrieval, the information is compressed and repackaged by librarians which suggests that the meanings on the knowledge are changed (see model, chapter 3).

The policy at broadcasting libraries tends to be quite distinct from that at newspaper libraries.

The primary reason for this seems to be due to the fact that the library material i.e. video or audio tapes and newsprint needs to be processed differently.

In response to the questions about where the environmental information comes from ie sources, the librarians at The Herald stated that they only use material which is printed in The Herald itself, The Evening Times or The Scotsman. Close attention is paid to the environmental campaigns which are run in these papers. This information gathering strategy is "incestuous" in that Scottish papers freely refer to each other's copy (see secondary stage of model).

There appears to be an informal information network among the media library staff. It has been identified that both broadcast and press library staff collaborate on requests and consult each other's in-house databases. BBC Scotland uses The Herald database and The Herald refers to The Scotsman etc. One respondent commented that,

"We have access to The Herald on PROFILE which is helpful. We help each other. The papers are in competition not the library staff." Marie Campbell, The Herald

Within the library context, too, it became apparent that all media institutions tend to monitor other media closely. In each library all daily newspapers are cut and national news channels are surveyed constantly. Newspaper library policy is routinised by a shift rota.

"The Herald is input into the database. The Scotsman is cut and marked (although this is going to change - soon there will be access to the Scotsman on the database). We gather multiple copies of the Evening Times which are alphabetised and filed. The second edition is checked against this. The Evening Times is then electronically tagged and is up to date on that day." Marie Campbell, The Herald

Definite themes, which emerged from the discussions about library policy, were the specificity of information requests by journalists and editors and the rapidity and accuracy of information retrieval which is needed to meet deadlines.

Despite the distinctions between the types of material handled by media librarians, there is a common unity in their policy towards journalists. All media librarians have a policy which aims to encourage journalists to find their own information (this differs from some other Scottish media organisations e.g. the Daily Record). However, there was an indication from the evidence gathered through the semi-structured interviews that librarians in the field do not closely monitor how well journalists retrieve information. The librarians were unsure as to the success rate of journalists' information gathering strategies. However, all the respondents agreed that it is essential for journalists to find information themselves as this frees library staff for other tasks. The following evidence substantiates this,

"We have to encourage journalists to look for their own information. We have terminals in each of the newsrooms and one in the library which front in-house databases and FT PROFILE. Journalists are taught how to use it through informal training sessions." Marie Campbell, The Herald

One respondent drew a parallel between the reporter and the subject specialist emphasising the fact that many journalists prefer to do their own research.

"...Most journalists do their own research in this library. This reflects the fact that those people have expert knowledge and are experienced at looking for information quickly and accurately. Journalists generally know exactly what they are looking for." Moira Stevenson, The Scotsman

But do journalists know what they are looking for? Are they receiving the most accurate, relevant types of information and are they exhausting all possible resources within the allotted time? The more traditional quality Scottish newspapers operate with a partial open access policy. The Daily Record, for example, has a closed access policy where they emphasise that a better information service is provided to journalists. Within this type of system, journalists phone the librarians with their information enquiries and expect these to be fulfilled within a particular time frame.

A common trend among the quality broadsheet papers seems to be that journalists like to be independent with regards to information gathering. This is supported by comment from the BBC Scotland librarians.

"Our searching policies depend very much on who is requesting the information and what type of material is required. Journalists like to do their own research." Alex Gaffney, BBC Scotland

Sarah Adair, the librarian at LWT, is one of the information specialists who believes that librarians and journalists possess different skills and that their professions are very diverse.

"I think it is much better to put a professional on-line researcher into a team of journalists, than to try to teach the journalists everything about accessing electronically stored information, because they are two distinct jobs. They are interrelated and interdependent, but they are not the same." (Sarah Adair, in Stanbridge (1992), p48)

The other perception which has emerged from the literature is one which describes the disappearing media library or rather its metamorphosis from a traditional paperbased resource centre to an electronic one and this is discussed below.

4.4.1 Staff Responses to Enquiries

Where library help is required for journalists there seems to be a standard routine procedure involved. Information is not simply located. It is located, retrieved, evaluated and disseminated back to the requester. The logistics of information retrieval are very often not standard procedures. Sometimes staff respond with their own information strategies and rationales. A lot of staff particularly those who have worked in media librarianship for some time have built up a substantial amount of specialist knowledge. What then are the implications for information meanings? The preliminary stage of the model (see chapter 3) indicates that as information is retrieved and evaluated by librarian intermediaries, the information meanings inherent in the knowledge is altered. Through the selection and rejection of information processes, the librarian's role of gatekeeper to that information is reinforced and librarians are disseminating back to journalists, repackaged information which exists within a particular context.

4.5 Technology in Libraries

It is difficult to evaluate the use of new technology in the library without firstly addressing the effects of this technology on the profession. A brief outline, is provided below, of the technological innovations which have taken place to produce computer aided journalism as the natural succession to journalism.

4.5.1 The Use of Technology in Journalism

According to Gaunt (1991) the electronic revolution in Britain began in provincial newspapers in the '70s. This revolution faced resistance from the various print unions in the '80s but Robert

Maxwell, the newspaper magnate, overcame this resistance. In the mid-80s, Rupert Murdoch made his move to London's dockland.

"The decentralisation of Fleet Street from the West End to lower rent areas on London's fringes has made it possible to take advantage of new, computerised technology and smaller staffs, thus further weakening the grip of the print unions." (Gaunt, 1991, p69)

Johnston (1984) states that the news stories reported today are more complex. However, it is not clear whether he means that journalists write with a greater amount of subject knowledge, that they employ more sophisticated construction techniques or whether he simply means that the issues which are covered are more complicated and intricate in detail. He admits that despite this, news is still concerned primarily with the human state i.e. human interest. He suggests that one of the main changes which has occurred is the way that journalists retrieve information. Undeniably, the catalyst for bringing about this change is the advancement of technology.

"Telephones and pocket tape recorders are standard tools for reporters today. Increasing numbers of journalists are making use of certain computers that process words ("writing" is becoming an obsolete term), others that analyse data, and still others that serve as great repositories of published words and numbers." (Johnston, 1984, p112)

He is one of a number of journalists who feel the same. Bagdikian (1984) highlights the potential of new developments in technology by setting them in a historical context. He compares the journalism profession of previous eras with the present. He makes no effort to conceal the fact that he believes that a greater dependence on technology will segregate the audience into information rich and information poor. He brings into question the quality of the news product and suggests that the standards of news will be diminished as a result of the new communication media.

"Technology has no morals. So it is more germane to ask what is needed for a healthy news system, rather than to enumerate, the ingenious qualities of the new technology or allow the systems that develop around the technology to follow along the path of least resistance." (Bagdikian, 1984, p109)

Kruger (1991) writes about the effects of multi-media technology on news distribution and underlines the fact that with the evolution of the electronic newspaper, industry profits are seriously threatened. The whole of the media/news profession has, nationally, and in recent years, undergone a technological revolution. At a local level, Scotland is trailing behind.

The technological revolution which has taken place in the journalism profession is one which has concerned academics (Koch, 1991; Rachline, 1991), who have identified themes like the use of editing and selection of information and the implications of this on the product. Koch's (1991) work involves investigating electronic technology and its effects on news construction and consumption.

"Koch foresees database access fundamentally changing the relation between the reporter and his subject. By providing writers with information at least equal to that offered by the officials they are assigned to interview, he believes databases will force a re-evaluation of the relation between "official expert" and passive reporter." (Stanbridge, 1992, p46)

What Koch does not address is the fact that the information which is accessible through on-line databases is interpreted information which is often condensed into a tighter format (see chapter 3, preliminary stage of the model).

Similarly theorists like (Koch, 1991; Eagle, 1991) have examined critically electronic sources of information available to journalists. More specifically, practitioners and academics have investigated themes such as the extent to which journalists are using on-line technology (Stanbridge, 1992) although this is viewed on a national scale. Jacobson and Ullman's (1989) research reveals that US journalists are much further ahead in their embracing of news technology and that commercial databases are positive research tools.

In contrast, Scottish media journalists do not use electronic methods of information retrieval to the same extent as their larger, national counterparts (although policy is being revised). Furthermore, journalists do not receive training in information retrieval or the availability of electronic sources and this may be one reason as to why there is a greater reliance on personal

sources rather than non-personal ones. These personal sources include the subject specialists to whom journalists refer for specific types of information.

The use of electronic sources by journalists and library staff is discussed in detail below.

4.6 Electronic sources of information

"A lot of journalists are resistant to on-line information. This is because, to them, the value of a newpaper story is as much seeing where it appeared on the page and what it looked like as the information it contained." Lucy Gamage, News International

The library respondents felt that journalists were wary of on-line sources and preferred hardcopy sources. (This differs from the journalists at a national level e.g. The Independent or The Guardian, where librarians search on-line for their users).

"Journalists like to do their own research and they like hardcopy - not on-line print outs. On-line and printed hardcopy, complement each other. You cannot do without either. On-line doesn't give the same feel as hardcopy. You can't see the size of the headline or where in the paper it was situated or graphics." Moira Stevenson, The Scotsman

Library respondents stated that although electronic sources can be relied on to some extent (not on-line) and are important resources, they cannot be used exclusively. They stressed the importance of using cuttings files and printed material from archives. All agreed that FT PROFILE is one of the most important sources for the news library regardless of whether it is in the broadcast or print sectors.

"FT PROFILE is a large database of newspapers which gives access to all the UK's news. It contains today's newspapers so it is very current. It gets downloaded at night and goes straight in to the system. It also contains company information which is useful. In October 1992 we stopped cutting The Herald and now use The Scotsman if there is no hardcopy." Marie Campbell, The Herald

According to the library respondents, journalists seem unaware of the information potential of on-line libraries. They argue that the pressures of deadlines prohibit the execution of long complex searches and the amassing of and comprehension of the wealth of data which can

ensue. The operational (see chapter 9) routines which journalists practice are reinforced through daily repetition, in which on-line and indeed library research seems to have little place at all.

Full text information from other databases is not customary. Therefore, there is a lack of fresh primary environmental information. When on-line searches (see below) are undertaken by library staff for journalists, these are usually for accessing and retrieving newspaper information ie other newspaper stories through FT PROFILE. Therefore, the information located and retrieved for journalistic staff has already been interpreted. This information is mediated as opposed to primary, unmediated information (see chapter 3, preliminary stage of the model).

"Even reporters who go on-line regularly are usually only interested in accessing what they themselves have written, what their own publication has printed or what their competitors have said on a particular issue." (Stanbridge, 1992, p47)

Respondents were reluctant to extol the virtues of electronic sources of information.

"It can work both ways. I have my doubts about electronic systems. What happens when the storage system is full up? Hardcopy is just as good." Marie Campbell, The Herald

"It depends on the source. The range of sources are limiting because of their specificity. We can afford to pay the subscriptions so why not the books? On the other hand, on-line gives us access to more than printed material. There are benefits in terms of space - we had to throw out cuttings after five years unless they were very specific. Files on foreign topics have to be destroyed because the information is on Keesings anyway. There are no storage problems with on-line systems and we have access to quality, current information." Moira Stevenson, The Scotsman

The respondents made no mention of the many environmental databases (Enviroline; Pollution Abstracts; Environmental Bibliography; Energy, Science and Technology) (Stoss, 1991; Alston, 1991) available on hosts such as DIALOG and DATASTAR. These databases provide up to date, primary information (see preliminary stage of model) which according to the sample of librarians and information officers are not accessed by journalists even through themselves as intermediaries.

Much has been written on the subject of electronic news sources. More specifically, on-line sources e.g. DIALOG, DATASTAR the hosts of FT PROFILE, Nexis and Textline, (Briscoe and Wall, 1992; Arundale, 1989), CD-ROM (Stover, 1991) and news broadcasts which can be transcribed and accessed on-line (Ojala, 1991; Wall and Williams, 1992).

But despite the obvious progressions in the application of technology to information sources, very few are in evidence within Scotland's media. On a national level, Nicholas (1992) studied the information retrieval practices of journalists using on-line systems. He suggests that journalists "take refuge in the simplest, most basic and easily understood commands" (p23), a finding which is substantiated by the evidence from Scottish journalists and media librarians.

Nationally, journalists are far more aware of on-line and CD-ROM technology than from within the Scottish media. There is a distinct lack of awareness of the potential for gathering information. The journalistic respondents interviewed implied that there is an emphasis on choosing personal sources rather than paperbased ones. This has been observed, also, by Stanbridge (1992),

"News editors are not always in favour of journalists becoming end-users. Said one, "I don't want my reporters reading what all the professionals and academics and other journalists are saying - I want them out of the office and talking to people."" (Stanbridge, 1992, p46)

4.7 The Pragmatics of News and the Implications For the Media

News has been defined as a guide to or a synopsis of up to date happenings. It is not surprising, then, that the media, also, regard news as one of their primary information sources. The information content of any news report is succinct and is indeed celebrated for its brevity and currency, making it, therefore, the forerunner of all information sources for the media. It has been observed, during periods spent at media organisations, that the media monitor each other constantly i.e. broadcast journalists read all the daily newspapers and print journalists watch

TV news bulletins throughout their shift. Similarly, media libraries tend to acquire all the daily newspapers, broadsheet and tabloid (this varies between organisations).

"Newspapers and TV bulletins are monitored for the major stories to keep abreast of what rival media institutions are outputting." Respondent 1

It is apparent that there is a "recycling" of the information due to this continuous referral procedure which takes place within the news process and the news library. What is significant, is that, this "recycling" may have an effect on future news construction. If journalists refer back to previous work, whether it is their own stories or colleagues' reports, and this work contains (perhaps unintentional) misreporting of fact, then this "mistake" can be replicated, reinterpreted and perpetuated in future news constructions.

It is this point which reinforces the importance of the preliminary stage of the model. Not only does the model show a "recycling" of information as the product is fed back into the library but also demonstrates the interpretive process by which KNOWLEDGE I is changed into LIBRARY INFORMATION. This chapter has sought to bear out the claims of the model by discussing the transformation of the unmediated knowledge into information retrieved from libraries and electronic sources.

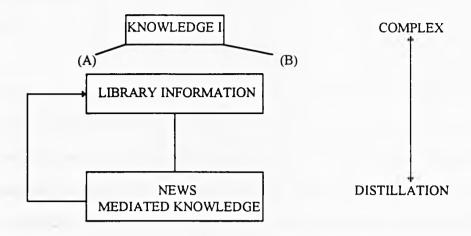


Fig 5 Excerpt from preliminary stage of model

The pragmatics of the information seeking procedures like the pragmatics of the news process rules (see chapters 6-10) are influential in shaping the strategies which journalists select in constructing the product.

"Newspapers provide an environment that is like no other. The object is to gather information, write it up, edit it, check it, find illustrations, originate pages and print the newspaper - in 24 hours. When that arduous, sometime harrowing, task has been completed one moves on to the next objective: to go through the whole process again...Deadlines are deadlines and they must be met if the product is to appear when it should." (Duncan, 1993, p208)

One important finding which emerged from the T.I.D. sessions (discussed in chapters 6-10), was that when journalists are gathering information for a story, they have a "take-what's-available" policy. Due to the pressures of pragmatic practices like deadlines i.e. time factor; space; distinctions between media, the journalist simply does not have the time to locate, retrieve and absorb the background technical environmental information which exists, even with the help of the librarian. It is evident (see chapter 9) that there is a much greater reliance on contacts i.e. scientists, specialists. It is through the use of sources like these that the journalist can amass a manageable amount of brief, contextual, summarised information, which is pitched at an acceptable level of comprehensibility. Explanations are provided in a concise way which the reporter can then use or modify for the intended audience or readership. With this information exchange between journalist and specialist, the reporter is one step further removed

from the primary information itself due to the fact that he/she is relying on an intermediary's interpretation.

The differences between broadcast and print media, accentuate the distinctions related to the pragmatic factors. Television and radio news is shorter and this research has discovered that broadcast journalists in small organisations rely more heavily on personal contacts than on library information (Grampian Television and Northsound Radio do not have libraries). Newspaper journalists have both a greater amount of space and time, in which to construct the news, and most organisations have established library services.

Does the media have a consolidated information service?

Arundale (1991) stresses the importance of information management within a profession which is, technically, difficult to organise and control. The increasing amount of technology which is being developed is vital to the progression and growth of the journalism profession. There is concern that the role of the media library will change dramatically and that an electronic interface which may be accessed by the end user i.e. journalist, will replace the human component.

"The library will shrink and become in effect a core activity providing information from other sources that are not suitable for editorial searching, for example, book resources or maybe CD-ROM resources." (Richard Withey, the librarian at News International, in Stanbridge, 1992, p48)

The library respondents implied that they perceived the implementation of technology within the library as a threat to their professional existence. If the library as it exists now is diminished and replaced by electronic interactive media, then, this would have serious implications for the quality of the information. This work argues that electronic manipulation of information condenses, distills and interprets data, thereby altering the meanings inherent in the information. Further, journalistic and editorial staff would need extensive training in order to become efficient end users. Education in information technology, information retrieval and

information management would need to be mandatory within journalism training courses. and this is not in evidence at the moment.

As a professional group, journalists tend to rely on more established methods of information gathering eg interviewing people, retrieving cuttings of newspaper text, viewing video or audio tape of news programmes, and need to be made aware of the potential benefits of electronic storage. The media library (as is the case in Scotland) is the information core of the organisation and to be effective needs to introduce technology gradually while still emphasising the importance of established, traditional methods of information storage and retrieval.

Chapter 5 Subject Specialists as Information Sources for Journalists

It has already been established (chapters 1, 4) that the media use a wide and varied range of information sources during the implementation of their information strategies (see chapter 9). Further, journalists have a preference for using human sources of information rather than paperbased ones. Therefore, it seems appropriate to look at the scientific subject specialist as vital point of reference for the journalist and to study this important relationship.

"...the 1980s began with a public more wary of science and scientists than a generation before. The decade ended with mediated images of Challenger, Chernobyl and the Greenhouse effect as reminders that wariness is warranted. The shift had been years in the making. When the enemies were disease and hunger, science was an ally. When the enemy became overpopulation and pollution, science was a part of the problem as well as the solution." (Wilkins and Patterson, 1991, p197)

Academics like Wilkins and Patterson (1991) have observed that the audience or readership has changed their perceptions of the environment from ones of passivity to those of active involvement. They have also suggested though that the media has also altered its outlook on these types of issues. They continue,

"Journalists began this century attempting to popularise science. Today they are more skeptical. Progress is no longer assumed when the news story is one of scientific discovery, nor is progress any longer always assumed to be desirable." (Wilkins and Patterson, 1991, p198)

The media popularise science but it is purported that this is rather more due to the nature of the news process itself rather than popularisation for the sake of it (see chapter 10). Wilkins and Patterson (1991) are right in observing a more sophisticated media attitude which is emerging. They suggest that people are no longer surprised at scientific discovery and appear to be less challenged by scientific advancement.

Wilkins and Patterson (1991) make the following points. Firstly, the audience's faith in the media is paramount for the media's survival. Secondly, the audience is wary of science. This

may be due to media interpretations (Nelkin, 1987, 1991; Wilkins and Patterson, 1991; Burkhart, 1987). Equally, scientists desire to communicate the correct knowledge at a suitable level for comprehension by the audience. The main way they do this is through the media. Thirdly, the media's relationship with scientists is undiscerning and journalists are often uncritical of specialists due to their lack of subject knowledge. This relationship is double-edged. Scientists are frequently distrustful of the media due to issues such as misquoting, misrepresentation and the wrongful interpretation of facts. However, the media feel the need to refer to scientists in order to validate news reports and the use of experts aids the credability factor.

These ideas are supported by comments from journalists and specialists who were interviewed (see chapter 2).

Several subject specialists were interviewed, primarily, to gain an understanding of their roles during the Braer oil spill crisis. However, this specific information can be located in the analysis and evaluation of the Braer oil spill at Appendix VI. The specialists were interviewed using a semi-structured interviewing method (see 2.6) and the analysis of this data was completed using grounded theory (Glaser and Strauss, 1967). Themes were drawn from the interview schedule which forms the basis of the analysis. From the evidence gathered, theories have emerged which pertain to the following thematic categories,

- 1 The specialist reflecting on him or herself ie self perception. How he or she envisages the self as the personification of knowledge.
- 2 The investigation of the relationship between specialists and journalists and in particular the specialists' perception of this relationship.
- 3 How specialists impart environmental information to the audience via the journalistic process ie how specialist information is changed by journalistic simplification.

A discussion of how journalists perceive specialists as sources of information is also included to provide a counter viewpoint and to help balance the chapter. This evidence was gathered by semi-structured interviews and coded in the same way as other data, using grounded theory.

5.1 Specialist Self-Perception

This theme emerged as a result of a discussion with respondents about the type of role which specialists have when they come into contact with the media. There seems to be one predominant role which specialists adopt - the educational role. The majority of respondents were in favour of speaking to the press or broadcast media in order to educate the audience or readership in environmental matters. Many replied that it was helpful to use the media as a vehicle of communication for scientific comment and to avoid conjecture. The consensus among the respondents was that scientists should reply to journalists' questions openly and made the recommendation that a training course for scientists in ways to handle the press would be useful. One respondent stated,

"Scientists are very truthful but there is a naivety in the way they answer the press," Respondent A.

Other views of self-perception also emerged. Just as the journalists' self-assessment revealed that they have roles of social responsibility (see chapter 6), it was discovered that specialists' fulfil roles of authority and authenticity. Scientists recognised their roles as influential in so far as they possess a specific knowledge of a particular academic area and that they communicate it to the social community via the media. Furthermore, they noticed that their views were used to authenticate information ic establish the truth or validate issues. a task which few others could accomplish.

Scientists seem to have a very clear idea of their role when interacting with the media.

5.2 The Relationship between the Specialist and the Journalist

Contact between the media and subject specialists is quite frequent. All of the respondents admitted that both the broadcast and print journalists contact them in a crisis situation if this corresponds to their area of expertise, although one of the specialists qualified her statement by saying that the local media will not usually approach her for advice, only for information which will provide publicity. The model shows experts at point (B) being approached by the media for information about the eco-incident (see secondary stage of model, chapter 3).

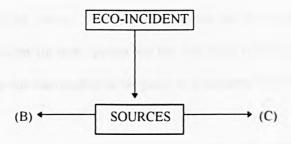


Fig 6 Excerpt from secondary stage of model

The researcher was told that most universities have a central list of contacts within the institution and the press officer can put the press in touch with anyone whose expertise may be relevant. It would seem from the evidence gathered that there are two types of contacts list which exist. The first one is a list of specialists, owned and referred to by journalists. The second one is a list owned by the university or academic institution from which names are selected for the media if it is deemed appropriate by that institution. This was substantiated by evidence from the journalistic sample (see chapter 9). The majority of respondents did not know of being on a list of contacts owned and used by the media.

Specialists apparently approach tabloid and broadsheet journalists differently. It was implied that tabloid papers have a tendency to misrepresent scientists more often than broadsheets. It is felt that the popular press are unable to handle complex information. One respondent felt cautious about speaking to journalists because of the danger of being misreported. It was

suggested that there is a lack of even reporting in science subjects. In response to this problem, the Scottish Agricultural College sometimes use a system of prepared quotes. One respondent argued that there are no controls in an interview situation and therefore he prefers to write down the information and fax it through to journalists.

"It is important for specialists to represent their organisations properly and inaccurate reporting is seldom acceptable." Respondent C.

The respondents felt that journalists are often forced to find a dramatic story to attract the attention of the audience or readership eg the Braer oil spill attracted media attention for weeks (see cross-section of model, above). The specialists agreed that the long term impact of these stories is barely newsworthy (in their opinion and this will differ from a journalists perspective, see chapter 8) although this does depend on the paper or programme covering the issue.

"TV - the later broadcasts are much more factual but the earlier programmes condense the information to give a particular view rather than covering all the angles. Respondent A.

Before an interview, the respondents preferred to find out the angle that the journalist is going to take.

"At the Braer [press] conference there was a wide range of specialist practitioners. One journalist wanted to know the chemical formulae of dispersants so that he could write about the toxic effects. Another person wanted to know how many oiled seals there were, so that he could take heart rending pictures." Respondent C.

5.3 Specialists' Mediation to Audience/Readership via Journalists

It was felt that there is always a danger of the public becoming confused due to the fact that the audience varies in terms of comprehension ability and that the news is an interpretation of knowledge or the primary unmediated information (see model chapter 3, preliminary stage).

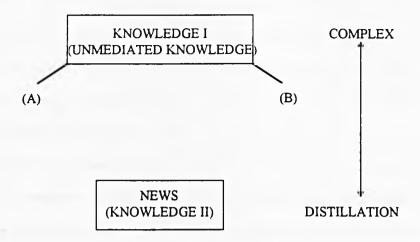


Fig 7 Excerpt from preliminary stage of model

Two strands of opinion emerged from this part of the discussion. These were, firstly, that the information which is to be communicated is complex and secondly that this information is disseminated rapidly. Respondents felt that there should be more specialists who could communicate information to laypersons. One specialist said that this danger comes from the pressure on the journalist to condense what is said and that sometimes things cannot be reduced without losing their meaning. This substantiates the preliminary stage of the model (see chapter 3) which suggests that information meanings are altered, when information is retrieved, interpreted and mediated (see cross-section above). The model argues that the news product is altered information which has been interpreted by journalists using information which has been simplified by specialists (A). With a fast breaking story or one that has to have constant coverage, the information has to be gathered and assembled and the news mediated quickly to keep the audience/readership up to date. Although the audience might be confused by complex information, it is very dangerous to over-simplify an issue because the intellectuality of the idea will be lost.

[&]quot;People will switch off or stop reading anything which is pitched on too high a level." Respondent D.

[&]quot;People are selective about information." Respondent B.

Two separate themes emerged. Firstly, that people switch off because they don't understand and secondly, that people are selective about information ic they switch off because they have received enough knowledge or the particular knowledge they wanted and do not need any more. Without an audience effects study it is impossible to draw any firm conclusions. However, from the specialists' data, it appears that there are two different audiences which they are aware of or perhaps two different facets of the same audience: one which makes its own decisions and controls the flow of knowledge from specialist to self and another which finds it more difficult to amass the information and understand it. It is with this knowledge it is argued that the experts see part of their role as an educator. It is interesting that specialists perceive the audience in two parts because this is bound to have implications on the types of information offered to the media by specialists. The simplification process which specialists or experts carry out ic the selection and rejection of information and the reinterpretation of this information. causes the meanings attached to this information to change (as suggested by the preliminary stage of the model). The information metamorphosizes more than once as it is retrieved and interpreted by specialists for mediation to journalists and then as journalists reduce the concepts for dissemination to the audience.

Respondents recommended that by giving the scientist a briefing on the approach they want, journalists can help educate the specialist as to the level at which the information should be pitched.

It was felt that due to the complicated nature of the environmental field and the ways in which the media have handled it, the audience/readership now distrusts scientific subjects.

"Environmental issues require a wide field as it is necessary to balance interactive features. The width makes it confusing and complicates the thing. Despite the public's interest in environmental issues there is still a large amount of unbalanced views. The reason for the extremism in this field is unevenness of opinion. Over the last ten years, there has been a loss of trust in science by the general public. Part of this can be laid at the door of the media." Respondent C.

However, this is speculation and again the author cannot draw firm conclusions about how the audience perceives scientific concepts

The majority of the respondents believed that generally news and documentaries portray environmental issues in a scientifically sound manner, although they were unanimous in saying that not all programmes were thorough in their research. The scientists identified the quality broadsheets and the television documentaries as being the most comprehensive. This reveals that the scientists had a lack of faith in television news bulletins which is due, perhaps, to the brevity and lack of depth with which items are mediated. Undeniably, it can be argued that this is due to the pragmatics of the process and does not seem to be intentional (see chapters 8, 9 and 10).

The information can be complicated for journalists and also for the audience to understand. Specialists break down this information into an intelligible format which simplifies the concepts. Some of the respondents indicated that they always pitch the information at a level reporters will understand by trying to highlight areas the public will be interested in. In doing this they can find out more information themselves. The specialist has to change the information to make it more accessible for the public. The respondents felt that the media have a "don't-be-scientific-or-technical" attitude but this does not prevent the scientists giving journalists information which is still pitched at a complex level. Therefore, journalists are receiving a mediated or interpreted form of the information.

It is evident that there does not seem to be a formal structure to the relationship between the media (broadcast and print) and specialists. Experts are contacted when the need arises eg a crisis situation - the Braer oil spill. From the journalistic point of view, it is a case of building up a private list of contacts through experience (see chapter 9).

It is apparent that specialists see themselves as informing the public about a particular area of expertise. However sometimes it is felt that the media may sometimes "manipulate" the information, thereby altering its state and changing what was to be communicated.

It is understood that interviewing specialists for their opinions and explanations of issues, lends validity and authority to newspaper articles and often heightens the credibility of a journalist's profile. Ford Burkhart quotes Sarah Friedman in his paper "Media Functions and Environmental Management",

"If journalists' education is deficient in areas that might prepare them to understand and communicate the technical nature of risk and hazards, then some media advocates would argue that their obligation is to act as a surrogate for the layman, to absorb and transform technical information provided by either experts or mediators between experts and laymen and to relay that information to a public that often is even less well prepared to grasp technical information and concepts." (Friedman in Burkhart, 1992, p. 77).

The subject specialists agreed with the above view. Journalists have to and should act as mediators between the scientists and the general public but specialists feel that often the information and its context is changed due to this simplification process (see preliminary stage of the model, chapter 3).

"...most people understand science and technology less through direct experience than through the filter of journalism." (Nelkin in Moore, 1989, p54)

This fact is supported by the majority of the respondents, who try to accommodate the media by breaking down the complexities of a variety of scientific issues into straightforward language and relating it to the readers within a particular context. Scientific information should be clearly defined without simplifying it or presenting it in a patronising and condescending manner.

This term was used by some of the specialists who were interviewed. It is not the researcher's invention.

The scientific respondents talked with great emphasis on the effects of the news on the audience and also, about issues such as misrepresentation, the misinforming of the public and misreporting. This work does not have any of the above elements as its focus and therefore can address them only on a superficial and peripheral level. Some respondents talked about the link between sensationalism and misrepresentation in the media, for example.

It is difficult to identify sensationalism in the quality broadsheets. The material in these types of paper is accepted as what is real, however, without an audience effects study it is difficult to assess the extent to which people are influenced by journalism.

5.4 Journalists' Perceptions of Subject Specialists

Despite the mythologised argument that experts or scientists do not respect or regard journalists highly and vice versa, experts are definitely referred to as one of the most important sources of information in the reporting of environmental news (see chapters 9 and 10).

Groups of scientists and journalists were interviewed separately and a distinct antipathy was observed when either referred to the other and clearly neither professional group perceived the other favourably. It has already been noted in this chapter that scientists believe journalists misrepresent and misreport complex, scientific and environmental information. However, taking into consideration the difficulties of translating the information into a readable, comprehensible format for the audience.

Without having studied the subject specialist in greater detail, it is difficult to reach conclusions about their perceptions of the audience. However, both the experts and the journalists hold the common view that the audience should receive environmental information in its simplist form.

All the journalistic respondents admitted that they referred to experts or subject specialists in order to back up an environmental story.

"We do use experts, local people, scientists, agriculturalists. We use the relevant people for the right story, though we don't have a list and use some over again." Respondent 1

"We use experts at BBC Scotland. The BBC has a good science correspondent and he has lists of contacts who can help. I do use contacts whose names I would never reveal. I protect my sources. They can be for example in Government Departments and it is to their advantage that they give the right information." Respondent 3

When questioned as to why the media use experts, the respondents agreed that it was to substantiate or validate their stories, as the following evidence demonstrates.

"...we are not experts ourselves. The BBC has specialists who can be consulted. Experts are fine if they can explain." Respondent 1

Many of the journalists criticised the scientists for using technical jargon to explain complicated environmental concepts, which they [journalists] had to synthesise for the audience or readership. The following respondent implied that she applies a self-comprehension test to the information ie when she herself understands the concepts, then the audience will also understand them. This theme is developed as one of the operational rules (see chapter 9).

"If I don't understand it then the viewer isn't going to either. Television relies on visual aids constantly to help the understanding process. We let the pictures tell the story. We need to use maps and diagrams, for example, how an oil platform works. Graphics are sophisiteated ways to breaking down complicated information and making it more visual. Television reinforces the information by using art work, graphics, maps and diagrams. Viewers hear and see what is happening. The comprehension of viewers is enhanced." Respondent 3

Respondents were adamant that there is a danger of the audience becoming confused by the issues which specialists discuss, unless the information is presented at the appropriate level for the audience to handle. This level is selected through the operational rules implicit in the news process.

"Don't underestimate the audience. They are selective about what they pick up. But if we [the journalists] don't understand then the audience won't either. There are ways of making the information more palatable." Respondent 3

What this brief chapter has attempted to do is to draw out the theme of the subject specialist or expert as an information source for the journalist which is described by the preliminary and secondary stages of the model. It is undeniable that in the reportage of environmental issues, the scientist is one of the most important sources and therefore it seemed appropriate to capture a flavour of the unique relationship which exists between the two professional groups. The chapter has also tried to demonstrate the influence of the news process on the information flow from originating ic primary, unmediated source to the information consumers ic the social community.

It is evident, from interviews with specialists and journalists that both groups have distinct perceptions of each other's roles and consequently, this is sometimes reflected when the two groups interact.

It is necessary now to examine the tacit rules which journalists use in the news process, described by the preliminary and secondary stages of the model (chapter 3), thereby testing the hypotheses of the research.

Chapter 6 The Procedural Typology

The research has previously tested the hypotheses of the preliminary and secondary stages of the model (see chapter 3) by examining thoroughly the sources which journalists use in communicating environmental news and the ways in which environmental information is changed through the interpretive journalistic process. An investigation was conducted into the library as an information support device to practitioners and an evaluation of the importance of this type of source for journalists covering the environment has been included. A case study focusing on the Braer oil spill was used to exemplify the evaluative, constructional and interpretive functions of the news process and focused on a practical (real) environmental problem, which the news media had to deal with. The work now proceeds to focus on the routine practices or rules, which journalists use, to further test the research hypotheses by examining the news process at a more detailed level. In order to do this data was gathered through T.I.D. sessions. The methodological and ethnomethodological coding was specifically designed to identify and elicit the tacit rules which journalists practice during the news process. The coding system (see Appendix VIII) was constructed prior to the T.I.D. sessions and applied to the transcripts of evidence gathered from these sessions. Thus, by using an inductive method, rules were inferred from the evidence. The elicitation of these rules was made easier by the fact that the evidence had been coded in this valid and reliable way (see page 126).

It was argued that journalists and news practitioners use taken-for-granted procedures which are regarded within the profession as being instinctive and respondents found it difficult to rationalise the news process (findings which support White's (1964) work into wire editor's gatekeeping rules). March and Simon (1958) discovered that personnel in organisations routinised their tasks because this process of routinisation facilitated the control of work, a view echoed by Tuchman in the '60s and '70s. Tuchman's work argued that routinisation was impeded by a variability in raw material which was partially alleviated by a classification of news stories which news people carried out.

Flow chart depicting evolution of research

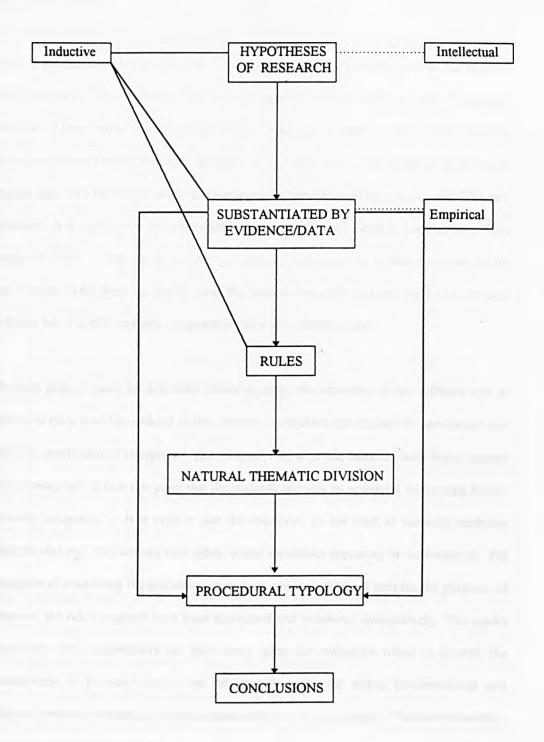


Fig 8

"Newsmen categorise events not only as happenings in the everyday world, but also as potentially newsworthy materials - as the raw material to be processed by news organisations." (Tuchman, 1973, p111)

This is substantiated by evidence from the respondents in Scotland.

The evidence from the T.I.D. sessions with journalists, carried out by the researcher, has underlined the fact that they do use tacit, routine procedures to construct the news i.e. research and compile stories. The researcher has, through extensive analysis, inferred "rules" from these procedures. These "rules" were aggregated into groupings in order to better understand the types of procedures used in the news process. The "rules" were then assigned to particular categories and were labelled Evaluative; Operational; Constructional/interpretive and Editorial. Furthermore, it is evident that the rules used by journalists are often used in combinations when carrying out tasks. The categories are not mutually exclusive. A further extension of the model (chapter 3) has been developed using the information gathered from the T.I.D. sessions. This shows how the different rule categories interact (see chapters 8-10).

If the news process could be described chronologically, the execution of the different sets or categories of rules would be ordered in this manner - evaluative (see chapter 8), operational (see chapter 9), constructional/interpretive (see chapter 10), with the editorial ones being applied actively throughout. It is at this point that the research imposes an unnatural sequencing feature on the rule categories. It is evident that the categories do not exist as mutually exclusive entities and that they do influence each other, whilst sometimes appearing in combinations. For the purposes of translating the journalistic practices into a model, and also for the purposes of explanation, the rule categories have been segregated and numbered consecutively. The model explains that news practitioners use their news sense (or evaluative rules) to identify the newsworthiness of potential stories but subsequently write the article (constructional and interpretive rules) by targeting the issue appropriately for the readership. The model describes these rules in chapters 8, 9 and 10.

1

¹ Unnatural in that the news process does not appear in such straight forward terms. The intertextuality of the rule categories is not clearly represented as this is almost impossible to do with a 2-dimensional model.

Collectively, this work discusses such issues as, the sources which journalists use, news as a formulaic construction, the relationship of news values to writing, journalists' perceptions of the audience through writing and the journalists' role as an intellectual filter for the audience. It is evident that some of the trends emerging from the respondents' data substantiates the model discussed in Chapter 3 and other trends add new information thereby extending and developing it to a higher level.

There follows an examination of the sources of these tacit rules which journalists employ during the news process. Then, the work develops the typological procedures which form a type of microscopic analysis, starting with the editorial (chapter 7) followed by the evaluative (chapter 8), operational (chapter 9) and constructional/interpretive (chapter 10) categories.

6. 1 The Sources of the Rules

"Journalists must be able to understand and interpret the social events with which they are confronted, and second, they must have the specific skills necessary to convey this information to their audiences." (Gaunt, 1990, p37)

The method took account of the ways in which the journalists routinise their work procedures and how they apply these rules tacitly to the news process. It was also the aim of the research to discover the origins of the said rules.

Two possible sources from which rules might emanate could be training and on-site experience (i.e. the knowledge acquired on the job by osmosis and through trial and error). In order to uncover this information respondents were asked open-ended questions. These questions unsettled respondents because the interview forced them to account for knowledge which they take for granted. Consequently, some respondents found this very difficult to answer and put it down to experience but could not elaborate, indicating something of the tacit nature of the process. In spite of these difficulties, a number of origins have been revealed by journalists and

these have been categorised into themes. These are training; experience; editorial and organisational policy; professional role/self-image.

Consideration has been given to these rule sources, in order to gain an understanding of the context within which the news process exists. Each of them will be discussed in greater depth below.

6.1.1 Training

The sample of journalists came from a wide range of educational backgrounds and it is evident that there are major differences between the ways in which journalism students are trained today and the methods used fifteen to twenty or more years ago. Many of the senior members of the sample drew contrasts between the training then and now, as the following example shows,

"I think that young journalists now because of the nature of the business are thrown into the deep end and I think they are out an awful lot...But that's the changing nature of the job. I went out with...them [experienced journalists] as a kind of legman and they told you what to do and you learned by that. If someone tells you once in a forceful way [not to do something], you don't do it again, whereas they [novice journalists] do it now and it gets in the paper and they think it's all right. Also they don't have the techniques [now] that reporters had - like the ways to approach people - where you persuade them. You pick things up without being aware that you're doing it." Graeme Smith, The Herald.

Journalism education has been the subject of considerable research (Becker, 1988; Marsh, 1973; Gaunt, 1991; Luter, 1983). For example, Marsh's (1973) study of student teachers demonstrates that educators have a great deal of influence over their students.

Many of the respondents who were formally trained by journalism educators i.e. at undergraduate, post graduate or certificate level stated that they were dissatisfied with the ways they were trained. It was suggested that journalists have to "unlearn" concepts which they have been taught when they start working at a newspaper or broadcast institution (see diagram, page 133).

"It's not the sort of job where training makes a great deal of difference...Experience is everything and until you've done it there's not a lot anyone can tell you. You're self-motivated, self-taught and self starting..." Carlos Alba, The Press and Journal.

In Britain, the National Council For the Training of Journalists is the main training institution and most journalists (certainly the majority of the respondents in the sample) hold the certificate from NCTJ courses. The Council aims to train students in the recognition and selection of newsworthy facts from both written and verbal documentation; to write clearly balanced reports and to gain knowledge of the newspapers' departments and the industry's infrastructure (NCTJ cited in Gaunt, 1990, p45).

In every course the emphasis is on the pragmatics of the news process and this is the reason (according to Gaunt) that British journalism is regarded as a craft rather than a profession.

Today, almost all training is given either in colleges of further education or on the job. The focus is on practical reporting not theory (Gaunt, 1990, p39). It is the practical side of training i.e. the on-site training which journalistic respondents referred to most frequently. These college courses were classed by respondents as being academic.

The sample divided into those who had taken a journalism course at either undergraduate or postgraduate level and those who had joined papers to get experience and had later completed the NCTJ certificate in journalism (the majority of the respondents).

What became clear during the course of the discussion about training was that the journalists perceived that there are fundamental differences between an academic and practically based learning experience. Training, it was suggested, is idealistic and divorced from reality of the newsroom. On graduate courses, writing assignments are designed around a fictional village and reporters are taught to write in a non-biased, balanced way. Some of the respondents referred to this exercise and emphasised how artificial it is. They underlined the fact that the theory of objectivity does not exist in practical newspaper reporting and that forcing students to write using a technique which is not grounded in the pragmatics of the news process, prohibits

them from quickly adapting to conventional newsroom practice when they assume a journalistic position.

Respondents were asked about the differences between their training and their job,

"Yes but that is a failing of the body that trained me - the NCTJ. It exists in this kind of a vacuum which never really existed. They construct this little village called Oxtown and everything happens in Oxtown and it is completely fictional. It's got a district council and a regional council, a court and a river and a school - everything you are going to need if you're going to write for a local paper. The way they make you write when you're training is completely different to what...well my experience anyway. It's false you know. If there was an Oxtown Gazette which is the paper that you are supposedly writing for...it would be the dullest paper in the world because they do impose all these ideals on you. You can't put emphasis on any particular area of the story. You have to be completely balanced, you have to be non-sensationalist, and it really is an unrealistic situation." Carlos Alba, The Press and Journal

"I went straight from school so I suppose that I think that's the best way to do it...[the] journalism course is artificial and it's still a false environment. It's not really in the real world." Ian Lundie, North Scot

The majority of the journalists in the sample, received instruction from senior colleagues when they started work. In light of this evidence, it may be tentatively concluded that in many cases new reporters did not learn these rules overtly i.e. learning by being told but rather by osmosis i.e. learning through the subtle, unconscious influence of others. Journalists often watched their colleagues and learned by example.

"I mixed with the journalists and saw how they operated and picked things up. I think it is very difficult to work on your own...I think you do need help. I think as you go along there are always people you look up to...one particular person who you think is good and you watch how he writes and that person will change as the years go by." Ian Lundie, North Scot.

"I received a great deal of help from journalists because you have to rely on them. This is not the sort of job that you walk into and pick up straight away. There is a definite learning curve and if there is not that curve then people are liable to fall flat on their faces." Alistair Gracie, Grampian Television

"I got some help but a lot of it is just listening to what people are doing. Just trying to pick up on what is happening." Elizabeth Buie, The Herald

Learning by osmosis means that journalists absorb the techniques which they must use to evaluate, operate and construct the news. It is after this process and through the repetition of the same routines that the knowledge becomes tacit i.e. inherent in the working practices of the journalist. Reporters then define the source of their rules as "experience".

6.1.2 Experience

This was a typical response to the probing questions about how journalists know what they know and about how they learn how to practice the news process. For example, one respondent replied that it was "basic experience" which he had acquired over a set period of time and thus enabled him to write stories for both tabloid and broadsheet simultaneously. When prompted further about whether this was learnt on the job or from a formal qualification, he replied,

"I joined the paper straight from school and I was trained on a block release course. It was very, very basic but you do learn the fundamentals of reporting and they stay with you right through. But you learn through experience how to write. There are certain ways to pitch stories or certain issues. It is experience there is no other secret about it." Ian Lundie, North Scot

Although the term "experience" was used constantly by respondents, they were unable to clearly define exactly what it consisted of or what it meant.

"It is experience. You receive a basic training at college which sets rough parameters. But after a few years it becomes formulaic. If you have a story you must have an opposing view point...so there are certain rules that you use. It's a flexible pattern. It's instinctive but it's coached by your previous experience. Anyone can do it. It's pretty much common sense." Tom Little, Edinburgh Evening News

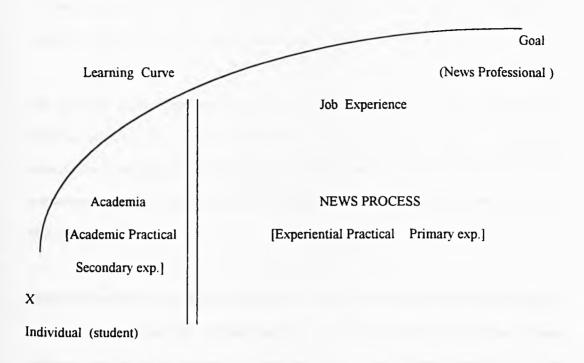


Fig. 9 Diagram depicting different routes to journalism experience

According to the respondents, the student starts initially with a basic instinct for news. This instinct is apparently more than a deep seated interest for the subject. It was described by the journalists as a naturally occurring intuition with which journalists can firstly identify what is newsworthy and secondly assess how to organise, interpret and disseminate the product. This apparent innate reaction is cultivated and extended only after the student starts to re-learn the news process in a practical, editorial setting. The respondents who had completed graduate studies in journalism felt that a period of readjustment had to be endured after they started work. They had to cross a division which separates academic training from on-site experience. These two types of learning are defined differently. Academia, although professing to be practically led exists on a separate experiential level from on-site experience. This is because the training conveyed to students through academic courses is secondary i.e. it is communicated through an intermediary e.g. an educator or practitioner, or from within a specifically defined context e.g. training exercise or the simulation of a newsroom. Experience from an on-site position is distinct from this, in that it is primary and trainees learn in the real situation. The differences between academic training and "real life" work experience were so defined, that the journalists

felt that they had to "start again" and re-educate himself according to the news work patterns or routines (refer back to Alba's comment on page 130).

The model (p133) also represents the fact that the student/practitioner is on a learning curve with the ultimate goal being the transition to news professional which is defined by organisational and personal culture. Both journalism students (ie academic trainees) and journalism trainees (ie on-site trainees) recognise distinctions in the different methods of education.

This on-site experience (i.e. experience gained in a practical setting) facilitates the routinisation process because through the constant repetition of the rules, the same formulae become reinforced and journalists ultimately perform them tacitly. The following quotations illustrate this point,

"...we're talking this through and I'm rationalising it but just purely from an operational point of view, when I'm working if I picked up a news release, I wouldn't be thinking right who's making the claims, right it is an environmental group...I'd just do it.....[I'd be aware] that they've got an axe to grind, they've got an agenda that they're working to, so I've got to be careful of this one." Carlos Alba, The Press and Journal.

"I don't really think about it. There's a trainee spending some time with us at the office and I can't explain what I do to him. I don't actually think about how I do it. I just kind of do it. I don't sit down and think about it - maybe I should think why am I doing this?" Graeme Smith, The Herald.

This last respondent is a clear example of how the routinisation process and instinctive journalistic qualities have all combined and over an extended length of time, become ingrained into the working practices of the journalist. He carries out the news process without having to think or rationalise why he is doing it in a certain way. Moreover, he cannot communicate why he is doing it in this way.

"It's on-site experience. On the job. It's really just experience. You just go out there and do it." Graeme Smith, The Herald.

It is evident that this is a common occurrence among members of the journalistic profession, because other respondents put forward the same idea.

"It comes through experience. I've been doing radio for six years and journalism for eleven. It just comes through experience." Jonathon Moore, Northsound

Learning on-site, then, involves learning not only by osmosis but also by trial and error. The mistakes made by new reporters are used as educational devices. Each one is logged and a mental note is made not to repeat it in the future, while at the same time, other rules are continuously reinforced, thereby extending the learning process. Through these experiences, recipe knowledge (Berger and Luckmann, 1967) is advanced.

Journalism is a profession which involves a continuous learning curve. Each journalist strives towards a professional goal and this is defined by both the organisation and the self (see Fig. 9). The familiarity with issues results from experience. This experience manifests itself either in the form of a specialist reporter or as an editor who has built up an experiential code for the selection and rejection of issues. Personnel who have worked at the paper or organisation for a length of time, can often second guess editors because they have acquired a clear insight into the policies, news values and requirements of the institution. This is seen in the following comment.

"[I know how to do this] from having worked on the paper for so long. I can tell you what the reaction of my boss would be if I took this story to him and said, "look what do you think of this?". He would say, "yes fair enough...these are quite strong claims". Again, from the operational point of view of the paper and from what's largely a subliminal attitude or ideology that he is working from he'd say, "its only one of these cranky, environmental groups that is making the claim so don't take it too seriously." Carlos Alba, The Press and Journal.

The above respondent can anticipate the reaction of his supervisor (the news editor) because he understands and is aware of the policy of the organisation. He refers to the "subliminal attitude or ideology" his colleague works from, inferring that there is an invisible, tacit formula against which the editor evaluates and constructs the news. It is evident then that some reporters are

aware of a set of organisational norms which causes them to perform the routine tasks in certain ways. The evidence gathered from the T.I.D. sessions, reveals however that this journalist was in the minority.

A consummate professional standing is achieved through the compounding of a basic grounding in news practices and a number of years experience. However, it is paradoxical that two of the fundamental requirements of journalism and common sense exist in harmony due to the fact that they are opposing qualities (i.e. instinct suggests spontaneity and common sense, rationality). This research argues that instinct is a learned phenomenon but it has been socialised and reinforced to such an extent that it appears instinctive. This suggests that journalists have tacit knowledge and abilities while simultaneously possessing this rationality which underlies the routine procedures carried out during the news process. When asked about these diverse qualities, the respondents returned to the subject of news sense,

"You develop a news sense and you can only develop it by working in it [journalism]. It may be that you are naturally inquisitive and you like finding out things. But you can be inquisitive and like finding out things and not be able to put it over in a way that other people can...communicate it. So it is a balance of having that inquisitiveness to find out things and having the ability to put it over so that people understand what it is. News sense is more than common sense rather than anything else." Jonathon Moore, Northsound Radio

"News sense is something which is developed with practice but I think you have to start with it. If you don't start with a basic news sense - a basic curiosity about something and then this urge to communicate what you have found out, if there is nothing of the gossip in you then I think you would have an awful difficult time. You could become a critic but even that....you've got to find a line, there's no point in doing it otherwise - find a line to make people read on." Respondent 2. "Television and radio are exactly the same as newspapers. You are listening to what somebody says and you are picking up the news points e.g. a speech from John Major. If he's speaking for 45 minutes at the end of the day, it might end up as three or four paragraphs in the newspaper. Its constructed around three or four paragraphs so any journalist learns to look for the news line. You learn to extract the meat out of the story. It's something that's instinctive. It doesn't happen overnight. They don't start off with inexperience and say, "well that's how you do it". It's something you just pick up subconsciously. It is instinct." Alistair Gracie, Grampian Television.

6.1.3 Editorial and Organisational Policy

To a great extent, the selection of news is dictated by the management of the news organisation (Gaunt, 1990). This is due to a change in the ethos of news and news making. Gaunt argues that the organisations are working towards a more profit-oriented remit nowadays and that the selection of news stories is defined as those stories which are the easiest to edit. Early on in their careers journalists are instructed as to the values of the newspaper or broadcast organisation and indirectly, therefore, as to what values their stories should be reflecting. This strongly influences the way news is constructed. If stories are written which violate the policy, they will often not appear. The editor creates the editorial policy by taking into consideration the different requirements of each department in the organisation (paper or broadcast station). One respondent admitted that the newspaper he works for would ignore the hypothetical story about the air pollution and respiratory diseases (case 2). He rationalises the reasoning behind this decision by saying,

"It's not that the newspaper...is callous towards the environment and so it doesn't care about car exhausts or anything. In a situation like this...I mean everyone drives a car and particularly Press and Journal readers drive big cars with big engines...so that's probably another reason why it's not on the Press and Journal's agenda. But I mean that sounds as if the management structure rationalises that in a sense - "we-can't-call-for-cars-to-be-outlawed-because-that-will-alienate-our-readers". It's just built in - a subconscious thing - built into the culture of the organisation." Carlos Alba, The Press and Journal

Implicit in this are, of course, the economic factors which academics like Gaunt (1990) say are now the driving force behind journalism today. The readership or audience and their interests are predominant considerations within the design of organisational and, therefore, editorial policies.

One respondent explained how the force of the news values, perpetuated by the organisation, determines how quickly the journalist adapts to the new work environment i.e. socialisation of the newsroom (Tuchman, 1972).

"I think if a BBC journalist went to work in a tabloid paper and wanted to keep his/her job there, that journalist would quickly learn that it pays to acclaim and that you really have to have opinions and in some circumstances you've got to express them. It's a different style of journalism so ...it's learned. You learn the standards set by the organisation. Every organisation has standards - some codify the standards...some codify standards in forms...certain ways." Respondent 1.

These standards are implicit in the organisational policy which manifest themselves in editorial policy. The editorial policy which journalists work to. Some respondents referred to the style of the paper which becomes ingrained in the working routines of the journalist.

"You have a line....but before that there's a style, that just happens to be...if you work on a newspaper the style is actually ingrained and you just do it." Paul Riddell, North Scot

This style is represented in the editorial policy and reporters are taught to conform to these standards in the newsroom. If the policy is violated, the stories are changed through editing or else do not appear.

Gaunt's idea that the media, specifically the newspaper industry is driven by profit seeking ideology, was echoed again by one of the respondents,

"...at its most blatant, if for example in this story, if a Peterhead fishing company was one of the worst offenders that was overfishing in the North Sea and they happened to take out a lot of advertising with us, that would be a consideration you know. If they threaten to take out their advertising if we run a really hard hitting story against them then I strongly suspect that the story would be pulled completely or it would be watered down..." Carlos Alba, The Press and Journal.

It may be concluded from this that newspapers and broadcast organisations help shape the news by reinforcing professional and organisational norms which are mainly economic in origin. However, without studying this facet of the news process specifically it is difficult to reach any firm conclusions (see chapter 7).

6.1.4 Professional and Personal Roles

Gaunt (1990) also argues that the journalist's professional role is determined by historical context, public expectations and organisational control and further that his/her personal role may be dependent on training, type of organisation, journalistic traditions, editorial pressures. There is evidence from the data gathered at the T.I.D. sessions which supports this view.

The respondents' have very clear perceptions of their self-image, for in describing this image they specifically stated the roles which they see themselves fulfilling. From the evidence, there have emerged two professional roles (social responsibility and economic) and one personal role (self-criticism). This image is influential in shaping the rules which journalists use to construct and interpret the news.

6.1.4.1 Professional

Many of the respondents discussed the ways in which they would avoid sensationally publicising issues which would alarm the public. This is the journalistic role of social responsibility which is defined professionally and therefore has originated from both the organisational culture and the academic training programmes.

"The way you feel about something can affect the way it is constructed but I think it's the responsibility of the reporter to avoid making that happen. But newspapers don't have a legal responsibility in the same way TV has to be politically balanced. As long as it is not breaking any public order laws like inciting people to riot or racial hatred, a newspaper can print what it likes and they do. I think that it would be a falsehood to say that there is the ideal of the completely impartial journalist." Carlos Alba, The Press and Journal

Historically, it has been suggested that the media violates its responsibility to the public and that it indiscriminately reports things in a dramatic and sensationalist fashion.

The social responsibility role of the journalist involves avoiding the conscious misleading of the audience or readership. For example, a negation of this responsibility may occur where a potential link has been stated as fact, such as assuming that the pesticide Benazalox has caused

the illness of seven people even when these people are geographically dispersed around the area (case 1). Journalists cannot afford to draw conclusions based on their own speculation and commentary should be distinct and separate from factual reporting.

"A lot of the time you are trying to report what other people are saying, after all. You may have to contrast what they are saying to others but contrasting is a different matter, it's not the same as injecting your own stuff." Paul Riddell, North Scot.

Most of the respondents talked indirectly about the role of social responsibility. Usually this was in the context of how they would avoid sensationally publicising issues or parts of issues which would cause alarm to the public. For example, placing undue emphasis on the fact that in case 1, the chemical pesticide may be carcinogenic. The journalists are very aware of the need to remain professional and responsible in matters where a scare might be caused. They see this need as an inherent part of their role and this consequently defines how they practice the routines involved in the news process.

The profession has apparently changed as journalists are now expected to assume more responsibility from an earlier stage in their careers.

"I am very mindful that everything should be very responsible....I think you must be responsible and not cause a scare when there's no necessity for it. On the other hand people will always tell you there is no cause for panic. You've always got to be responsible and quote the facts to get the balance." Graeme Smith, The Herald

It was evident (see self-image) that journalists saw themselves as having to fulfil an economic obligation within their professional roles. News making is run as a business, with reporters having to identify and construct as many newsworthy stories as possible in order to justify their place on the news team.

"I'm a senior production journalist - a producer who occasionally reports. I'm looking for stories; choosing stories to do, assigning stories to people. I oversee the production of these stories, ensuring their production quality, managing a

team of people...and we're all trying to do a good job and beat the opposition." Respondent 1

Competition is strong in the news business between stations and between newspapers and the economic influences on the journalists are clearly defined (see below).

6.1.4.2 Self Criticism

This is a personal function which reporters perform in order to assess their own working practices. It is adopted in response to the need to constantly maintain a self-set journalistic standard.

"If you don't think about the reader then you will end up writing needless and nonsensical stuff. You've got to analyse your own stuff. You have to sit back and say what would interest me?" Ian Lundie, North Scot

"As a journalist you can't afford to draw conclusions because you don't know. You've got to report and if there is some argument, you've got to report that." Paul Riddell, North Scot

Collectively, this function is defined within the perceptions of the self-image which journalists hold tacitly. The roles are difficult to separate because they are inextricably interlinked and consequently influence each other.

6.1.4.3 Self-Image

Respondents found it difficult to discuss their perceptions of their image. It was evident that the journalists found it easier to describe their own image by stating their role and what this entailed, for example,

"I see myself, pretty much, as a straight forward reporter without any pretension such as editing a [local] newspaper or a national. We have to act responsibly and professionally otherwise if we don't then our reputation crumbles and we lose... You are part journalist and part businessman and part diplomat. You have to be a kind of a salesman in many ways as well I suppose. I never really thought about it before." Ian Lundie, North Scot

This respondent discusses how he sees himself i.e. as unambitious from an editorial point of view. His self-image is linked to the professional roles of responsibility and profit-seeking. Instead of simply referring to himself as a reporter who can recognise and evaluate potentially newsworthy material, he sees himself as "a salesman", which emphasises the economic influences of his role. The need to sell papers on the strength of certain stories is a concept echoed by other respondents as the following substantiates,

"Our role is to sell newspapers, first and foremost. It is a business. Then you can be pious and say you are informing the public and protecting the public's right to know." Tom Little, Edinburgh Evening News.

Respondents see their roles and therefore their overall image as having different facets. Journalists are aware that the product they construct has an effect on the news consumer (audience/readership), indeed the rules which are inherent in the news process are applied with an image of the readership in mind. The following respondent admitted, however, that he sees his role as shaping people's images and actively constructing their realities for them.

"[as a journalist]...what you are doing is shaping people's reality...because...for example...if you were to ask people "what do you think of Neil Kinnock as a leader?" They'd probably say, "oh he's weak" or "oh he caved into the unions". And you say "well give me an example of his weakness" and they wouldn't be able to because their reality has been shaped by the newspapers, which for ten years told them that Neil Kinnock was weak. People's general understanding of most things is what they read in the newspapers and if that's slanted in some particular way then you are affecting a large section of public opinion." Carlos Alba. The Press and Journal

This is part of the process which has been reinforced by newspapers and broadcast institutions over a number years. It is only a fragment of reality or a reality created within a particular context

"An interesting thing about newspaper journalism is that people always want to speak to you when they think that you can tell them something, you know if there is a big murder or a big police thing - it's ok to be a journalist then but if there is a disaster the same people treat you with contempt as if you are the lowest form of life." Graeme Smith, The Herald

Journalists are aware of the image which is perpetuated by other media e.g. film, TV drama, literature and this influences how they perceive themselves to some extent. However, the stereotypical misrepresentation of the profession over a long period of time is generally incongruent with the self-image journalists possess. Their image is composed of the different roles outlined above - social responsibility, economic, self-criticism, social construction etc. This image becomes part of their social construction of reality i.e. world view. Consequently, this must have a bearing on how they perceive the world and how they mediate these fragments of reality to the wider social community. The news is not reality, only an image or interpretation of the same.

Chapter 7 An Analysis of the Editorial Rules

"Like other bureaucracies, news organisations are a combination of hierarchy and division of labour... This reflects their divergent demands - on the one hand, centralised co-ordination to assure smooth routines and consistent presentation, on the other, widespread interaction with a diverse and unpredictable environment to generate news. Overall authority and decision-making are concentrated in a relatively small group of editorial executives, below which is a large and diversified middle stratum of reporters and processors." (Tiffen, 1989, p 16)

This short chapter is concerned with the procedures and therefore rules which affect editorial decisions. It is evident that (as with all the other categories) each set of rules is used in combinations by journalists and consequently it is clear that they influence each other. For example, the constructional and interpretive categories are both always used together as they are primarily concerned with the writing of the story.

The editorial rules which, from the data gathered at the T.I.D. sessions, appear in fewer numbers than any other category are distinct from the other rules because they play a different role in the news process. The news process (as depicted by the tertiary level of the model, see Chapter 10) can be described as a chronological statement but it is difficult to assign a chronological label to the editorial rules. For example, journalists use the evaluative rules initially to assess the newsworthiness of an issue by weighing it up against criteria determined by the news values of the paper or broadcast organisation. The natural progression of this process is to implement operational rules for the purpose of gathering the information from sources including interviewing actors involved in the situation. In addition to this journalists apply constructional and interpretive rules to write or construct the story, for example, they include or reject bits of information, select particular quotes from experts or "victims", they "interpret", distil and therefore simplify information (including scientific and technical) for their readers. However, editorial rules are applied consistently at each part of the news process. These particular rules also exist on a tacit level because journalists are aware to some extent of the routines which are involved in their work. Journalists learn about the editorial and therefore

organisational policies of the institution through experience of the newspaper or broadcasting culture (findings which support Sigelman (1973). However, it is also learned by osmosis and what Breed (1955) calls the socialisation of the newsroom where new reporters are conditioned and influenced by work colleagues through a reward system. Novice journalists are trained therefore by a repetitive practice which reinforces the work in a positive way.

"...they become socialized and "learn the ropes" like a neophyte in any subculture. Basically the learning of a policy is a process by which the recruit discovers and internalizes the rights and obligations of his status and its norms and values. He learns to anticipate which is expected of him to win awards and avoid punishments ...he tends to fashion his own stories after others he sees in the paper. This is particularly true of the newcomer. The news columns and editorials are a guide to the local norms." (Breed, 1955, p328)

Editorial rules are outwith the control of the individual journalist. They are devised by the editorial team which is directed by the editor of the paper or news director of the broadcast organisation. Ultimately, however, the control of the policies, to which the reporters work, is kept by the publisher or the station manager. It is unclear as to what extent the publisher influences the direction of newsroom activities and therefore the ultimate shaping of the news. The findings from this research project are not wide reaching enough to be able to draw any firm conclusions on the matter and further investigation is needed. However, work by Bowers (1967) shows that publisher activity is greater in smaller daily papers due to the fact that he/she is more involved in the community and with his/her staff and also because the economic resources of these papers are smaller. He also found that publishers who had risen from the editorial ranks were better able to use their specialist knowledge in the news policies and in the application to news problems (Bowers, 1967, p52).

The following schematic diagram illustrates the news process as a sequential statement.

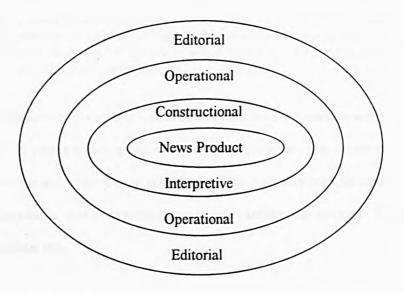


Fig. 10 The integration of rule categories

Although the diagram depicts the fact that editorial rules are the primary consideration which take place before the other categories, it should be understood that journalists are aware of editorial decisions while simultaneously carrying out the other tacit procedures within the news process. Through the socialisation process of the newsroom journalists absorb the ways of working and this is influential in shaping the news product. They are not consciously aware of this because they found it difficult to explain. However, they are aware to some extent of how this influences them because they have all discussed how newsworthy or non-newsworthy the stories are in relation to their particular medium.

The ethnomethodological coding (see Appendix VIII and page 150) was used to indentify and elicit the editorial rules from the respondents' data. These editorial rules were concerned with the practical technicalities of the news process. This is due to the fact that the rules in this category are primarily concerned with how to fit the news into particular spaces within the newspaper or broadcast schedule.

[&]quot;There would probably be more science in the radio piece especially if it is quite a long time. The television piece would be much more wedded to pictures of bodies of the dead animals, the countryside that we are referring to - very small soundbites of the scientists, or the farmer and the ill person." Respondent 2.

"It's difficult [to say] but I would be looking at a six minute piece and the initial one on this would be unlikely to run for more than six minutes. The follow up could take another six minutes...the general overview on the use of pesticides or whatever could be around a discussion which would last maybe ten minutes." Mark Stephen, BBC Radio Scotland

Some of the respondents from the sample were able to estimate approximately which case would appear on the front page but they qualified this by stating that this was subject to what other stories arrived on the day. This was an application of the evaluative rules in conjunction with their editorial knowledge. It is an example of one category influencing the other. The following evidence substantiates this.

"It didn't fall off the bridge but it was de-railed? I'd say it would be on the front page for two or three days. I mean you can't tell because from this scenario, you can't tell if it's going to be sealed and carried off and you'll be left with a relatively small amount of fuel, and no scenes of dead ducks or seals washed ashore. So...from that it's difficult to say but certainly on day 1 it would be a front page story." Auslan Cramb, The Scotsman discussing case 5.

"It wouldn't be on page one. If you've got good pictures it might make page four or five. It would depend very much on the day - if we've got other stories running. They might just decide that they want a human interest story for that day and that would make it quite prominent but on the other hand there might be other stronger stories but it would be unlikely to make page one. It would be the inside pages. If it was a quiet day that might make page one because it has got lots of implications and many different strands." Elizabeth Buie, The Herald discussing case 2.

The constraints placed upon the news process by editorial rules may be found specifically in the leader column of the newspaper. This is a method through which news organisations can support or oppose a particular lobby or other political situation. This is written by the editor and it is opinion led. One respondent's discussion of case 3 supports this,

"It is quite possible that it's the kind of story which the paper might write a leader on. It wouldn't take sides on the reporting of it at all... I don't think it's something they'd campaign on - But ... they could write a leader on it, expressing an opinion on it. I think it's a very difficult one to express an opinion on because the arguments sound simple but they're not terribly simple. And the ideal solution is not apparent. There's conflict between serving the community and the environment. I guess the leader initially having looked at the amount of information on this since it was proposed ... the view would be slightly skewed against the development. The leaders of course entirely depend on the opinion of

the editor. If he disagrees with what I've written, he will re-write it." Auslan Cramb, The Scotsman

Editorial revisions (Sigelman, 1973) is another example of one of the rules in the category. Sigelman found that journalists were able to anticipate the actions of their immediate superiors i.e. news editors. This finding is echoed by this work (see sources of rules, chapter 6). One respondent, in discussing case 4, stated that he became aware that the fishing authorities should be given a more prominent standing in the story than would normally be given. This was due to the fact that the journalist had been advised by the editor to do this because of the newspaper's policy and so as not to alienate the readership (a large percentage of which work in the fishing industry).

"If it came in from this group then we would be quite interested in this. Particularly if it said that unemployment was going to result from it. I did the fishing page on my second week here, and I was doing stories as if they were hard news stories and I got so many complaints...we would probably use this but we would give the fishing organisations an equal if not greater say." Carlos Alba, The Press and Journal.

The journalists, then, apparently have little overall control over how it will appear in its final form. Furthermore, the news process is carried out under the intense pressure caused by deadlines and the saturation of the work load by incoming material.

It is evident, then, that the editorial category is used in conjunction with other rules (operational, evaluative, constructional/interpretive) and that this is extremely influential within the news process due to the fact that all the other rules are implemented in the work routine with a knowledge of the editorial mechanism in mind.

"What we are working towards is the timescale of the editions which doesn't necessarily fit in with or comply with the development of the story's natural course. So that's where newspapers become, in my views, dishonest...Because you are trying to get a story everyday, you are perhaps distorting the natural development of the story. You can go off at tangents depending basically on the requirements of the paper." Carlos Alba, The Press and Journal

Journalists are, according to the above respondent, inflicting an artificial code of practice onto real life situations. In other words due to the very nature of the news process the natural or real progression of the story is altered by the rigidity of the news routines and therefore a contrived representation of the situation is created. This is not to say that journalists set out with the intention of biasing or structuring the news in a subjective context. It is not a premeditated process. It is simply that the nature of the business is such that news can never be completely objective. This is because the process determines that the news has to be set in a particular context, and that it has to be constructed and disseminated within a particular time frame.

"The notion of a passive, comprehensive repository of official proceedings is economically unfeasible in its demands on space (especially with the proliferation of such proceedings), and in a more time-conscious age, readers are unlikely to consume the columns of print involved." (Tiffen, 1989, p18)

This extends not only to print but also to broadcast media,

"TV news has many distinctive features. The first is the brevity of the verbal information presented. The text of a half-hour news service would not fill the front page of a broadsheet newspaper....The production of TV news is dominated by a "stop-watch culture"....Visual quality is at the heart of the TV news enterprise. The construction of stories centres on the gathering and editing of suitable newsfilm". (Tiffen, 1989, p22-23)

It is evident that the editorial category is distinct from the others due to the fact that these rules are used in conjunction with the rules in other categories. This category, firstly, illustrates the type of knowledge journalists acquire by osmosis and the socialisation of the newsroom. Secondly, it demonstrates the organisational constraints which shape and construct the news product and ultimately the readership/audience's perceptions of reality.

Chapter 8 The Analysis of News Evaluation

"The world in which we come to have knowledge about the world, is of a particular sort...order. Though the order is always evolving (or better, changing) and never absolutely secure, it does represent a particular constellation of social relations of a particular integration of the institutions of society. The manner of integration, of organisation indicates and serves to reproduce particular priorities, values and interests. News that informs us of the world, from the perspective of any particular world, will reflect those priorities, values and interests. News, then, is not simply a "constructed reality" but instead a reality constructed within a particular social, political, economic ecology." (Rachline, 1988, p127)

The methodological and ethnomethodological coding system (see Appendix VIII, pages 80, 146) was applied to the respondents' data and facilitated the elicitation of the evaluative rules described and discussed in this chapter. The evidence which was gathered from the T.I.D. sessions was sought to test the claims of the preliminary and secondary stages of the model (see chapter 3). These stages describe the flow of environmental information from unmediated source where experts or scientific specialists interpret it, through the news process, to the dissemination of the news to the audience or readership. This chapter is concerned with the evaluative rules which journalists apply to environmental issues to assess their newsworthy potential. These types of rules are particularly relevant to the claims of the secondary stage of the model which places the news process of the preliminary stage within a specific reporting context (a disaster). The following cross section shows the relevant part of the secondary stage of the model.

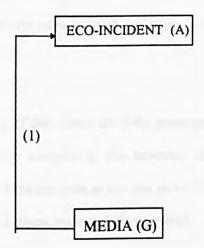


Fig 11 Excerpt from the secondary stage of the model

This part of the model shows the media organisations dispatching reporters to the scene indicating that the story is newsworthy enough to warrant coverage.

The evaluative rules are concerned with the news values and the news sense which journalists possess. This chapter addresses these issues and examines the categories to which news is assigned by journalists. The tertiary stage which completes the model discussed in chapter 3 is a description of the integration of the different rules elicited from the evidence. Section 8.8 investigates how the evaluative rules fit into this final section of the model. The chapter begins with an experiment which involved journalistic respondents prioritising and therefore evaluating the case scenarios presented to them during the T.I.D. sessions.

8.1 Journalists' approach to cases

Each journalist was asked to prioritise the five environmental case scenarios in an order which demonstrated the most newsworthy (1) through to the least newsworthy (5). This revealed the news values and related editorial policies of the paper or broadcasting institution.

All nine targeted media organisations took part in this prioritisation exercise, with the exception of North Scot Press Agency which supplies all main British newspapers with copy from the North East of Scotland and therefore could not be included. Four out of the nine respondents taking part in this section of the study were environment correspondents and the author wanted to perceive any differences between the ways in which specialists and non-specialists rated stories for newsworthiness.

It is evident (see fig 12, page 152) that almost all of the journalists were able to rank the five stories in some kind of order. The exception to this, however, was Edinburgh Evening News which would not consider the Cairngorm issue as this was outwith the area that would normally be covered and because no local Lothian angle could be perceived.

Cases	I	11	Ш	IV	V
North Scot	Х	Х	X	Х	Х
Press and Journal	2	5	3	4	1
Evening News	3	2	Х	4	1
Herald	3	I	4	5	2
Scotsman	5	4/5	3	1/2	1
Scotland on Sunday	2	3	4	5	1
Northsound	2	4	5	3	1
BBC Radio	2	3	4	5	1
Grampian	5	2	3	4	1
BBC Scotland	3	2	4	5	1

Fig 12 Table depicting how respondents prioritised the case scenarios

The data included in the table demonstrates that not all the respondents prioritised the cases in the same order. This is due to the fact that many of them work for different types of paper or broadcast institution and these have different news values. For example the Edinburgh Evening News is a local paper, based in central Scotland, which deals with parochial, Lothian-based issues and has a different set of criteria, against which to assess stories' news potential, from any of the other institutions. A selection of respondents' comments, which explain why they ordered the cases in a particular way, has been collated in Appendix IX at the back of the work.

The respondents, both specialists and non-specialists, recognised the importance of case 5 (environmental 'disaster" type story) and rated it as the most newsworthy or as the story demanding the most immediate attention. This is underlined by the following comment,

"As the environment correspondent I would tend to choose the aviation fuel because you have got the public safety plus the pollution to the environment. There wouldn't be any choice if you had a disaster....you are bound to take the aviation fuel spilling all over the Firth. In a round up of the key stories, that would be a key story if it developed into a full scale disaster - so that would be at the top of the running order." Respondent 2

"There's no doubt at all that the pollution of the aviation fuel is the biggest one. It's a national one. It's wider than just local. It's a big incident. There's lots of drama, lots of good pictures, lots of cuddly little seals who are at risk. That's definitely the main one. It's the only one of all these that I can think of that we would splash on." Tom Little, Edinburgh Evening News

The interviews revealed that environment correspondents approach a story of this magnitude from a journalistic point of view first and an environmental point of view second. It is treated as a hard news story i.e. the facts of the case (what is happening at the scene) are followed up initially and later on attention is turned to the analysis of the situation (what are the impacts environmentally). This is the rule for covering this type of story regardless of whether the journalist is a specialist or not. This idea is substantiated by evidence from a T.I.D. session carried out with Auslan Cramb the former environment correspondent for the Scotsman,

"Tackling any story you would start by...whether you are writing as an environment correspondent or not...finding out what happened. You need to get the basic facts. You need to start off at the scene." Auslan Cramb, The Scotsman.

The table in Fig. 9 is unrepresentative due to the fact that it is unlikely that five environmental stories of such magnitude would appear in one news day. However, it shows that definite trends have emerged to the fact that the majority of the respondents prioritised the stories in the following way, case 5 (1); case 1 (2); case 2 (3); case 3 (4) and case 4 (5). The three most important stories (in news terms) were those which have the "hard" news angles. Cases 3 and 4, although also environmental issues have less apparent news angles.

It may be deduced from the evidence that the selection of news stories depends very much on what other issues arise on that day and also the "subjectivity" of the editor's judgement. In using this term an implication of bias and personal construction is not intended. Much work has been done in the area of newsgathering and both academics and practitioners (Tiffen, 1989; Harris, 1989; Willis, 1991) maintain that the process is subjective. The findings from this research project indicate that the selection of news is subjective and, therefore, reinforce the work previously carried out in this area. It is this knowledge which has led academics to label the

This is explained below.

subjective evaluatory process of news selection as "gatekeeping" (Lewin, in White (1964), p162).

White in his study into wire editors' selection policies, states,

"Through studying his overt reasons for rejecting news stories from the press association we see how highly subjective, how based on the "gatekeeper's" own set of experiences, attitudes and expectations the communication of "news" really is." (Lewin in White, 1964, p170)

If it is an accepted fact that news gathering is a subjective procedure, then this is further compounded by the rapidity of the news process. Editors make decisions without consultation because their experience and knowledge of the news process makes them the most appropriate people to do this. It is difficult to put forward any alternative to this subjectivity as it is inherent in the structure of the organisational norms.

"You may go to another journalist now and he may give you an opposite view [of prioritisation] and ten good reasons as to why it is an opposite view. You have to act on instinct and very often you are probably wrong but you have to act on instinct and make decisions fairly quickly." Alistair Gracie, Grampian Television

This view that journalists use homogeneous rules in the news process is contradicted by the evidence above ie that there is an individualistic influence to the evaluation of news. It seems on the surface that this research into how journalists and news practitioners prioritise the news stories contests the ideas of hidden political agenda setting (Heeter [et al], 1989; Salwen, 1988). Having analysed the news process the conclusions of this research which have been reached, suggest that news people possess a "news sense" which is learned, and is developed on the job. It is described by news practitioners as being an intuitive reaction which is used when assessing the relevancy of news for the readership or audience of their particular area. However, it is argued that if journalists were born with an innate, news instinct, they would report the news in the same way consistently. It is evident from historical analysis of news reporting eg the Chernobyl nuclear incident (Rubin, 1987; Luke, 1987; Friedman, 1987), that the Soviet Union's news coverage was distinctly different to that of Britain or the United States. The evidence from Alistair Gracie above also underlines this individualistic argument. It is possible that the socialisation of the news room and the reinforcement of the values which determine news sense are factors which probably contribute to the myth that this tacit quality is instinctive and therefore

innate. Nevertheless, it is a reaction which news practitioners use when selecting news which is relevant for the readership or audience of their particular area.

"A story must have news value to stand-up and journalists have a keen sense of telling what is old-hat, propaganda or apocryphal." Carlos Alba, the Press and Journal

"Most news reporters (and this includes environment correspondents) are expected to keep coming up with a stream of stories to justify their place on the team. Their success or failure is judged by the "by-lines" they get in the paper or bulletin. To succeed they need to develop a sensitive palate for news. This involves researching their subject area assiduously - scanning agency copy for new points of departure in running stories, browsing through periodicals for interesting snippets, scanning sheets of statistics, telephoning contacts or going to visit people and places - constantly judging new information against all known recipes for news stories to see if it is worth further investigation." Alisdair Stirling, former correspondent for BBC World Service.

The above quote from this respondent refers implicitly to the recipe knowledge discussed by Berger and Luckmann (1967). It was proposed by these sociologists that knowledge is a social phenomenon which can be described and critically examined and that social actors (journalists) develop formulas to enable them to carry out their work strategies more efficiently.

"Everyday life is dominated by the pragmatic motive: i.e. to the solving of practical problems. Given the importance of this motive, <u>recipe knowledge</u> (i.e. "knowledge limited to pragmatic competence in routine performances") occupies a prominent place in our stock of knowledge." (Hunter, 1986, p15) (My emphasis)

The research set out to investigate the strategies which journalists implement during the news process. The understanding gained from this knowledge of the routine practices of reporters has provided a valuable insight into the ways in which the news is constructed as a product of what is assumed to be ordered reality.

The environment as a political issue does get relegated to the bottom of the running order or buried deep within the pages of newspaper text, because the media play a part in setting the political agenda, and the environment is positioned far down it. Environmental issues are regarded from within the media as "soft" news stories although some respondents agreed that

due to the recent popularisation of the environment as a subject in education, the media have had to start changing their attitude towards it.

"...this year it [environment] is climbing the running order. It has always been "...and finally" and the sort of pretty pictures with the pseudo-scientific reason for running them and it still is that...It has suffered because it has been popular science and to make it understandable we have had to put pretty pictures on it and tell it in very simple terms that has made it quite simplistic in itself when in actual fact deep down it hasn't been." Respondent 2.

"...there hasn't been a great deal of environmental coverage in Scotland until recently and even then there hasn't been a lot. There's a public interest but there's no real public involvement with environmental issues and that's something that I'm conscious of. Newspapers, and I include the Scotsman in this, tend to still treat the environment as a kind of "last item" on the news. They tack it on as a colourful, interesting, countryside story which it is and it's not." Auslan Cramb, The Scotsman

Respondents who were environment correspondents suggested that environmental issues, were regarded as less important and less newsworthy, than other issues, due to their "softness". They also made it clear that these issues would often be approached by journalists in similar ways to other environmental stories which had been covered around the same time. The credibility of these other environmental stories was determined by association, as the following evidence substantiates.

"...stories like the M77 protest, the burning environmental issue - very accessible, central Scotland, so it's a big audience, it has been right at the top of the news. It has been the environmental story and from that kind of story anything else that has happened or has been attached to it, is suddenly being perceived as important. It is almost impossible to analyse what goes on in a news editor's mind. You start the year with a story like the M77 protest, which is an environmental issue and it is grabbing people, then it seems to follow from that, that other things which have a green tinge to them suddenly seem to become more important." Respondent 2.

Not only does this respondent suggest that issues which have received a great deal of coverage before, determine how related issues are treated in the future, but also that it is impossible to rationalise the apparent "subjective" prioritisation which takes place at the news desk. This respondent implies that, again, there is a randomness involved in the selection of environmental stories. Another journalist from the press agency North Scot referred to this phenomenon as the

"band wagon effect" which occurs when two or more similar incidents surface within a short time of each other. The second issue will trigger off a more intensive coverage because it is seen to be reinforcing a trend or pattern. It will be seen as topical and consequently it is magnified by the media at the time.

All the respondents prioritised the stories according to the news values of their particular organisation and in general no two orders were the same. Further, they all rationalised why they would have placed them in that specific hierarchy.

It emerged from the data that stories are categorised by journalists. These categories range from the simple to the complex, in terms of content and in terms of how journalists gather the information for the story (see chapter 9). The idea that there is more than one type of story is substantiated by the comment,

"...there's probably a range of stories and they range from simple, straight forward - going out and speaking to someone or on the phone...which doesn't really involve much in the way of alternative sources or a complex story where you have to try and find out more information from the library." Paul Riddell, North Scot

From this exercise, the idea developed that the five stories could themselves be categorised.

Case 1 which dealt with the use of chemical pesticides in agriculture may be termed as a "serious incident" type of issue because it affects more than one person but its severity is not comparable with an "environmental disaster" story which demands immediate attention and usually threatens either large numbers of people or the eco-structure (as case 5 does).

Case 2 which was concerned with the worsening of respiratory diseases due to atmospheric pollution may be classified as an "action attempting to affect policy" story. If the link between asthma and traffic pollution could be proven this story would be stronger in news terms. Respondents seemed to disagree with each other about the real issue at stake. Many believed the action of the parents was the predominant issue, others felt that it was the fact that the girl had died (this is discussed later).

Case 3 referred to the development of a funicular railway through the Cairngorm mountains which was a continuing environmental issue. Respondents referred to it as "claim/counter-claim" story i.e. one side of the argument is represented first and then journalists report the other side, thus balancing the report. It is regarded as a straight forward if somewhat monotonous type of story to cover, by non-specialist correspondents.

Case 4 covered the issue of overfishing in the North Sea. This may be regarded as a localised environmental story which is of little interest to non-specialist journalists outwith the North East.

Case 5 is the easiest scenario to categorise and follows the pattern of environmental "disaster" stories.

Specialist and non-specialist reporters cover this alike.

Case 1	"Serious incident"
Case 2	"Action to Affect Policy"
Case 3	"Claim/counter claim"
Case 4	"Local Story"
Case 5	"Disaster Story"

Fig 13 Categorisation of scenarios in News Terms

All the stories are environmental and political due to the fact that they all involve Government intervention. Journalists all refer to Government officials in their list of sources for comment (chapter 9). The more newsworthy stories from a straight journalistic point of view are (in a hierarchy of importance), 5, 1 and 2. Cases 3 and 4 are generally regarded as less "hard". However from a specialist's view point, cases 3 and 4 have greater importance attached to them because the issues will have a greater impact on the environment in the long term. News is immediate. Scenarios which, for example, discuss the possible implications of a railway development on a conservation area or the idea that common fish stocks are dying out due to overfishing, are not seen as newsworthy as both issues would take a long time to develop.

"...in environmental terms both the Cairngorms and the North Sea stories are far more important than all the others - all the others are on the day - strong news pegs but in terms of the future of Scotland - the Cairngorms and the North Sea would take priority but they are ongoing stories. It is very hard to pinpoint key turning points in these particular stories." Respondent 2.

The implications from this mean that specialist correspondents do not evaluate environmental issues from a specialist point of view. They approach stories from a news angle first of all, as the comments above and below suggest.

"In the overfishing, if the scientist was charging [that]North Sea fish stocks were irrevocably depleted, then that would be on a par with the train story. The train story could be the strongest. It is very visual. That is the most exciting news story. The overfishing story is however the most important story in the long term." Auslan Cramb, The Scotsman.

8.2 Journalists' Categorisation of News

Tuchman (1972) argues that newsmen find it difficult to define news categories because they use them tacitly. Her work showed that journalists classify stories into categories labelled - hard, soft, spot, continuing and developing. The evidence gathered from the sample of journalists supports the idea that practitioners classify stories but the category labels which she has drawn out do not explain adequately the relationships between the categories which are used in combinations by journalists. For example, developing stories are hard as are spot issues i.e. the label given to sudden unexpected events like disasters.

'Hard" news stories as regarded by journalists are current, relevant, consequential events which are usually affecting people and 'soft" news stories have less relevancy and are perhaps not as current. The following respondent explains the difference between the two categories.

"The difference between hard and soft news is that soft news is referred to as "puffing" - it's just verbiage...it's not important. It is not descriptive of what's immediately happening. Hard news is news as it happens and a reportage of events that are developing or happening." Carlos Alba, The Press and Journal

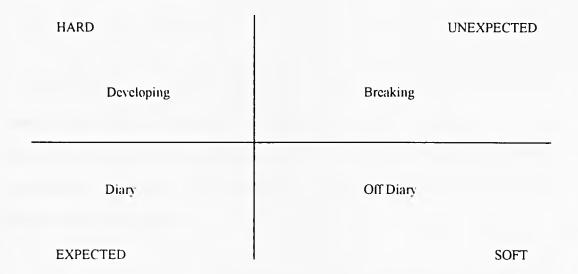


Fig 14 Depicts the News Categories used by journalists (after Tuchman, 1972)

The matrix illustrates the types of news, hard or soft and expected or unexpected. Breaking stories e.g. the Braer oil spill, are often categorised as hard, unexpected events; however, stories often change categories as they develop. For example, the Braer started as a breaking story but changed to a developing story when it ceased to be an unexpected event i.e. as it became normalised. Diary stories e.g. press conferences can be hard or soft and appear in advance. Off diary stories are generally classed as soft, unique events, human interest, which are unexpected. Tuchman talks about "routinising the unexpected" i.e. that journalists categorise events in order to be able to respond to them more quickly. Some of the respondents supported this idea by indicating that there are formulas which enable them to carry out the news process more efficiently. However, it is evident that the classification of news is but one factor used by journalists to formulate the news process and that the rules discussed in the typology, collectively enable reporters to research, construct and shape the news to fit the medium, more effectively.

The case scenarios which were presented to journalists can be classified according to the categories within the matrix. The collection of cases, includes at least two examples of hard news (1, 5 and possibly 2 depending on the interpretation of the reporter). Scenarios 3 and 4 are regarded as soft issues by non-specialist reporters. Environment correspondents agreed that from

the total of the five stories, 3 and 4 are the most important in environmental terms. However, due to the fact that they approach issues from a hard journalistic view point first and an environmental view point second, they too had to place the issue further down the news agenda. In addition to this, cases 1, 3 and 4 can also be classed as developing news stories. The responses from journalists seemed confused and the conclusion was drawn that the categories are obviously not mutually exclusive but rather influence each other - a conclusion not brought out by the work of Tuchman. The following data exemplifies how respondents viewed news categories, (for further evidence see Appendix X),

"It [news] all comes under the broad church of news stories but some obviously are harder news than others, for instance, an oil spillage like the Braer is very hard news but possibly a report coming out about oil pollution would come lower down the schedule of news as it hasn't got quite the same impact. A human interest story about...thinking back to the scenario you painted about the child with the asthma...that's a different kind of news...it's more of a human interest story but it's still a news story." Elizabeth Buie, The Herald.

8.3 Contextualisation

An interesting theme emerged from the T.I.D. sessions, where respondents were required to justify and rationalise the procedures they would use to cover case 5. The fifth case was concerned with the derailment of a freight train carrying aviation fuel across the Tay Bridge.

Many of the respondents mentioned that they were reminded of the Braer (Jan 1993) when confronted with this story. This is a reasonable expectation as many of the journalists in the sample covered the Braer spill. However, what happened was that some respondents started to describe how the Braer would be covered instead of hypothetical case 5. During the sessions, it was observed that the journalists, in uncovering the rules, were contextualising the imagined scenario (case 5) with images of the Braer oil spill.

"You might find that ten days hence you've got a high death toll amongst some of the animals or as you had with the Braer some of the economic things - tainted fish and so on that would begin to come out." Respondent 2 Some of the journalists mentioned the necessity for pictures of the seals before the incident and also afterwards covered in black oil, despite the fact that aviation fuel is colourless and much lighter in viscosity.

"You're looking at something on the scale of the Braer...31000 tonnes of deadly...I mean the Braer to some extent was heavy oil but and there was a storm which washed most of it away but here you are looking at a potentially huge disaster." Paul Riddell, North Scot

This seems to indicate that journalists take the procedural experience i.e. how they have previously carried out operational rules, of a particular situation and apply it to ones they regard as similar. It suggests that journalists do in fact assign stories to particular categories. Furthermore, in using the same information strategies or routines for similar issues it may be deduced that reporters have perhaps a mental "template" which is used with other stories in the future. It is evident from the journalists' data that reporters use the same routines for particular story types e.g. "disaster"; "serious incident" etc. and each time this comes into effect, the rules are reinforced more definitely.

All journalists seem to approach the stories in the same way indicating that they all view them from a hard news/journalistic angle rather than a specific environmental way. The differences which do exist between specialists and non-specialists are due mainly to the greater depth of knowledge about the subject matter which environment correspondents have, rather than the journalistic approach to the stories and the procedures which they employ during the news process (as discussed below).

Environment correspondents are not able to promote an environmental issue over a hard political or health issue. This comes back to the fact that the environment is regarded in news terms as a soft issue unless it has, for example, "disasterous" overtones ie criteria which push the issue up the running order or put it on the front page, a view also put forward by Hanson (1991).

There are differences also, as might be expected, between the press and the broadcast media in how they approached the stories and wrote case 1 as a news story. This is due to the fact that the

logistics and pragmatics of the press and broadcast media are different in terms of time, space and presentation (Tuchman, 1969; 1978).

"You are taught a framework - how to balance a story by putting forward counter points of view, for example, how to cover the environment or district council. There are set parameters and certain steps. Routines are automatic. Things are obvious. You don't sit down and think what is the next step. You do it and you get faster through experience." Tom Little, Edinburgh Evening News

Journalists are aware, to some extent, that they use routine practices which have been reinforced through repetition. What is less obvious is that they use rules, many of which are tacit, to produce i.e. research and construct the news. The distinction between a procedure and a rule is implicit in the fact that the latter is a construct, shaped and structured by a number of different factors such as organisational policy and journalistic perception of the professional role. The former is less defined i.e. unrepeated, part of a method taught in academic training courses. The procedure used by journalists is the basis for the rule which becomes embedded in journalistic practice after the routinisation process where a certain length of time on a paper has been served.

"We have routine practices. We don't do things at random. You shouldn't have to think about it. It starts with the five "ws"²...you don't have to think about that after a while. It is something which is learnt and it is something which is instinctive. I think you can't wholly learn it you must have an instinct for news." Respondent 2.

A more detailed discussion of the sources of these rules can be found in chapter 6.

The evaluative category, which forms the basis of this chapter, evolved out of the data which dealt with news values and newsworthiness and provides the framework for the reasoning behind the prioritisation exercise where respondents placed stories in a hierarchy according to their newsworthiness (page 152). "Evaluative" refers to the ways in which journalists approach stories initially, summarise the issues' news potential and assess the extraneous factors which strengthen or weaken a news story e.g. Government intervention which strengthens an issue. Reporters are constantly making value judgements against the information using news criteria which are

The five "ws" are who, what, where, why and when.

perpetuated by the organisation. However, this is not always recognised by journalists as a subjective process due to the fact that they do not analyse their own working patterns. Each of the respondents categorised the stories differently (pages 157-159) and the reason for this was found to be due to the diverse news values sustained by each of the organisations.

"Journalists need stories that are recent and relevant to potential action by audiences and that have a local angle, human interest and an element of novelty. Reporters are under pressure to be "first" with a story, even when no event is making the information newsworthy." (Burkhart, 1992, p79)

The different parametres set by each news organisation makes it difficult to compare how journalists gather news stories, for example, an evening paper might have eighteen deadlines a week whereas a Sunday paper may only have two and a daily regional paper may have up to sixty. The Sunday paper, therefore, has a greater length of time to locate news stories. This, inevitably, has a bearing on how journalists evaluate issues. The data from the T.I.D. sessions, which was coded according to the ethnomethodological system (see Appendix VIII), revealed that journalists use a set pattern of rules to help them evaluate and organise potential stories. From these rules, thematic strands have developed such as the news sense which journalists possess after the rules become tacit. These rules become so ingrained in the journalistic process that reporters can identify stories without consciously deciding to apply the evaluative criteria. It was further revealed that journalists use rules to classify the types of story they receive or locate. This supports the work carried out by Tuchman in the '70s as similar results were discovered when the Scottish respondents had difficulties in describing the news categories they use. This was due to the fact that again journalists do not rationalise what they are doing during the news process. The rules are applied to the environmental issue tacitly.

8.4 News Value Rules

"...values are built up over time and generations...so the values are perpetuated and the news fits into that kind of narrow definition. News is not an abstract notion...it's something that clearly...people go in, in the morning and decide what's going to be news and what is not." Carlos Alba, The Press and Journal.

Much has been written to date about news values by practitioners and academics. These values (see page 21) are a vitally important component within the evaluative category. Although there are many different news values which differ from organisation to organisation, respondents (from within the context of the five cases presented to them) revealed that geographic location and human interest (author's labels) were the most important. It was also discovered that "negativity" is a quality which determines a better news story although it is not included as a definitive news value criterion. In Scotland the media is small but diverse and, therefore, a regional paper such as the Press and Journal has very different news values from, for example, a national news network like the BBC. However taking this into consideration there are standard rules which journalists apply to each story to test its newsworthiness. The author is aware that academics have identified more news criteria than the author during the course of their research (McNair, 1994, Hartley, 1982; Hetherington, 1985, 1987). However, the criteria identified in this research are the outstanding categories which journalists revealed, whilst implying others such as proximity, immediacy, ethnocentrism etc. The reporters did not expand on these as they were constrained by the context of the information scenarios and the values were, therefore, not relevant at the time.

8.4.1 Geographic Relevance

This refers to the location of the story. An incident which occurs in Aberdeen, for example, the illness resulting from the use of chemical pesticides (case 1) is of less importance to a local evening paper in Edinburgh than it is to a regional paper in the North East of Scotland, and this fact is reflected by the amount of coverage each paper or broadcast station gives it. The exception to this rule (discussed below) is when a "disaster" story such as the derailment of the aviation fuel train (case 5) takes place. Depending on the scale of the event, all media (press and broadcast) converge on the scene to cover the incident. A "disaster" being the most newsworthy type of story is regarded differently by journalists. It is the most easily recognisable in terms of hard news and the application of news value criteria is seemingly suspended and deemed as

unnecessary during these situations. This is due to the fact that the scenario is very often strong enough to stand up by itself in news terms and there is greater urgency to communicate the facts. For example, one respondent pointed out that a story such as the one described above ("disaster"), often does not need an Aberdeen line i.e. mentioning the name of the area to justify its place in the schedule (case 5).

"There is no great need for me to say anywhere, the fact that it was on its way to Aberdeen. If it was on its way to Aberdeen and it's carrying twenty dignitaries and they all got dumped in the river then it's on its way to Aberdeen. But [in this case] the fact is secondary." Jonathon Moore, Northsound Radio.

The addition of the human component adds strength to the story, and the Aberdeen line is necessary to help the listener make sense of the issue. However, this story (case 5) is strong enough to stand without the mention of Aberdeen.

Respondents further described why geographic criteria strengthen a news story, from within the context of case 1,

"If it happens in the North East then that would be important. If they were from the North East then that would make it even more important. If the people were from outside the readership area it would make it less interesting to us, but the fact that it happened in the North East would certainly make it relevant." Carlos Alba The Press and Journal

"In this case I would say that the Who is probably the most important thing and also the fact that there is a specific geographical location. You have to remember that news values tend to impinge a lot. It varies geographically. A provincial paper like the Press and Journal...this is a big story for them as this is the local patch, but in terms of the national press for which I work predominantly, it's not a big story unless it happens to be affecting people in other farming areas of Scotland." Paul Riddell, North Scot.

Location, then, has a very definite bearing on whether or not the journalist would cover it. This is linked to their images of the intended audience. It is evident that journalists are very aware of the audience or readership they are writing for (see chapter 10) and the geographic criterion is applied automatically to ensure that the news story is of relevance to the news consumer.

This is substantiated by the following evidence from the discussion of case 4,

"...that is a major story for our area because the fishing in decline though it is, is still a major part of the life of not just the North East but of Orkney and Shetland and the Western Isles, all of which is part of our transmission area. As long as you've got the industrial side of it, you've got the fishing processors and you've also got something the housewife, be she in Aberdeen, Dundee or Inverness, can relate to."

"There are knock on effects right through out the area. This is the type of story that we would be very interested in. If we take away North Sea oil...what are the key industries of the North East economy...fishing, farming, papermaking etc. A lot of them have gone into decline. Fishing and farming are still rock solid in our transmission area." Alistair Gracie, Grampian Television.

In contrast the issue is not important at all to the non-environment reporter from the central belt,

"I don't think we would cover this....we would probably have to see if there was any local angle on it. I think most of our fishermen, fish further south than the North Sea. If there are people who fish in these areas then you have a local angle. But because it's not as important around here as an employment area, it wouldn't be quite as important as it would to the Express or the Press and Journal, for example." Tom Little, Edinburgh Evening News.

8.4.2 Human Interest

The respondents who were interviewed, unanimously agreed, that in being confronted with a story initially, they assess its newsworthiness by identifying who is involved in the scenario. In case 1, it is indicated that in total seven people around the Aberdeen area are ill and it is implied that the cause is chemical poisoning. All the journalists in the sample agreed that the top line of the story i.e. the predominant news angle, would be the fact that humans had been affected by a pesticide and that they were ill. This is evident from the following data from the broadcast journalists,

"...that is a fairly hard news story. It's affecting people and it's affecting animals and it is an issue which people would be interested in...because there is a suggestion that it has been caused by chemicals which have got into the water supply." Jonathon Moore, Northsound Radio.

"This story as with any story would be dictated by news values and these values do vary from journalist to journalist and from institution to institution. In broad terms there is a kind of priority scale against which facts are assembled. The fate of a person is usually inherently more interesting than the fate of an animal although both may be important and both would certainly be reported here. However I would certainly report that people were ill before I reported that animals had died unless I found that hundreds of rabbits and foxes...had died and only a couple of

humans were affected and that there were doubts to what the link was." Respondent 1.

There were no differences perceived between the press and broadcast journalists nor between specialists (environment) and non-specialist reporters, with regards to the way they approach stories. The assessment of news story potential is a standard rule, universal to all types of reporter, as the following evidence from the press, substantiates,

"If I had to write a story based on this particular press release, it would be the fact that humans had been struck down by what appears to be some sort of poison. The fact that animals had been found dead....would be pretty high up but it wouldn't be the main point of the story...when you're doing a story like this, then your main concern is that if there are animals or humans, humans come first." Ian Lundie. North Scot.

"...the most important thing is the human aspect of it, the fact that there are people who are ill. First and foremost we would go for the human element - the fact that people are ill. There's a suggestion, even though it's not confirmed, that it could be caused by pesticides or toxic chemicals they work with, so from a news point of view that would be our major interest." Carlos Alba, The Press and Journal.

For additional information see Appendix IX.

In contrast to the first case, which was classed by the researcher as a "serious incident" type story, case 3 was constructed in a completely different way. An examination of the journalists' responses to case 3, demonstrates how differently reporters evaluated the issue.

The third case was referred to by respondents as a "claim-counter claim" story which indicated the way they would cover it i.e. balancing a claim with a counter claim from the opposition. The scenario, described the proposed development of a funicular railway, which would run to the top of one of the Cairngorm mountains, transporting a large number of additional visitors. Mixed responses were received from the group of respondents. Firstly, not every reporter would cover it, for example, the respondent from the Edinburgh Evening News refused to use it due to the fact that it was outwith his readership area. Therefore, the geographic relevance rule underlined the fact that the story was of no interest or relevance to his readers. Secondly, some respondents

indicated that due to the absence of any human angle the story was weaker than either of the two previous cases.

"There's no human angle on it. That's one of the main problems. Unlike the last scenarios, where there was a human face, nice pictures, nice quotes and things. There's no human angle on this unless you've got some granny who is going to be shoved out of her house because of the plan. There's no human angle." Tom Little, The Edinburgh Evening News.

"It is an interesting story...but there is no specific human angle there. It is a company announcing a plan, so you report the announcement of the plan because it does have implications on, for example, tourism and the environment but it doesn't have as the various other ones have had, the death element or whatever. It is a good story and it is worth running." Jonathon Moore, Northsound Radio.

These respondents believe that the issue is good i.e. worthy, because it is local and yet it is weaker than the first two cases because it lacks a human interest angle. It may be suggested then that although one of the most important factors which can be used to evaluate a news story is the human element, its newsworthiness is still dependent on the type of story being assessed and its location. The news values appear to complement each other. All the respondents had their own ways of prioritising stories and the main rationale they gave to justify their decisions was that the audience or readership are familiar with a particular type of order.

"I prioritise the stories so that people know what to expect. They know that the first story in the bulletin is going to be something that is going to hit them. Equally they know that towards the end of it they might get...a cosy story to finish off with so that they feel quite good about it. And then the music starts again..." Jonathon Moore, Northsound Radio

This respondent describes a typical radio news bulletin, but his comment can be applied to the television and print media, as readily. He underlines what other respondents implied, that the news is arranged for the audience and readership. This point crystallises the fact that the journalist is influenced by not only the policies of the organisation and their training or experience but also by images of the intended audience. In journalistic terms, the respondents believe that case 3 was of average importance i.e. it was prioritised from position 3 downwards (page 152) because there was no human angle (as there was with case 1) nor any dramatic quality

(as there was with case 2). However, it was clear from the data that the environment correspondents rated it as being one of the top two most important issues in environmental terms, even although they were unable to promote it over and above the "harder" news stories i.e. cases 1, 2 and 5.

"...the main thing...the top line would be if they were sufficiently ill. I think I find the frustration for me, in being an environment correspondent...if it is a toss up between a health story in one programme and an environment story, the health story nearly always involves people and illness and death and that seems more newsworthy than birds dying or things about the long term future of the Cairngorms. If children are being turned away from a Paediatric ward today at a hospital then, that is obviously going to take precedence over Scotland's wildlands in 20 years time. My top line would be that people are reported as being ill." Respondent 2.

Other respondents in the sample agreed that the issue was a worthy story, although it is evident that television journalists seemed more willing to consider it, due to its visual qualities.

"It is the classic confrontation between environmentalists and ourselves...The Cairngorms is an area right in the middle of our transmission area. It is something which along with the skiing industry brings great wealth to the area and employment as well, so it is obviously of interest to us." Alistair Gracie, Grampian Television.

"It is an extremely visual story with all the mountains and scenery and the wildlife as well...you've got mountain hares around Ptarmigan and a whole manner of interesting things. You've got a very, very good story because you've got people who feel passionately about the subject." Respondent 1.

For further information please see Appendix XII.

In discussing the visual qualities of the story, the above respondents have also indicated that the issue can be covered with a human interest angle. The employment which may be created if the development takes place and the environmentalists who put forward a strong case in opposition to it are both angles which these journalists maintained would become apparent in their coverage (see pragmatics of evaluation, p 182). Gracie also states the geographic relevance of the issue to the audience, again, illustrating that the journalist is tacitly influenced and constrained by the audience or readership. This point is not exclusive to the broadcast practitioners. It is a view echoed by the press, as the following evidence suggests,

"You've got the environmental considerations and we have readers in this area who have a stake in maintaining these because they have big houses and they like the view. On the other hand, you've got the promise of jobs - so in a situation like this you've got an unholy alliance of campaigners and middle-class homeowners which is a pretty powerful lobby. As far as the story goes it would be a good one for us." Carlos Alba, The Press and Journal.

Regardless of what type of news organisation journalists are affiliated to and regardless of what issue is to be covered, in journalistic terms practitioners always follow the human interest angle first. This is a standard rule which is used repeatedly.

8.4.3 Negativity as a News Quality

News values are of differing kinds. Unlike the other two criteria (geographic and human interest) negativity is not a rule which journalists apply to an issue to test or assess its newsworthiness. Rather it is a quality which is generally although not always, inherent in a hard news story. It is not a recognised, necessary prerequisite for a news issue but it is a phenomenon which is almost synonymous with newsworthiness. Three out of the five news stories presented to journalists can be classed as negative (1, 2 and 5), the other two can be categorised as neutral. It is interesting to note (see fig 12, page 152) that cases 3 and 4 (Cairngorms and Overfishing) are the scenarios which appear most often towards the lower end of the journalists' hierarchy i.e. the least newsworthy. This is despite the fact that the environment correspondents rate them as being the more important issues.

Some of the respondents referred to the campaign Martyn Lewis launched about good news which attempted to challenge the ways in which the media tend to concentrate on negative news. But many of the journalists, interviewed, indicated that the reason for the news being so negative was to satisfy the audience or readership's desire for tragedy and disaster.

"Newspapers tend to pick the negative aspects of an issue. I don't think it is a deliberate thing. Nobody's interested in things going along normally and there are far more things go wrong than go outstandingly well." Graeme Smith, The Herald.

"Probably in over 50% of the cases....it is bad news rather than good news. A good story is someone who has been killed in a car crash or someone who has died in a helicopter tragedy. I would say that 70% of our stories are written about the

negative things. People want to read about other people's misfortune." Ian Lundie, North Scot.

The absence of an audience study makes it impossible to come to any conclusions about whether this is true or not. The respondents may be justified in attributing negativity to the consumers' desire for social trauma, however, this also may be just a myth perpetuated by the media to ensure the commercial success of news. This also forces us to beg the question, if over 50% of issues are regarded by journalists as being negative and therefore newsworthy, do reporters regard 'neutral' or positive stories less seriously? Is this why environmental stories, which do not frequently possess dramatic or tragic elements, are often relegated to the lower parts of the schedule or paper? The degree of negativity within an issue can apparently also affect how journalists write the story.

"From an operational point of view... I can't get worked up about a good news story. Instinctively, it doesn't interest me so...unless it is something like a big jobs boost but even in that I don't enjoy writing about it in the same way I do, writing about disasters and tragedy. If you are asking me whether as a newspaper person would I concentrate on the negative aspects then I think the answer is undoubtedly yes. Good news stories are termed under the generic term "puffiness". Anything which is verbose or is not hard news is just "puff". Carlos Alba, The Press and Journal.

In effect, then, negativity is a factor which can strengthen or harden a news story. Good news stories or neutral issues are regarded as 'puff' or 'soft' and are rated as having less value or credence, in news terms. Case 2 described the scenario where an eight year old girl died of an asthma attack and her parents blamed the increased amount of air pollution caused by traffic fumes. Respondents commented on the fact that the story was hardened by the girl dying. There was disagreement, however, amongst the sample of journalists, as to whether the predominant news angle is the fact that the girl has died or the fact that her parents are starting a campaign about the problems of air pollution and respiratory diseases. Some believed that it was one and not the other, some decided—that both factors were of equal importance and made the story newsworthy, others believed that there was no story because of the tenuousness of the link between the death and the levels of pollution. There were no significant differences between the

broadcast and the press reporters, however, non-specialists were more likely to disregard this issue as unimportant than were the specialist journalists who recognised the relevance of the story as being one of the top environmental concerns.

"The fact that the child has died does make it more newsworthy and the fact that her parents are going to start a campaign makes it hugely newsworthy...The problem with a lot of environment stories is that you are always talking about such long time lags. It's "if nothing is done then in ten years time we could have the following results". Who cares what's going to happen in ten years time." Respondent 2

This respondent underlines the fact that, again, one of the qualities or values which changes information into news is "immediacy". However, this is one news value which respondents implied rather than stated. News dates quickly, and this may be a reason as to why the environment is regarded as a soft issue - because it takes time to develop. This point was illustrated by non-specialists reporters who indicated that the issue is made relevant to the audience or readership through the fact that the girl has died.

"Because it is topical and relevant, this would be a good story...especially because you have got this dry, rather drab link between air pollution and asthma which is a good story but it doesn't grab people's interest. Then you've got an eight year old girl who's died...[which] is the hook on which you can hang all that scientific debate, that you've probably given one or two paragraphs in the past or maybe a health feature. You've suddenly got a news hook for it." Tom Little, Edinburgh Evening News

The issue is dressed up with drama and tragedy (see constructional/interpretive) but the story is strengthened because the child has died. This point is echoed by another journalist.

"If they had said, "our daughter isn't very well because of increased traffic problems", yes we might consider it, but if they say, "our daughter died because of increased traffic"...it gives it a strength that it might not otherwise have had." Alistair Gracie, Grampian Television.

Several of the respondents stated that the story is too weak to be used as it stands. One journalist explained what factors would strengthen it, as the following evidence illustrates,

"It is not a news report because it is not a news story. It has an element of a feature about claims that pollution is exacerbated asthma problems and endangered life...Basically, I could make a good story out of that but and it sounds very callous to say but I would prefer to get somebody else who had died where the doctor involved has said that there was a direct link. This is usable but it is potentially shaky. The issue's a good one, and there's a lot of concern about it". Respondent 1.

Negativity may not be intentionally emphasised by journalists, but it is nevertheless one of the main factors which highlights stories' potential newsworthiness.

8.5 Relationship of News Values to Writing

The purpose of this section is to demonstrate that the rule categories are all integrated and are used in combinations by journalists. When reporters are writing their stories they are still applying editorial and evaluative rules. The categories evaluative and constructional influence each other because journalists construct the news according to their perceptions of the news values perpetuated by the organisation. Respondents expressed the idea that the way in which they write is curtailed or constrained by the news values of the paper or institution. Evidence from the T.I.D. sessions with journalists substantiates this.

"The way I write is in a sense curtailed by the news values of the paper. A tabloid paper would probably give more space to human interest stories whereas we might give more space to a story that has either economic...well for instance the Cairngorm Chairlift story scenario that you put forward....that would probably make three paragraphs in The Sun or The Record if it was used at all and a paper like The Scotsman or The Herald would probably give far more space to it, looking at the jobs versus the conservation issues, looking at the background to it, speaking to the people involved. In a sense The Herald's news values are different from The Sun's news values. I mean that would be seen as a reasonably important issue for Scotland, where you put the interests of tourism raising revenue and job creation before the possible long term impacts of conservation but a tabloid is unlikely to devote much space to that." Elizabeth Buie, The Herald

"The way I write is probably curtailed by the news values of the paper. After a while you don't notice it, but yes, the values of the paper...our paper is a local...regional paper so you have to content with that. But the values are more or less the values of the people in the North East of Scotland...whether you believe they read The Press and Journal because it reflects their values or whether you believe that The Press and Journal shapes their values... You're instructed or it is made clear to you what kind of values your stories should be reflecting. If I went in with a preconceived idea of what was important and what wasn't and what represented the news and what didn't and it conflicted with what The Press and

Journal as an institution believed, then my stories wouldn't appear." Carlos Alba, The Press and Journal

Additional evidence on this subject can be found in Appendix XV.

The last respondent admits that after having worked at the institution for a reasonable amount of time, journalists are no longer aware of writing in a particular style and this comment underlines the fact that many of these rules are tacit.

Through the repetitious constructional procedures (see chapter 10), inherent in the news process, the news values of the organisation are constantly reinforced and become the socially accepted norms of the readership or broadcast audience. Some of the respondents believe that the values of the readership and therefore their perceptions of reality are shaped by the newspaper/broadcasting organisation. For example,

"People's general understanding of most things is what they read in the newspapers and if that's slanted in some particular way then you are affecting a large section of public opinion." Carlos Alba, The Press and Journal

Values are perpetuated through the journalistic rules or procedures and the news has to fit into the narrow definitions set by editorial and publishing policies. Due to the fact that these values are implicit in news construction it can be suggested (for there is no concrete evidence without an effects study) that readers/viewers/listeners receive a partial and fragmented view of environmental reality. Some of the respondents stated that news is not abstract but is constructed within a narrowly defined context by people who make conscious decisions as to what will make news and what will not. Furthermore, it was suggested that these practitioners subjectively prioritise and categorise news for the readership. The fact that a story is small does not necessarily mean that there is a lack of information about the subject. Someone has made a conscious decision to limit it to a particular length in order to fit in something else which in their opinion is more important in terms of newsworthiness. Case 5 is rated as the most important by respondents but ironically the human element which they maintain is the most important news

value is indirect in this scenario. This is due to the lack of individuals (victims) involved. The story stands as the strongest because of the potential environmental damage which might ensue and the dramatic re-telling of the event.

The relationship of news values to writing or construction is explained clearly and honestly in the following quotation from one of the respondents.

"...there can be two court cases but there will be a tiny factor about one which will make it more newsworthy. For example, two drunk drivers - one is a lawyer and one is a bus conductor. We will follow the lawyer because he is a lawyer but not the bus conductor - yet they will be exactly the same - two people who have been caught drunk driving. The fact that one does one thing for a living and the other does something else shouldn't come into it but it does. Again that has a lot to do with the values of the paper." Carlos Alba, The Press and Journal

News values, therefore, affect the way stories are written but it is also evident that the personal views of the editors have some bearing on the construction of news as well. Some of the journalists pointed out that the editors at certain papers will include stories on topics which interest them specifically.

"It's a good story. It's a very straight forward one. It would probably take a trick with some of our customers but it's not one which would require a great deal of thought nor a great deal of time. It's easily written and the issues are pretty black and white." Ian Lundie, North Scot

How do journalists and editorial staff know what makes a newsworthy story? They possess what they call news sense.

8.6 Journalists' News Sense

News practitioners all appear to possess a quality which they use to not only select news stories but also to determine the strengths and weaknesses of issues. This news sense may be partly inherent in an individual journalist's nature (as respondents suggested), but it is more likely to be a learned phenomenon due to the fact that the journalist develops it over a period of time on the job. This evaluative ability which is shaped and influenced by the organisational and editorial

policies (see chapter 6) becomes implicit in the working practices of the journalist. News sense is, therefore, the ability to evaluate an issue and estimate its newsworthy potential. This quality is tacit or part of the news process which reporters do not think about but carry out automatically. It becomes like this because of the repetition of the same standard strategies or rules which are inherent in the journalistic process. The news value rules, discussed earlier are, therefore, implicit in the routinised practices common to journalism and when they become tacit after a period of time, they are regarded as news sense. This underlines the fact that journalistic news sense is a socialised and therefore learned phenomenon. Practitioners from the sample found it very difficult to rationalise about news sense and some could not describe the phenomenon, indicating something of the tacit nature of these values,

"It is something which is learnt and something which is instinctive. I think you can't wholly learn it, you must have an instinct for news. For example in case 5 - the train, if you didn't have an innate news sense you might think that the fact that seals were being affected was the top line and over look the fact that humans might be affected." Respondent 2

News sense is subjective in that journalists evaluate potential stories from within the context of the organisational norms. It was evident from the T.I.D. sessions that respondents evaluated issues in completely different ways and that they assessed the factors which would strengthen a story in different ways also. A great deal of evidence was gathered and coded and this in turn revealed those things journalists seek to strengthen a story. For example all the respondents stated that before being able to discuss the operational rules pertaining to case 4, respondents would have to work from the premise that a report by marine scientists had recently been issued prior to that of the press release. Case 4 was not regarded as being a hard news story by the journalists, due to fact that it was not a new issue. However, it was evident that specialist correspondents and local i.e. North East non-specialist reporters were more likely to treat it seriously as a potential news item. The researcher deliberately excluded the mention of a report or official document, in order to assess how journalists would test out the unsubstantiated claims that stocks of fish in the North Sea were being depleted by overfishing. The evidence suggests that all respondents would cover the story providing it was strengthened by the release of a

scientific report. Reporters pointed out that careful checking is done (see chapter 9) to investigate the origins of the press release claims. Furthermore, it is obvious that journalists approach and regard scientific researchers differently to environmental groups. They have an apparent implicit faith and respect for the former which is not replicated for the latter, a view also stated by Friedman (1986).

"This is kind of a difficult one to cover from a news point of view because you have to assume that there's some sort of news angle to this. It's not actually explained. If it is the case that some definitive study has said that stocks of haddock or cod are declining to the point at which the environment is damaged...then it's an interesting story. If on the other hand it's Greenpeace or WWF saying that stocks have declined to a point at which the environment is damaged, then, it is a slightly different story." Auslan Cramb, The Scotsman..

"This is a good issue because fishing is a main issue around here, so I would assume that this would develop from a marine scientists report. There are a few stories - environment, political, unemployment etc. but these are all might bes, could bes, so they're not as hard as if we had heard that a factory in Peterhead was closing and having phoned the guy up, he says its down to overfishing. That would make the story stand up better." Jonathon Moore, Northsound Radio.

For further information see Appendix XI where other respondents quotes are listed.

A fundamental result, from the T.I.D. sessions, was that respondents evaluated each scenario in the same way. Similar patterns emerged as they revealed which factors would make the issues more newsworthy, for example,

"...if this happened in the North East where two people were on the verge of death because they had eaten food or they were working with crops which were sprayed with pesticides, then on the face of it, it's a good story and depending on developments it could be a great story - like for example if the pesticides were banned in this country or other countries that would be even better...that's the sort of thing that we would be looking at. The different lines we wouldn't get in one day. The first thing we would do would be to go for the human angle, to get photographs of the people". Carlos Alba, The Press and Journal.

In describing the possible development of the scenario, this respondent mentions all the main news values discussed above - geographic relevance, human interest and negativity in which illegality is included - all qualities inherent in newsworthiness. Negativity is implicit in the comment and the respondent uses the phrase, "on the verge of death" which is not stated within

the scenario. It is unclear as to whether the respondent is simply hypothesising about how the issue would be strengthened if the case was serious enough to have a reference to death or if he would interpret the story at this level. Other respondents have indicated that issues are prone to being over emphasised i.e. amplified by journalists because they are directed by editorial staff in this way. Journalists are trained to expect the worst possible scenario and to overplay "disaster" situations rather than underplay them. This happens despite the fact that journalists have a keen sense of social responsibility (see sources, chapter 6). The researcher was told that it is easier to admit in retrospect that a situation turned out to be not as dangerous as estimated at the time, than to have covered an issue moderately and to find out that the incident was worse than anticipated. This happened during the Braer oil spill where the media coverage escalated with saturation campaigns which led the readership or audience to believe that the situation was worse than it was. Evidence emerged to support this from the discussion of case 5,

"...it has just happened so we wouldn't at this stage know how far it was going to go. It could turn out to be like the Braer...not too much of a disaster after all but you wouldn't go on that basis...you would assume that it was going to be bad." Tom Little, Edinburgh Evening News

The assumption of news editors that an oil spill is of the proportion of the Exxon Valdez or Braer has been reinforced by this rule of overemphasis as opposed to underplay. Journalists think about issues in terms of what similar stories they have covered before and this reinforces how they approach them.

Another factor which emerged from the data was the apparent indiscriminate use of the term "disaster" (a key finding in the Braer case study). The majority of respondents used the term casually when referring to the case (5). Academics, historically, have accused the media of making value judgements through the language used to write articles (Bell, 1993; Fowler, 1991) However it is possible that journalists refer to situations as "disasters" because this is a label which has been assigned not only to a particular type of story but also to a particular way of reporting and consequently this has become normalised through its repetition over time. This

together with the overemphasis rule of reporting "disasters" has been reinforced and routinised by the socialisation of the newsroom. Breed's (1955) hypothesis suggested that newsmen learned the policies of the organisation by osmosis and that these policies were reinforced by rewards from colleagues. This has been examined by Donahue (1967), Tuchman (1969) and has been previously examined in the sources of the rules (chapter 6).

Many of the journalists did assume that case 5 would be a "disaster", and seemed to have differing perceptions of the scope and magnitude of the incident,

"This is a major, major story. It's almost another Tay Bridge Disaster. It's a bit like the Braer in a sense. You've got contamination in the atmosphere, so again, you would concentrate first of all on the effect on humans and secondly on the effect on animals." Ian Lundie, North Scot.

Very few of the respondents (only two) did not refer to the case as a "disaster" (and these respondents were from the same organisation), as the following evidence indicates,

"...it goes back to what we were saying about the Braer. People were saying it was a disaster but we had not said that ourselves. It was a "massive oil spill". If we were explaining about the effects we would explain that seabirds were being washed up with the oil and that later seals appeared to be affected...but then again that is the difference between fact and judgement...we all have our views and we might think it is a disaster but we would not report it as being a disaster...so we all have a feeling for how we should approach the story." Respondent 1.

It is clear that this type of policy is dependent on the organisation and is reinforced by editorial practices. Case 5 is different to the other four scenarios. It is a situation where all media would cover the event in spite of their differing news values. This is a definite example of news coverage overtaking ethics or training as the following evidence indicates.

"The last one is definitely a good story. This is the kind of story which would get the pack out...which probably hasn't been true of any of the ones before. There would be individual interests in those ones [previous cases]. This one - all the press would be there." Tom Little, Edinburgh Evening News

"There would be no policy considerations at the paper about stepping on anyone's toes. Clearly in a situation like this...in "disaster" situations, the kind of normal operations of politics go out the window." Carlos Alba, The Press and Journal

It is one of the 'hardest', if not the 'hardest' types of story, which consequently assigns it to top priority listing on the news agenda. Respondents indicated that relevancy, whether it is geographic, social or cultural is one of the most important news values. However, in cases like this normal news values are suspended.

The more relevance it has to more people, the more important it becomes. This is a good story and it affects everyone. This is an environmental disaster which people are interested in because it happened in Dundee, but it might have happened in Aberdeen harbour - it did happen in Shetland. There is a relevance and where it happened is almost immaterial." Jonathon Moore, Northsound Radio.

This is an example of the same kind of reasoning as occurred at the time of the Braer. Respondents contextualised this scenario (case 5) with the Braer (Appendix VI) in the same way they contextualised the Braer with the Exxon Valdez.

"You would just get a whiff of it [the story] and people would say "oh it's another Braer or another Exxon Valdez - let's get someone up there." Tom Little, Edinburgh Evening News.

Normal editorial policy is apparently suspended in this situation and new criteria apply (see editorial rules). News values too are seemingly disregarded; however, it appears that operational rules e.g. contacts, interviews and constructional rules eg writing the story are constant no matter what the situation is.

8.7 The Pragmatics of Evaluation

Tuchman (1972) stated that the routines of reporters were affected by the constraints of time ie deadlines and space ie news holes in newspapers and schedules. This is more apparent in the broadcast industry where news appears to be more superficially covered than in the press, which has both the time and the space to include greater depth of analysis. News values are bound to be affected by pragmatics such as these, as the following evidence substantiates.

"...because it is a picture medium we are looking for a story that lends itself to pictures. If you are producing a half hour magazine what you cannot do is start with a talking head, have a talking head all the way through and end with a talking head. We are actually looking for stories that lend themselves to visuals, which doesn't mean...that we would ignore a story that would lend itself to visuals. We try as much as possible to illustrate them and try to break it up and make them more interesting and to hold the viewer's attention." Alistair Gracie, Grampian Television

The respondent continues by distinguishing between the operational parametres set by the press and those set by broadcasters.

"If you worked for the Press and Journal and the five stories break at the same time as they break for Grampian Television, the difference is that we've got a lunchtime news and mid afternoon news and 6.30 programme. We've got to make our decisions and react to these decisions within the next few hours, so that's why early decisions are required, whereas that paper is not on the streets until 7.00 the next morning. They've got an awful lot of lead up time to make decisions, to visualise stories, to develop stories and so on. That is a luxury that we don't have. If we did have it we might find it difficult because our training is in something instantaneous." Alistair Gracie, Grampian Television.

It is evident that the broadcast news team is picture led and have to have a greater awareness of how a story will look or sound, than the press. All the broadcast respondents stated however, that it is not essential for an issue to have pictures before it is considered.

"I don't knock down a story on the basis of what are we going to do for pictures. If it...a story is a story and if it has got good pictures with it then it will stand anyway and be sufficiently riveting...I find this with politics. You get a lot of good political stories but all you get are shots of the same politicians. It is radio with pictures. You don't get people knocking it off the top of the running order just because it hasn't got dramatic pictures with it" Respondent 2.

With a radio broadcast the language has to compensate for the lack of visuals therefore a radio news bulletin's top line (headline) has to stand out as being more dramatic than might be found in the press or on television.

"...it gets people listening to things and that's always what you've got to do. Your first line of any story has to to grab people. You have to get the strongest line." Jonathon Moore, Northsound Radio.

The data gathered from respondents through the T.I.D. sessions has been coded using an ethnomethodological system which has allowed for the identification of certain types of rules.

These rules have been collated and described by the tertiary stage of the news process model (see chapter 10 for complete stage). The following section explains the integration of the evaluative rules.

8.8 Tertiary Model

The evaluatory category has been concerned with the initial assessment of the environmental issue. The tertiary stage of the model (see following page) describes how the journalist approaches the issue from within particular contexts. These contexts are defined as news values, for example, human interest, geographic relevance etc. Journalists evaluate environmental issues differently according to, the policies of their organisation, and where they are positioned geographically in relation to the issue/incident. It is with this knowledge that they can classify or categorise the stories in news terms eg whether something is hard or soft, developing, continuing or breaking. This leads to assessing the position of the story on the news agenda although it is dependent on the incoming stories on the day. The fact that an environmental issue may also lack dramatic emphasis has a bearing on how newsworthy an issue is perceived by journalists. However, this is only one factor which usually relegates the environment as an issue to the lower end of the news schedule. These types of issue are regarded as soft by the news media partly becuase the environment involves long term scientific research and often little change is appreciated over an extended period of time and partly because even although it is beginning to be realised as a political issue it is still viewed as a populist political issue. It may be argued that the media itself is to blame for the perpetuation of this populist perception because that is the way the environment is covered. The news sense which journalists use to evaluate environmental issues is deeply tacit as are the constructional/interpretive ones. It is the operational factors (see chapter 9) involved in the news process which are less tacit. They are tacit in that the journalists are less aware of the routines involved in the story investigation and of the methods used to verify links for example.

Analysis of the News Process: Tertiary Stage

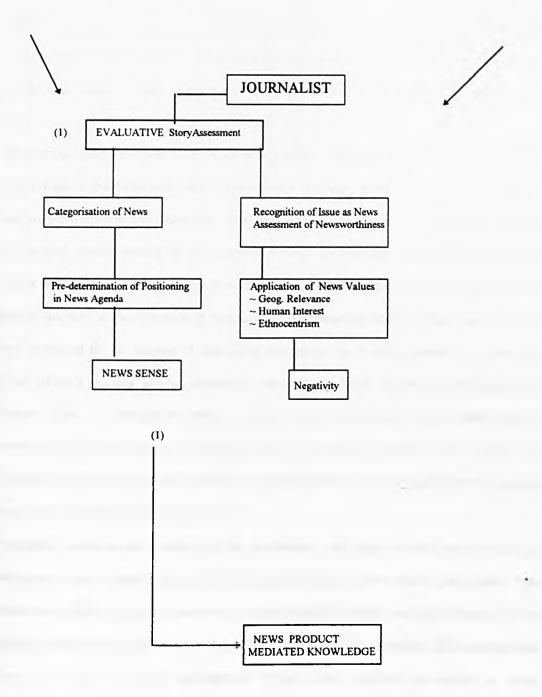


Fig 15 Excerpt from tertiary model: Evaluative Rules

However, there is a greater awareness of the information gathering procedures and the contacts selection process. This is not a subtle distinction highlighted by the model. This chapter has sought to demonstrate, with the aid of the tertiary model, how the evaluative (news values) and constructional (writing) categories are inter-related and how journalists apply more than one set of rules to an issue at a time. This is a point not clearly defined by the model in its 2-dimensional state.

The data gathered during the T.I.D. sessions was coded ethnomethodologically to ensure that all the evidence was reliable and valid. This evidence has been incorporated into the chapter to support the arguments and discussions about the ways in which journalists assess and evaluate the potential newsworthiness of environmental issues. The fact that reporters categorise news stories into different types has been considered, in an effort to demonstrate the prioritisation process inherent in the evaluation of such issues. The important theme of contextualisation has been examined for the purpose of illustrating how journalists evaluate potentially newsworthy issues within a previous, similar, established context eg the Braer, within the knowledge of the Exxon Valdez. The discussion about news value rules was extended to give consideration to news sense. This phenomenon, although described by repondents as innate is more likely, it is believed, to be a learned experience which through the socialisation and reinforcement processes has become mythologised as being instinctive.

Inevitably, journalists are directed by the bureaucratic and organisational pressures of the newsroom, to get as many strong stories as possible for each edition or news programme. The evaluation practices although structured by standard journalistic rules, are also influenced by the limited amount of time and space factors. The pragmatics of the newsroom differ considerably from the idealistic training environment within which reporters are taught to write comprehensive, balanced articles, (the sources of these rules has been discussed previously in chapter 6). The discussion will now proceed to examine the operational rules (such as contacts, interviewing, the news lines which are developed) which are inherent in the news process.

Chapter 9 An Analysis of the Operational Rules

The categories described in the typology illustrate the extent to which journalism is decision based. Reporters are constantly deciding what to cover, who to contact, what information to include and what to reject. When questioned about these day to day operational strategies, however, journalists find it difficult to rationalise how they carry out these routinised decisions because they perform them tacitly. The ethnomethodological coding system was again used to enable the author to identify and uncover the operational rules used by journalists.

This operational category is, like the others, decision based and journalists use strategies to select and locate appropriate contacts to interview and to retrieve relevant background information. It became apparent through the T.I.D. sessions that contacts help to provide the structure of the route or information chain along which journalists travel when gathering information. It was also found that reporters use each other's contacts and further, that once one or two appropriate people for comment are located, the search for additional contacts ceases. This evidence bears out the claims of the preliminary and secondary stages of the model (see chapter 3) which argue that the flow of environmental information is redirected by the news process and that as new meanings are added to this information the product evolves as an interpreted and simplified version of the original. The various stages of the model are discussed within the context of the operational rules throughout the chapter.

The operational aspects of the news process also are influenced by the integral images of the readership which journalists hold tacitly. Journalistic strategies, an inherent part of the operation ie the selection of the news angles (perspectives which dominate the story) which are most important are shaped and constructed taking account of the most influential groupings within the readership, for example in case 1 this is the farmers. These groupings will influence the types of contacts who are approached and the decisions which are made regarding which contacts are used. These operational rules have been added to the evaluative part of the tertiary

stage of the model and are discussed in section 9.6. The tertiary stage is evolving as the rules are uncovered and seeks to complete the communication model of the news process (chapter 3).

9.1 Information Strategies

It became evident during the T.I.D. sessions that, when initially confronted with the cases, respondents immediately summarised the issues ie they described the problems. This was done, at the beginning, before respondents started to say what they would do and who they would contact. It seemed to be a clarification process so that the information contained in the case and background information sheet was logically organised and evaluated in news terms by each journalist. For example,

"The main thing is that it is going ahead and there is environmental objection to it. There is a potential jobs boost but in the [long] term it might be a waste of time because environmentally the place is going to be degraded....You only get that sense when you get the full details of the thing." Paul Riddell, North Scot

"...it's all about access and improving access to the mountains and there's a lot who have very strong opinions about this. You could speak to the Chairlift company to hear their side of it and it would be interesting to know to what extent they are doing it purely on commercial grounds..." Auslan Cramb, The Scotsman

Journalists once armed with this mental image of the situation, can then call on the operational rules which are an integral part of the process, ie they visit the scene of the incident, question the "victims", interview the officials, describe the issue for the paper or broadcast. This research suggests that this initial mental image is refined and modified as the journalist proceeds through the information gathering process.

Journalists described how they intended to research the story ie what factors will be involved, who will be interviewed or contacted and what angles will be followed up. As one of the respondents suggested (see page 193) it is a process which involves taking decisions as the individual journalist proceeds. This underlines the fact that journalism is not only a decision

based profession but also that much of the operational process can be classed as having a snowball effect ie where one line of enquiry can reveal another.

Each journalist's approach to the news issue is different in a subtle way. There does not appear to be a standard set of inductive rules for their approach to and reasoning of an issue. In case 2, for example, some would approach the parents of the deceased child first and others the car manufacturers to challenge them about air pollution. It depends on how a journalist interprets the issue and prioritises the various angles involved. This interpretation in turn directs the contact selection process in that reporters are searching for appropriate interviewees who will substantiate their news angles.

There are, however, some information gathering rules which seemed to be common to all the respondents. The majority of the sample followed routines which appeared to be consistent for all of the cases. These were to visit the scene of the incidents in cases 1 and 5 (pesticides and train) ie the farm and the inland estuary, to go to the Cairngorm Chairlift Company to get an outline of the proposal (case 3), to the parents of the dead child (case 2) and finally to marine scientists who had authored the report on overfishing in the North Sea (case 4). It has emerged that the operational rules for cases 1 and 5 are similar as these are closely related types of story ie disaster/serious incident and require a special kind of reporting (see chapter 8). Cases 2, 3 and 4 initially require the journalists to contact the people involved in the scenarios in order to gain a starting point from which to build the line of enquiry in the report. The following selections from the evidence support this,

"The first thing I would do would be to go to the farm where there have been a few cases. I'd speak to the residents of the farm and presumably they'd have some more information perhaps from their doctor that would lead on to something else." Graeme Smith, The Herald, discussing case 1.

"The first thing I would do would be to go there. I would talk to the people who were ill." Ruraidgh Nicol, Scotland On Sunday discussing case 1.

Snowball sampling is a valid, recognised method which involves uncovering a network of contacts, through a chain formation, having started with only one key person from the field. This is a technique used at an earlier stage of the research (see chapter 2).

"I'd talk to the Chairlift Company to find out what they were trying to achieve and find out what kind of assurances they were offering to limit the environmental impact of the development." Respondent 1 discussing case 3.

"The first person I'd talk to would be the general manager of Cairngorm Chairlift Company to say this is what we are proposing and why we are proposing it." Mark Stephen, BBC Radio Scotland, discussing case 3.

It has been suggested in the discussion about other categories that journalists tacitly contextualise the present assignment with a strategy used previously for similar events. It is suggested that in using the operational rules to construct the news, this contextualising strategy is standard for the information procedures implemented at this point.

"It is quite a realistic [scenario] because I've done these stories in the past about principally organophosphates and the effects that they have allegedly had on others. To do that I've spoken to farmers themselves who have claimed that they've been affected and I invited them to explain the process by which they felt they'd been affected, the time scale, exactly what happened." Respondent I

This respondent suggests that having completed a story on this issue previously he has a mental information strategy already prepared. He knows how and where to start researching for the story, the people to contact, the angles which he has previously covered and therefore the different lines he will take this time. This tacit knowledge is analysed more fully below but it is worth mentioning here to introduce the discussion on journalistic strategies.

9.2 Journalistic Strategies

It has already been established that journalists frequently intiate their information strategies by visiting the scene of the incident (case 5) or interviewing the 'victims' involved (case 2). In addition to this it was made clear by respondents during the course of the tri-lateral discouse sessions that one of the crucial procedures involved in investigating any story is to check the facts which have been given to reporters. This also involves verifying assertions which may appear in press releases.

Press releases are a common method of drawing potentially newsworthy items to the attention of journalists. They often come from environmental organisations and pressure groups and are biased towards their causes. These groups use the media to publicise and gain support for their political agendas (see chapter 1) and it is, therefore, necessary for news personnel to authenticate the statements included in these reports. Thus,

"You would need to get the basic facts. You need to start off at the scene. Go to the farmers themselves. Get basic information from emergency services. They are being treated, for what? And then when you've got thatI'd then go to the next stage which would be to try and speak to the people specifically who had been using the pesticide." Auslan Cramb, The Scotsman

"There are various facts which are here as assertions but before I report them I need to establish whether or not they are true. I would try to speak to the doctors who could give me some sort of reportative analysis that there was a problem. I would speak to vets, definitely scientists, all the specialists to establish whether the animals died of natural or whether it has been caused by unnatural causes." Respondent 1.

"Well assuming this came in as a press release from...it would probably come in as a tip off...but if it came in this form it would probably be from someone who had a vested interest in exposing it. Say it was from a trade union or from a "green" group. The first thing you would do would be to check it out to see if it was true - to see if these people were really ill and if they were in hospital." Carlos Alba. The Press and Journal

"We would certainly need to talk to authorities on the matter to see if any link could be ascertained...but it would be an important thing to stress...that no-one could necessarily define it. We couldn't go ahead and say that this is what has caused it - a causal link - only a potential link exists between the two." Paul Riddell, North Scot

It was evident that all the respondents were agreed on this point and stressed the fact that much of the information received in this manner is presented as claims which have to be validated by either the people involved or the appropriate authorities. These might be scientific experts, government sources, environmental specialists or technical advisors.

9.2.1 Examples of Strategies

Although there are operational rules which are used in common by all journalists eg the use of the library for background information, going to the scene to identify "victims" or contacts, the journalistic strategies which reporters use are generally unique and distinct. Some may arrive at the same conclusions or in the case of a "disaster" the same facts may appear in a number of reports initially, but it is evident that the routes which journalists take when investigating the issue are different. This may be because they use their own subjective reasoning to identify and follow different lines or angles to the story. Further, contacts also direct journalists to specific lines or news lines.

Respondents outlined a variety of different ways to approach and define the story. For example, the following respondent demonstrated how by contrasting the deaths in other areas with the death of the girl in Dundee, journalists can find a new angle on an "old" environmental issue.

"You could look at deaths in other areas - there was an incident in London 1992 ... about the smog and doctors have estimated since that there was an excess of something like about 50 deaths in the London area because of that." Auslan Cramb, The Scotsman

One trend which emerged from the data suggests that the operational aspects of the news process, like the evaluative and constructional/interpretive ones, are also used in combinations with other rules by journalists. Furthermore, it is evident that the information strategy implemented for each story is not always clear cut and mapped out before the investigation begins, as the following quote illustrates,

"I must stress that as you go along...every time you do something it sparks off another chain of thought and you start to channel your enquiries. You'd phone the Forestry Commission, any farms or houses or shops or hotels along the route that might...say that this is going to ruin the tourist area...the tourist season anything like that." Graeme Smith, The Herald

It is only, therefore, when the story is underway that some angles will present themselves. It is also apparent that there are a number of different story routes which can be taken and each time the construction of the end product will be unique. This is why no two journalists research or write the story in exactly the same way. However, journalists do visit similar places and interview many of the same contacts for stories. The operational aspects of the news process underlines the subjective nature of journalism. Taking this into account it has been seen that in some stories angles present themselves in a more apparent way and these are covered in similar ways by most journalists. Similarly there are some which are not so obvious. The latter are discovered and pursued by some journalists and not others. This is where some coverage differs.

Cases 3 and 4 were stories which were tackled by respondents in similar ways. For case 4, many of them decided to follow the story's main line first which was that fish stocks were depleting in the North Sea and then the human interest angles which demonstrated the implications of this on the fishing industry and its workforce.

"I think that the main line of the story would be the fact that the fish are depleted and the fact that the fishing community up and down the coast of the North East of Scotland are going to suffer massive unemployment." Ian Lundie, North Scot

"...your main report would have to be that fish stocks are depleting...why is this happening? You'd have your experts telling you this and your experts telling you that, whereas the human angle comes in the inside piece. The piece in which you might take a fisherman, hopefully, whose family has fished the North Sea for years, generations and you'd use him or her as a case study to illustrate the problems that this is creating for local fishermen." Tom Little, Edinburgh Evening News

For case 3 the story was a claim and counter claim which is straight forward to cover as the journalists simply reports the comments of each side, balancing the argument. The obvious or overt lines which appeared are discussed below and these are the ones which most respondents admitted to taking.

"The line that I would probably take would be that conservationists are banding together to try to prevent a new ski development in the Highlands and then bring up in the next paragraph, the amount of jobs that would be created and that type of thing." Ian Lundie, North Scot

"I'd speak to the local Save the Cairngorms Campaign to find out exactly what their reservations were, how they justify these concerns, how great their fears were, how substantial would be the damage to the landscape and the habitat and to the wildlife....I'd also want to find out if there was a presumption against planning extension in the local property area. I'd find another area akin to this and look at that and at the impact there was and how many extra people were attracted, what the pros and cons of that were." Respondent I

Case 3 included an outline of the proposal by the Cairngorm Chairlift Company and to investigate the opposition to this development by environmental groups. Other lines demonstrated the implications for tourism and for the economy of the local area.

Case 5, which, in the discussion of the other categories, has been identified as being distinct from the other cases, has again been considered separately. It has already been established that "disaster" reporting is different from routine coverage of issues. Once again, however, the respondents tended to approach the issue from similar angles. This is because in these situations there are greater demands on reporters to communicate certain standard strands of information. These were firstly, what had happened and why it had happened and secondly the environmental point of view.

Respondents divided the coverage into (a) the description of incident and (b) the effects on society and the environment. This was prioritised in an order which is dictated by extrapersonal factors such as the audience or readership (see page 209).

"There would be any number of different aspects to it - the environmental aspect of the birds that are affected and the aquatic life, the health aspects - whether people are affected by it, you know streaming eyes, skin complaints. There would be the...whether the drinking water was affected and then all the other aspects - how it happened, what are they doing to clean it up, whether they were spraying chemicals, chemical dispersants. The [journalists] go into everything - how old the train was, when the last time it was maintained, whether trains like this had had accidents before. What were they doing immediately to ensure that other trains carrying fuel didn't crash whether they were...how Scotrail were responsible..." Carlos Alba, The Press and Journal

"It is an easy story to cover because it's a disaster. It gets more complicated on day two or three where you get issues like should this have been going by road or rail. What were the safety precautions, has there been a lack of investment in the safety side of it. You would start to tease out those kinds of angles. You would be

looking at some of the seals which had hopefully been rescued and talk to the RSPB but dead straightforward." Respondent 2.

The fact that this type of incident is a rare occurrence and the number of angles is less unlike, for example, an ongoing issue like case 3, also has a bearing on how the information strategy is formulated.

The ways in which journalists formulate their information strategies with a view to researching the issue, is complex. In some stories, angles/lines present themselves with clarity, in others they do not. A mixture of operational rules exist at this stage in the process. There are those which are used in common by reporters such as visiting the scene or interviewing the 'victims' first, and there are those which illustrate the diversity and distinction of journalistic operational rules, for example, the selection of different 'experts' and angles to view the situation from. Having examined in some detail the journalistic reasoning behind the information strategies, the work will focus on the information gathering processes.

9.3 Information Gathering

Information is gathered by journalists from a variety of sources. These include among other things personal contacts and electronic databases. In each situation ic for each story, reporters establish the basic facts first. This may mean describing the scene of a disaster eg case 5 or reporting the main issue eg that an eight year old girl has died (case 2). It is only after this has been accomplished that reporters can allow the coverage to diversify by following other angles and related developments—eg the implications of oil pollution on the eiderduck population—or the debate about too many cars being allowed in inner city areas. At each stage in researching a story, journalists are making decisions. These decisions include who to contact, who to interview for comment, how to balance the selection of these contacts, and, which databases to search. Journalism is by nature a decision based profession but it is in teasing out the operational rules which reporters use to locate, retrieve and gather information that—this becomes more apparent.

9.3.1 Journalists' Self Tests

One interesting finding which emerged from the data gathered from the tri-lateral discourse sessions, was that environment correspondents often set up self-initiated tests, for example to test for air pollution. These respondents admitted to hiring equipment to gauge the air pollution levels in order to include extra results in their reports. The purpose was, in some cases, to pad out the story or in others to give the issue a new line. Both broadcast and newspaper correspondents did this.

"In fact you could do[it]...newspapers these days can hire pollution monitoring equipment and set up our own test. This happens a lot, especially local papers. You can hire it for £10-15 and they stick it in the street and say that a test shows X amount of pollution." Auslan Cramb, The Scotsman.

"If there is no-one actually measuring pollution in the street where this girl lived...we can set that up ourselves. Other television programmes have won awards for that so it's not entirely original but it's still quite a good thing to do if no-one else is doing that kind of research and there are quite reasonable ways of doing that these days." Respondent 2

Consequently, it may be suggested that although in theory this might seem like a good idea ic a practical way to gather data to substantiate a news report, in practice, it begs the question, what training do journalists receive in the interpretation of scientific evidence? It has already been established that reporters in Britain do not receive tuition in scientific reporting on academic courses (interview with Carlos Alba). This forces us to consider the amount of expertise journalists can use to evaluate the results of these tests and therefore what conclusions can be drawn about an issue such as traffic density and air pollution in inner cities. These interpretive implications raise serious questions not only about the validity of the scientific information which journalists include but also about the self perceptions which environment correspondents have about their role and ability as subject specialists. What prompts journalists, specifically specialist correspondents, to make this kind of decision? One possibility is related to the pragmatics of the news process. If a story has to be 'padded out' to fit a particular news hole or space in the schedule, the data gathered from this test can be used to fill in the background

information to a news report. This is a decision which is based on the requirements of the editorial norms.

9.3.2 Sources

Information sources are vital to the journalist, providing the necessary raw material for the news construction process. It has already been established that Scottish journalists although reliant on the library as an information depository do not yet make great use of electronic sources (see chapter 4). The library generally provides a valuable support service to journalists in Scotland. However, the quality of the information service does vary between media organisations. The library support in the larger Scottish media institutions eg BBC Scotland and The Herald, may be described as being the vital core of the information network within these organisations.

The secondary stage of the model describes the news process within a particular reporting context and this cross-section shows the sources reporters use and indicates both human and impersonal (points B and C).

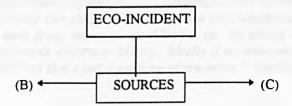


Fig 16 Excerpt from the secondary stage of model

Scottish media journalists do not use electronic methods of information retrieval as much as their larger national counterparts, although policy is being revised. Journalists do not receive training in electronic information retrieval or the availability of electronic sources and this may be one reason as to why reliance is placed on "human" sources rather than on impersonal ones. These human sources include the subject specialists (mainly scientific and environmental) to whom journalists refer for specific types of information. It is evident from the interviews with

both journalists and specialists that each group has different perceptions of the others roles and this is sometimes reflected when the two groups interact (chapter 5).

9.3.2.1 Library as source

A number of the respondents were of the opinion that the benefits of electronic information sources outweigh the disadvantages. It was evident, however, that the sample was divided on this issue into those who were unclear about the usefulness of electronic retrieval tools (having never been made aware of such aids) and those who were frustrated due to the fact they were denied use of them. Those respondents who were familiar with this type of information technology discussed it as follows,

"These days you can get a fair amount of information from computerised library systems...which give you access to large amounts of journalists and newspapers as well. We'd key in "pesticides" and see what comes out on a story and it's one you don't have much expertise in.

"We don't unfortunately use electronic sources of information. Not because we don't want to but because we don't have access. The height of the electronics we have...is a system which is linked up to Mercury... our stuff goes down into electronic mail boxes and everything we do is retained on that system...so we can go back and look at our own stuff. So if we'd done a story about rape seed oil in the past and we were doing one now, we'd look it up. So that is an electronic source. It's a small scale electronic library. Ideally if we were up and running, we'd have PROFILE but that's just a question of resources." Paul Riddell, North Scot.

This last respondent suggests that his organisation uses a small, self-contained, electronic depository. This is used by staff to search for stories written previously on a relevant and current topic by themselves ie personnel at the agency. This begs the question of information recycling as proposed by the communication model (see Chapter 3) which occurs when newspaper articles are divided into cuttings which are thematically arranged in the library or are transposed onto electronic format and to which journalists refer back in order to retrieve background information for their current articles. This is discussed more fully below.

Several of the respondents during the T.I.D. sessions indicated that they either used or desired to make use of FT PROFILE an online information service which contains international news and current affairs files, including newspapers like The Daily and Sunday Telegraph, The Herald and The Observer. Many of these are full text, meaning that the files are complete transcripts of the newspapers. None of the respondents are able to get personal access to PROFILE and have to use the library staff as intermediaries.

"...[checking] something like [Lurchers' Gully] you probably won't need to get the library staff to do it for you. I could do that through our own library system as I have access to it. I wouldn't need to go into FT Profile for it. We have our own files on Lurcher's Gully. I can't do an FT PROFILE search from here. I can only look through The Herald and Evening Times back cutting - what's in our own library system. We can't get into other newspapers' files so that's why the library staff have to do it for us." Elizabeth Buie, The Herald.

It is a resource which is becoming more widely used in the larger, British national newspapers and broadcast organisations but which is relatively unknown to journalists north of the border. Evidence received from interviews with Scottish media librarians indicate that this is perhaps about to change (see Chapter 5).

9.3.2.1.1 Library Context

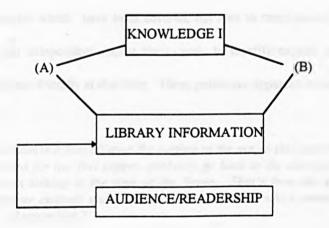


Fig 17 Excerpt from preliminary stage of model

The cross-section of the preliminary model describes the "internal cycle" discussed below.

It has already been established (see chapter 4) that the end product is filed in the library for future reference. Newspapers are not kept in their entirety but are dissected into subjects. This selection process might be seen to be influencing future news construction due to the "recycling" of information which allows journalists to refer to each other's work. How reasonable is it to assume that the same information is therefore perpetuated through this internal information cycle? The problem is perhaps not wholly concerned simply with the information itself but rather with the journalists' information retrieval strategies. For example, reporters looking for material on the Braer for background to an article on another oil spill, can influence the construction of their story by referring to the same particular journalists' work. More specifically, one journalist might persist in underestimating the disasterous proportions of a nuclear accident like Chernobyl even when the occurrence deserves greater severity. If this material is retrieved at a later date as background when this incident has been forgotten this could influence future news construction by perpetuating a myth. It can also be dependent on how selective or comprehensive the information strategy is. If, for example, reporters look at the earlier coverage of the Braer which tried to demonstrate how irrevocable the damage to Shetland's environment was as opposed to the later news stories which reversed the preliminary coverage, then this selection will influence the construction of the news story. Journalists do consult library files for previous stories which have been written on the issue. This is not only to check the angles which have been covered, but also to check facts (these are supposed to be checked by an independent source also) and to identify experts or interviewees who were presumably press-friendly at that time. These points are apparent in the following statements,

"It will cause a film all over the surface of the sea so this could be very dodgy but we'd look for our fuel expert...probably go back to the cuttings a bit and find out who was talking at the time of the Braer. That's from the library - go to the newspaper cuttings under "oil pollution" and see which names come out of the hat." Respondent 2

[&]quot;...other asthma sufferers have died obviously - how could they have claimed that the death was from air pollution - I don't know I'd have to check that with our library...our BBC library to see if they'd come across anything before. I wouldn't want to, for example, repeat a story wich had been done before at some other time, perhaps several weeks or months beforehand, unless it was to

demonstrate a claim or a growing trend or to develop the issue into a feature rather than a simple report of the events." Respondent 1

"You might get on to local community councils up there and you'd look back at cuttings for things such as Lurcher's Gully. You might find people like that who have complained and why they have complained and might get information about why you should or should not have this development." Graeme Smith, The Herald.

The above evidence substantiates that in effect, journalists do consult the library of old newspaper cuttings to check for angles or stories previously completed on a particular issue, as proposed earlier. This supports the hypotheses depicted by the preliminary and secondary stages of the model (chapter 3). Further, it underlines the point that journalists do re-use information strategies to research the project and that often the information which has already been mediated (KNOWLEDGE II) is redisseminated through the new product.

9.3.2.2 Contacts

"...a contacts book is the journalist's life blood." Paul Riddell, North Scot

This sentiment is echoed by some of the other respondents and practitioners turned academics such as. Harris (1987), Boyd (1990) and Hausman (1991). This fact that journalism is so decision-based is further underlined by the strategies involved in selecting contacts. The selection of interviewees for comment is carried out in similar ways when journalists are reporting on the same story. When reporting on environmental issues, the contacts to which journalists turn are mainly scientific. Among the other groups of people targeted by reporters are those drawn from government, industry and technical spheres. "Victims" are often interviewed by journalists first because they can be the centre of the story - the key characters. These are people who are not usually specialists (experts) and who are interviewed by journalists for comment in a capacity different to that of the other contacts to whom they turn. The 'victims" are the actors who provide the human face on the issue and allow the audience a point of interaction with the text. They are the people with whom the journalists make the first point of contact, for example the ill workers in case 1, the parents of the dead child in case 2 and, if

case 5 had had any casualties, the injured parties would take precedence over the details about the train.

This matrix of contact groups is best illustrated in the following diagram,

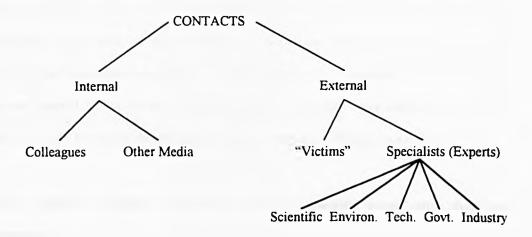


Fig 18 Diagram of journalistic contacts

9.3.2.2.1 Internal contacts

It has already been established that the media monitor each other constantly ie broadcasters scrutinise the papers and newspapers survey the news via TV and radio. This is in part a consequence of differences in the logistics of the media. Radio is the fastest producer of news and can communicate an issue more quickly than television and newspapers. Consequently television and the press monitor radio before each other. This in turn underlines the fact that there is a "recycling" of information due to this continual referral procedure which takes place within the news process. This has been depicted by the secondary stage of the model (chapter 3) and has been substantiated by academics (references) and practitioners alike,

"They are probably likely to have called a press conference or maybe the fishing correspondent from the Press and Journal goes on and says I believe you are doing something and they say "yes we are just about to complete the study. We know what it is all about" and then we think it is a good story and we might pick up on it from another outlet....It may be that Grampian or the newspaper would run with it first and the beauty of what we do is that people will not be watching the TV." Jonathon Moore, Northsound Radio

"One of the things you probably do a lot on these stories - you are in the office and you watch television, listen to the radio and read the evening papers." Graeme Smith, The Herald.

It was suggested earlier that radio is probably the fastest type of media in its ability to broadcast breaking news first (eg this was the medium which initially carried the Braer story). However, an important point worthy of due consideration—is that the speed with which the news is constructed and disseminated depends on newsworthiness of the incident. The fact that the Braer ran aground off the coast of Shetland, makes the incident newsworthy to the Scottish media as a whole, but also makes the grounding more relevant to Shetland's media.

9.3,2.2.2 Scientific contacts (specific to areas of scientific arena other than the environment)

Many media organisations have policies which stipulate what journalists should or should not do. These can be ethical issues or logistical issues for example who to contact or refer to. For example,

"These full time journalists will be supplemented by specialists adding their own skill and expertise in such areas as national and local politics, farming, industry and commerce, energy, fishing, sport, economics, international affairs and legal matters. This network of experts, continually reviewed and updated, will be used on a regular basis." Grampian Television

The above is an excerpt from the proposal put forward by Grampian Television for their licence renewal in 1992 and reinforces the importance of experts in the operational part of the news process, as determined by the organisation.

It was evident both from interviews with journalists and also from interviews with scientific specialists that each group views the other from a different perspective. Both have very different professional ideals so it is not surprising that disagreements arise between the two (chapter 5).

It is argued that the relationship between the scientist and the media influences the operational aspects of the news process. The journalist's perception of the scientific expert is of a contact who will add credence to the news report and therefore to the reality being emulated.

It has already been established in Wilkinson and Waterton's (1991, p53-56) report into the public's attitude to the environment in Scotland, that the audience looks for guidance, in environmental and scientific issues, to the media, as this is the main source of available information (see also chapter 1). The media contacts scientific experts to refer to for their knowledge and expertise. It is the opinion of experts and journalists alike that the media require scientists to give their stories authenticity and validity.

Scientific or environmental information is pluralistic and complex. It is highly technical in nature and consequently it is difficult for the lay person ie individual without a background knowledge of the subjects and their terminology, to understand. Without this understanding it is impossible for the lay person to use and apply the information effectively.

Journalists act as intermediaries between the environmental information and the wider social community. The relationship between journalists and scientific specialists influences the type of information journalists retrieve. Further, the scientist acts as an intermediary between the environmental information and the journalists. The scientific expert interprets the information by explaining technical concepts to the non-expert (journalist). Similarly, the journalist interprets the scientific information for the lay person. Hence, the hypothesis of the research, that information changes as it is retrieved, interpreted, and disseminated, is underlined (chapter 3, 5).

The journalists revealed through the T.I.D. sessions that they are aware of the problems associated with the communication of science (see chapter 10),

"People are unlikely to go back and read something four times to understand it so what we would probably do is go and ask a scientist who is an expert in the area to try and explain it in layman's terms. So rather than me misinterpret it -1 would rather ask the scientists themselves to put it into simple terms." Elizabeth Buie, The Herald.

"I'd probably want to speak to individual scientists because you've got...all this information that I'd want explained. You know from the point of view of transposing it into reasonable, readable newscopy. I'd have to be able to understand it myself first. So rather than go through a medium of a press officer I'd probably want to speak to the scientist himself, so that he could explain what all these chemicals are, what their uses are, how dangerous they are and how...what are the possibilities that these are the causes of the illness." Carlos Alba, The Press and Journal.

"I would phone the universities' press offices and try to get them to put me on to someone who could explain all this....make it so that I can understand it, so that I can write about it." Graeme Smith, The Herald.

There is also a lot of evidence to suggest that scientists are high on the list of source priorities for journalists to contact in for example cases 1, 4 and 5. Cases 2 and 3 would be approached differently in that the most important initial contacts are the parents of the child and the chairlift company. However, in cases 2 and 3, the scientific specialists would be likely to be the second priority.

"...once you have spoken to the people at the scene...if they'll speak to you. The next step would be to go to the institutions...scientists, in this case, Aberdeen University and The Robert Gordon University scientists." Auslan Cramb, The Scotsman, case 1

"We'd have to speak to... the scientist would give us the break down of what these chemicals do and if people were exposed to them what their symptoms would be. We'd also have to speak to people who knew how many of these chemicals were used in this particular case and how exposed the workers were." Carlos Alba, The Press and Journal, case 1

It has already been established that during a "disaster" type situation, the type of coverage changes. It has been argued that journalists use a method of contextualisation where they tacitly refer to a template of the specific types of rules of reporting eg the Braer. Within the operational category—there—is—also evidence to suggest that this type of scenario has a particular format. The "disaster" situation is much more highly pressurised in that the news process develops more rapidly and to a greater extent—than usual. A new set of rules take

precedence. In this setting journalists do not have to seek out contacts as often as during other types of story. Environmental and scientific experts converge on the scene to take part in press conferences which are arranged more frequently than in other types of reporting. It is normal in these settings for experts to seek journalists out rather than the other way about.

"Any zoologists or ecologists - anybody you could contact, but these people would probably be around the scene. You wouldn't need to chase them." Graeme Smith, The Herald

One of the operational rules which emerged from this work was that journalists do depend on their colleagues for the identification of appropriate contacts. It was very evident that during this type of story (case 5) reporters are much more dependent on each other.

"You would need someone who is a medical expert who could explain the medical aspects. Out of all these things would hopefully come other contacts. I'd also be speaking to my colleagues as I do all the time - like the Agency (North Scot), who I know you have spoken to....and The Record and The Scotsman. We'd all exchange notes to some degree to find out who they've spoken to - who's the best to speak to." Graeme Smith, The Herald

"There would be a lot of other journalists and you would ask them where they'd been and would swop contacts...we all help each other in that situation, particularly in the branch offices because we all know each other pretty well and one man can't do everything...so you avoid unnecessary work basically." Graeme Smith, The Herald

It is evident, then, that journalists have pools of contacts ie personal sources which are used repeatedly because of their "press friendly" attitude. These "key" contacts exist in all subjects but individuals can be transferred across the disciplines when needed to validate or comment on an issue in a related field. There are definite implications inherent in this action. It may be seen that news is defined in part by the relationship between the journalist and the scientific specialists (experts). The journalist often uses the same contacts for certain kinds of information. It can be argued, therefore, that the selection process reinforces the construction of the news product, for by choosing the same contacts repeatedly the same type of comment is being perpetuated.

The previous respondent made this very clear by emphasising that journalists talk to each other about their assignments constantly and refer to each other for specialist contacts. He also stated that doing this is a way of saving time which is a pragmatic factor of which all journalists have to take account.

9.3.2.2.3 Environmental contacts

It is very evident that specialist reporters and more experienced senior journalists have a much clearer idea as to what contacts are available and appropriate, particularly in the environmental and scientific fields. They can instantly focus on a number of people whom they term as "press friendly" ie people who give comment readily.

"I'd probably...speak to a couple of environmental experts in the field. I know that WWF has got an expert on fishing stocks....so I would speak to them and they would warn me of the dangers and would put forward their ideas as to what should be done. A lot of the environmental groups will have their own strategies/plans for what should be done and this is what they would be lobbying the government to do." Elizabeth Buie, The Herald

During the T.I.D. sessions, specialist reporters were very likely to use the names of real contacts as opposed to their generic occupation titles. For example, "Drennen Watson" as opposed to "a representative of the Save the Cairngorms Campaign".

"Dick Balharry of the Scottish Natural Heritage is always a good moderate [voice] in the sense that he very well understands the need for development and improving the tourism and all the rest of it. Dave Morris of the Ramblers is good but gives a rather extreme anti-view and [he is] someone who also went through the Lurcher's Gully inquiry and remembers that pretty intimately. There's no shortage of people to go to, the difficulty is coming to any firm conclusion." Respondent 2. (My emphasis)

"You tend to get to know who the main experts are in the field and particularly with the environmental movement - RSPB, WWF who are very well respected in that field - so I would speak to the people in the marine lab." Elizabeth Buie, The Herald

It has been mentioned before (chapter 8) that journalists use a tacit form of contextualisation when constructing the news and this is true also of the operational category of rules. When talking about environmental contacts one respondent provided a further example of this,

"You are thinking on your feet all the time. It is like the Braer where you are running about like a nutcase trying to pull it all together. But people were seeking you out at the Braer like Greenpeace. They're telling you "we're having a press conference, will you come to that."" Graeme Smith, The Herald.

The respondents indicated how a new environmental contact was selected. This was accomplished either through an already existing, "press friendly" contact or by phoning the university or conservation body.

"You've got the stuff in the office and you would have your contacts book. You'd phone one that you knew was involved in the environment - you could phone Greenpeace and they'd tell you the man you want to speak to and on it goes. You don't have to search for them. You don't have to have a huge bank of names in your mind". Graeme Smith, The Herald

Journalists approach different groups of contacts in particular ways. They have specific strategies for handling them. Practitioners were quick to point out that because groups use the media to get their point of view across to the audience, they have to be aware of the hidden political agendas which are often embedded in promotional documentation (press releases). This knowledge which journalists possess is not tacit and journalists develop this skill as they acquire experience. During the discussion of case 1, a specialist journalist indicated that Greenpeace and Friends of the Earth are the two pressure groups which are at the fore front of pesticide research and that they would almost certainly provide files of information for the report. However it was made clear that the reporter might not necessarily interview the scientists at either Friends of the Earth or Greenpeace for the story.

"It's probably more likely that finally Friends of the Earth and Greenpeace's names will not appear on the report. But they are a very useful point of contact....we have a kind of understanding and they supply me with information but don't expect as a matter of course to have a name check." Respondent 2

Pressure groups like these, then, do not gain explicit publicity but do manage to indirectly communicate their environmental message to the audience or readership.

9.3.2.2.4 Other Non-Specific Contacts

Medical experts were appropriate for cases 1 and 2. Environmental and political contacts were relevant for cases 3, 4, and 5. It is evident that it is the experts most relevant for the story who will be contacted by journalists. It is this relevancy which journalists look for when scanning incoming information.

"Doctors, physicians, politicians...ask if there has been an increase in asthma. Asthma is one of the few diseases which is dramatically increasing, so you could to a background piece looking at the growing incidents with asthmatics. I would go to the British Lung Foundation and say, "look what do you think about this?" and they would say, "...there is a strong link between traffic and asthma" but they'll also tell you that it's not the only link. We'd go to doctors and the Department of Transport". Auslan Cramb, The Scotsman.

This quote displays evidence of the respondent's information strategy, that is, where he is going to start looking for information, the contacts he is going to use and the reasoning which he is applying to continue and advance the search.

In some cases, respondents stated that they would approach political contacts whether it be at government, regional or local level. For example,

"I'd speak to the Scottish Office fisheries experts. I'd probably speak directly to the press office and they would probably come back at you with comments from them. Very rarely at the Scottish Office do you get through to the experts themselves. They are quite often heavily screened." Elizabeth Buie, The Herald

Journalists are aware and resigned to the fact that often the comments from government organisations are sanitised and disseminated for the media's benefit by the political mechanism. This problem is alleviated by journalists when they talk to a range of contacts from different organisations thereby balancing the news report (see chapter 10).

Two specific conclusions about the types of specialists (experts) which journalists refer to can be drawn. Many of the respondents related long lists of contacts which were presented in no particular order but occurred just as the reporters thought of them at random. Therefore, trying to make sense of the ways in which journalists logically select contacts forces the author to draw this conclusion. Reporters digest the information given to them and in formulating their research strategies, contacts that are easily available, "press friendly", specific to the field etc are targeted. Further, and more importantly, the repeated selection of certain scientific specialists (experts) because of their accessibility has a definite, constructional influence on the formation of the news product. Further, the pragmatics of the situation (see below), forces the journalists to operate under great pressure (deadlines) and this undoubtedly influences the contact selection and indeed the whole information research process.

9.4 Influence of Extrapersonal Perceptions

The evaluative and contructional/interpretive categories indicate that the journalist is profoundly influenced by the audience/readership. However, this influence is less direct within the operational category. It is argued that the news hierarchy is dictated to a greater or lesser extent by the journalist's perceptions of the needs and interests of the audience. For example, in case 5, the approach to the story is prioritised using evaluative rules in that a chronology of facts is ordered first, followed by the "disaster" as affects the humans and then the "disaster" as affects the environment. This demonstrates that each rule category exists in combination with the other two.

The audience/readership does have an effect in that it may be seen to influence to some extent the information strategies which journalists use in covering environmental issues. Specifically, this refers to the ways in which journalists select people to interview. For example in case 1, the respondents chose to interview a large number of farmers, agriculture experts and farming union officials. This is not unusual in that the issue surrounds a farming incident but several

respondents admitted that this line was taken because a great proportion of the readership or audience were involved in the farming industry. This is evident from the following quotation,

"...we have got a big farming readership in the North East and presumably they would be more familiar with these pesticides. I mean we also purely from the point of view of not alienating the readership as well...you know... we'd probably play reasonably safe with this. We'd go to the NFU...the farming union and we'd go to the farm itself. We'd want to know specifically how far we could go in suggesting that pesticides were the cause of the illness...because we've got a lot of farmers that read the paper. We would want to make sure that we could make the link." Carlos Alba, The Press and Journal

Journalists do not simply report news. As they report news and make decisions about how to structure it, they are influenced by a number of factors (see chapter 6) such as organisational and editorial demands, the advertisers, and the audience but also by their perceptions of the audience or readership.

"I'd have to speak to the scientists and so forth to find out what's causing it....newspaper readers would be more concerned with how the people are, what their symptoms are and...they'd only broadly be interested in what specifically caused it." Carlos Alba, The Press and Journal

9.5 Pragmatic Factors of Information Gathering

As with all the other categories, the operational one also is bound by the constraints of pragmatics. Respondents admitted to following a "take what you can get" policy, indicating that they start with an idea of who they would like to interview but realistically acknowledging that their contacts must be the people who can be reached at the time and who are willing to converse with the media.

"In the end you are starting with a kind of wish list. You're looking for a farmer, you are looking for someone who has been ill, you're looking for someone who has been campaigning locally on this kind of issue...You are hoping for a local doctor or a local environmental health officer and you are hoping for a scientist...with a bit of back up information from one of the pressure groups. In the end you would probably only get three of those and that would be enough but that is the list you would start with. You narrow it down by finding out who is available and who's going to talk, who can get to a studio or who is available when you turn up in the area with a camera crew." Respondent 2.

"You're not going to phone [the second] if you get through to the first one...you're not going to go to all the sources. If you got a good quote the first time then you're going to drop the rest of them." Graeme Smith, The Herald

In the end, journalists admit that because they are bound by the constraints of time in producing the news, they do not follow up an unending supply of contacts and interviewees and that on receiving the appropriate type of comment from a selection of people will stop searching for further contacts. Continuing in this vein, it is evident that reporters will not spend a great deal of time wading through background eg scientific information, rather they will go to an expert or specialist and ask for a synopsis of the material in layman's terms. This is partly because they need to communicate the information to a lay audience/readership and partly because of the short amount of time available to them in the news construction process.

"I don't think we'd contact the National Asthma Campaign. The nature of the news business is so quick, we would be relying on the medical school to make that connection between asthma and death and traffic problems". Alistair Gracie, Grampian Television

"[I might sift through this stuff]...it depends. You'd flick through it very, very quickly and try and work out what was relevant or maybe get them to fax you two or three pages. It's all kind of deciding as you go along." Graeme Smith, The Herald

Although journalists have been accused of covering scientific issues in a superficial way, it must be acknowledged that the reporting of this type of complex information precludes the non-scientist from comprehensively summarising the main arguments of the issue quickly and wholly. One of the main journalistic skills which reporters have to learn quickly is the ability to read and amass information facts or to absorb information quickly and accurately. This type of task becomes more difficult when the information is as complex and diverse as the type which emanates from the environmental or scientific disciplines.

There are differences too between the different strands of the media. Television and radio news is on the whole much shorter and more rapidly put together than newspaper stories where there

is greater scope for coverage and a longer time to assemble it. The tertiary model describes these concepts in relation to the evaluative rules.

9.6 Tertiary model

It can be inferred from the discussion in this chapter that the operational category is one which is quite distinct from the others but which is still important in the intertextuality of the news process. This category again reinforces and demonstrates how decision-based journalism is as a profession. Journalists' information strategy rules can be divided into two parts. How journalists approach the issue in an operational sense ie what lines are going to be taken in the search strategy and the information gathering routines ie sources to contact.

The tertiary stage of the model (see following page) shows the integration of the evaluative and operational rules by describing concepts such as the ways journalists approach the issue by identifying particular angles from which they can follow a story. They can do this by revealing links between concepts developing within the issue eg in case 1, the pesticides and human illness or in case 2 the atmospheric pollution and the death of the asthmatic child. These links cannot be implied unless they have been verified by the relevant authoritative figure eg scientists or medical research workers. If the journalist does state a causal link between factors such as these and there is a lack of evidence to support the claim, then, he or she is guilty of negating their role of responsibility to the public (see sources, chapter 6).

The information gathering routines of the journalist are non-tacit in that they are aware of the types of sources which can be accessed and more specifically who they can contact in the relevant fields for comment. These sources can be divided into two parts - human and impersonal. The sources at this stage are described in greater detail than in comparison with the preliminary and secondary stages of the model. These human contacts are, for example, subject specialists (experts) who may be scientific or environmental, or non-specialists like politicians, technical personnel. Internal contacts also fall into this category. These may be colleagues

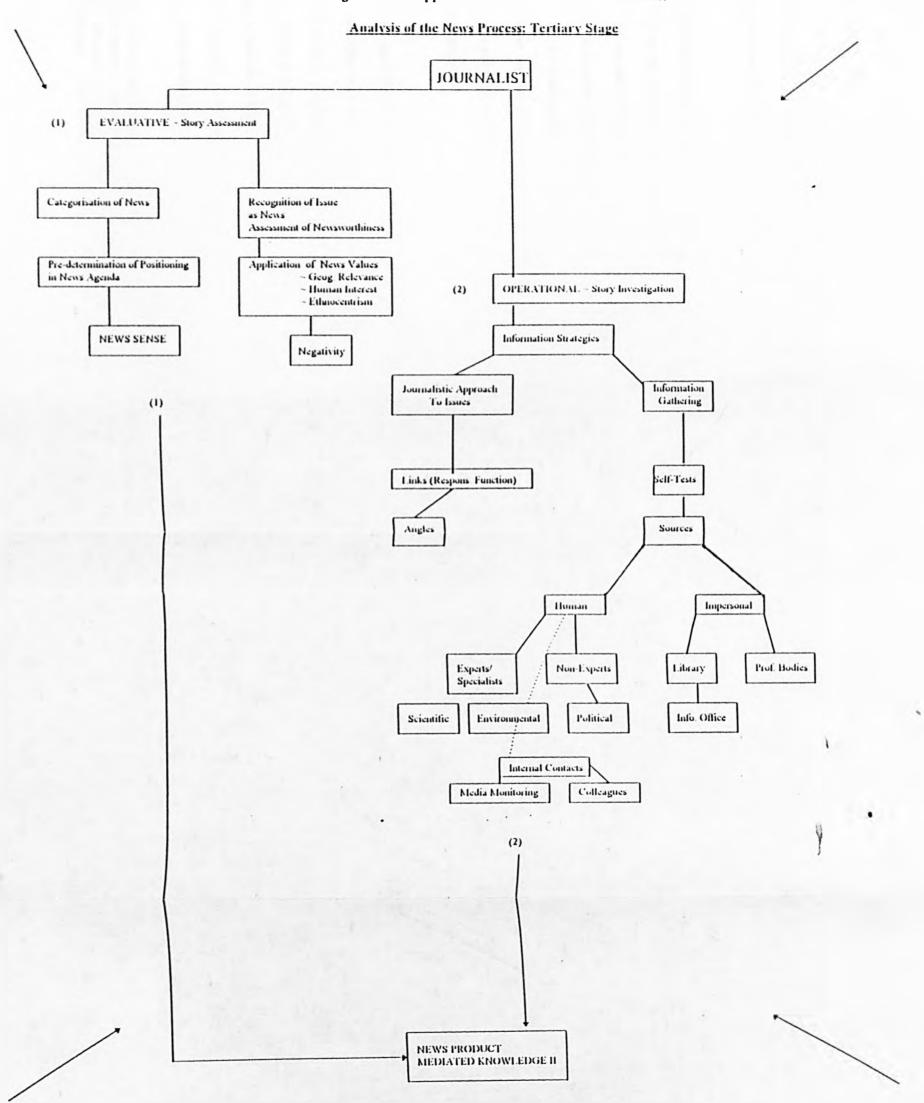


Fig 19 Excerpt from the tertiary stage of model: Evaluative and Operational Rules

within the newsrooom who often provide information easily and quickly (a sharing of resources) or colleagues outwith the newsroom who work in other areas of the media. When journalists monitor other media they may not contact colleagues personally. This is often a method which involves keeping up to date with current events as they happen. It is, therefore, an information strategy also. Impersonal sources are, as the model suggests, mainly institutional eg the library or information office at the environmental interest group. These institutions provide the majority of the technical information which journalists may use to construct their articles with.

It can be seen from this chapter that the operational category is also decision-based and contains rules which focus on the journalistic information strategies inherent in the news process. These strategies include, the identification of news angles, the selection of contacts to interview, the retrieval of information from a variety of sources eg libraries, scientific specialists and journalist colleagues. There are implications for the repetition of information in the construction of the end product due to the fact that journalists information gathering strategies are limited in comprehensiveness and information is "recycled" when the news copy is circulated back into the library for future reference.

Furthermore, the journalist is influenced in his/her operations by images of the intended audience or readership eg in case 1 where particular care is taken to allow the farmers and farming experts a voice. In addition to this the journalist is directed by the perceptions he/she holds of the powers of comprehension possessed by the audience. This idea is explored in greater detail in the next chapter (constructional/interpretive). The language and semantic structures that reporters use are dependent on the types of paper or broadcast being supplied with copy. Complex terminology is diluted and simplified by journalists.

"I think we'd try and find out a bit more...or a less technical term...asphyxiation is fine but anoxic...I don't even know what that is. But then that's something that doctors are able to tell you ...if you say what is...anoxic for the layman...then they'll tell you." Paul Riddell, North Scot

The discussion will now proceed onto the final category to consider the constructional and interpretive rules used by journalists which completes the news process.

Chapter 10 An Analysis of the Constructional/Interpretive Rules

"To say that news reports present a mythic, narrative system is to say that it describes signs (actions and events) that are presented through a series of cultural filters which include values of the reporting and reading culture. News reportage thus takes the raw events of our world and places them in a unifying context, a translation that renders them comprehensible and safe to readers or viewers, who can disregard that system of presentation just as readers of this passage do not stop to think of the degree to which the language (English) and style (academic-narrative) that order these words as I write also define and limit my mode of presentation." (Koch, 1990, p21)

The constructional and interpretive categories are interlinked and they are complementary to each other. It has, therefore, been decided that the following discussion will include both these types of rules

Tiffen (1989) discusses the format of news in relation to organisational production and states,

"The most basic format consideration which is shared by all news media is that news only becomes suitable when it is transformed into a story...every story must always include a lead, a narrative and a closer. Leads which are also "hookers" designed to attract audience attention, raise a moral issue, or question a common expectation (or stereotype)... The narrative illustrates the lead...the closer assesses the significance of the original highlight, offers a momentary resolution to the issue or debunks or reaffirms the expectation. This story format therefore creates or reinforces symbols to make it possible for the news to become a morality play." (Tiffen, 1989, p64)

He suggests that the story format which journalists use is a formula and that if a story differs from this pattern it is less likely to be accepted by the news editor. This is an idea which is substantiated by several of the respondents. The following excerpt is from the T.I.D. session (the discussion of case 1).

"...like any job journalism is about trying to establish a formula and so there would be a particular formula which would be followed for this type of story." Carlos Alba, The Press and Journal

The construction of news is repeated in formulas. These are routinised procedures or rules which are shaped by (among others) various factors like the organisational and editorial cultures of the institution and the training received at colleges or on site. Willis (1991) underlines this idea and states that through the process of mastering a number of journalistic skills, a composite view of reality will be gained. He talks about a pseudo-world perpetuated by the state media where if this media skews the interpretation of an event, audience response will be influenced and this in turn will affect actions in the real world (Willis, 1991, p6).

The constructional rules were identified from respondents' data, which, again, was coded by the ethnomethodological system (see Appendix VIII) and are concerned with the writing, editing and presentation of the news story. These, like the operational rules, refer to the structuring of the news. The interpretive rules are implicit in the ways in which information is codified and simplified for the end user ie the audience/readership. These, together with the evaluative rules, refer to the selection (often termed by journalism textbooks as news gathering) and reduction of news.

This chapter deals with certain themes which have emerged from the discovery of both types of rules, for example, the difficulties attached to the communication of science, the journalist as an intellectual filter for the audience, and the journalist's perceptions of the audience.

The constructional rules, elicited from the coded evidence, include fact ordering ie the ways in which facts are assembled in a newsworthy priority. This underlines the point that the categories in the typology used by journalists complement each other. The respondents indicated that facts are not always arranged in a chronological order but are prioritised according to their news value. There follows evidence of how a selection of the respondents described the issue and put it into straightforward terminology (see chapter 9) and also how they assembled the facts.

"...writing it up is a rather difficult question to answer because this is just a scenario...not the actual story. If the story is on a pesticide...people have been exposed to this pesticide and that it had caused illness...then the story is a simple one. It's simple in the sense that "X" number of people have become ill, having

been exposed to a pesticide...you then, have to detail what the symptoms are, how these people were exposed, were they using the pesticide correctly, should they have been using protective clothing, what is the pesticide..." Auslan Cramb, The Scotsman.

"When I am first presented with information like that, we will write a story to present the facts to people. So this has happened and this has happened, two animals been found dead, several people are taken ill, no clear link has been established. Scientists from Aberdeen University have been called in to investigate. The cases have been reported in X, Y, and Z. That tells people the story. We will run it for maybe two bulletins and then we are looking....from that moment we start running it...we are looking forward and thinking how can we develop it across the day." Jonathon Moore, Northsound Radio.

The way in which practitioners write is constrained by certain parameters (discussed below) like the audience for whom the news is intended or the news values of the organisation. In effect this underlines the fact that the news is a constructed entity. It is not a natural phenomenon.

"Everybody has a structure within which they write the story...nobody just reports the facts...you know yourself that the process of reporting the facts involves ordering the facts. If you are asking if there is a framework within which we are told we should assemble these facts then the answer is no...we have to quote facts as facts and assertions as such and we don't make assertions ourselves and we don't draw conclusions, unless we work in a specific field where we might be invited to explain some of the background but as a non-specialist I would simply be reporting the facts on what had happened." Respondent I.

It is possible to put a spin on a story when the journalists assemble the facts into a particular order and it apparently happens quite frequently in some organisations. Some of the respondents talked about this when discussing how they would construct the news story.

"The claims which they use in the story are what they believe to have happened...The order in which I choose to assemble the facts, I could put a spin on the story. I wouldn't because again that would be unprofessional and unethical. I would try and make it as straight as I could." Respondent 1.

"I think that even the dullest paper puts a spin on the way it reports news. It makes stories more interesting if you jack them up. If it's going to sell. It kind of permeates the whole process of reporting - the ordinary reporter is working to me and I'm working to the news editor who is working to the editor. At every stage in the process the story is being jacked up more and more because the reporter wants to be seen to be doing his job and so he sells you the story at a higher pitch than it warrants. Then I've got to be seen to have a bank of reasonable news stories for the statement so when the news editor asks me what I've got, I jack the story up even further. I think that's probably unavoidable. It's not a particularly justifiable phenomenon but it happens." Carlos Alba, The Press and Journal.

In some news organisations, then, the basic factual information is dressed up with drama to make it more acceptable at higher levels in the editorial chain. Certain facts are given more emphasis than others ie they are ordered in a particular way to give the story greater impact. This is exemplified by the tertiary model, below and further is discussed in greater detail in this chapter.

10.1 Tertiary Model

The whole tertiary level of the model is a statement describing the integration of the different types of rules elicited from the respondents' coded data. The relationship between the evaluative, operational and editorial rules has been evident from the previous chapter. Ultimately this chapter seeks to describe the interaction of all the categories with the addition of the final chronological component in the news process, the constructional category. However, this section is concerned only with the constructional/interpretive part of the tertiary model (see following page).

This is concerned with the writing of the story. It is the transformation of the raw material ie the information is put into an organised format through the writing process and the editing process. The interpretive rules which are always implicit in the constructional category, are embedded in the writing process. Besides having the more obvious rules and constructional procedures like the dramatic writing styles which are linked to the negativity aspect of the evaluative category, the journalist acts as an intellectual filter. This role is assumed when the journalist performs the task of reducing complex, scientific information for stories. This is a subjective emphasis on the selection of information for news reports because journalists make conscious decisions as to what to accept and what to reject. It is in this way that the journalist acts as a filter when producing the In reducing the complexity this news. type of

Analysis of the News Process - Tertiary Stage

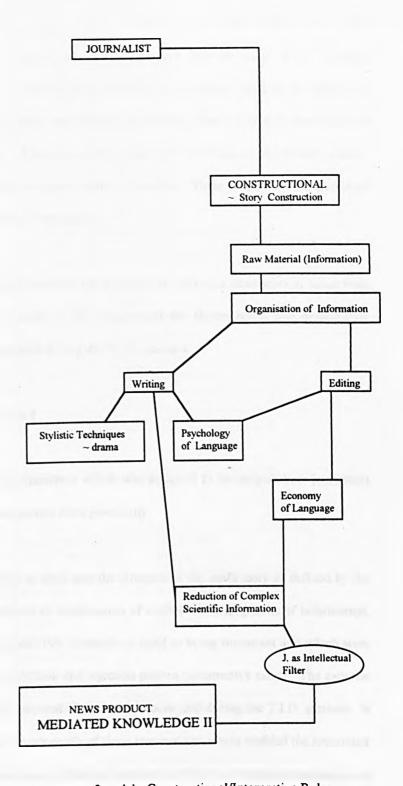


Fig 20 Excerpt from tertiary stage of model: Constructional/Interpretive Rules

environmental or scientific information, the journalist places—new meanings on the information, thus, creating a new information level (as described by the preliminary stage of the model). This reduction process is also a subjective one because it has been revealed that the journalist uses him/herself as a yardstick—against which the relevant level—of scientific information can be estimated. This is a facit rule which journalists implement with an image of the intended audience in mind. It is a function described previously by the secondary stage of the model (see chapter 3). The reduction of complex information is, however, also a device to economise on language ie an editing technique. A key aim in journalism is to communicate the facts of a story, using simple terminology as succinctly and rapidly as possible. These themes will be addressed in greater detail during the course of this chapter.

The second part of the methodology involved the respondents writing a news story or script from the Case 1 press release. The results of this experiment are shown below and demonstrate practically what respondents discussed during the T.I.D. sessions.

10.2 The Construction Experiment

There follows an account of the experiment which was designed to investigate how journalists apply the constructional and interpretive rules practically.

What this part of the study aimed to show was the structure of the news story as defined by the journalists. The experiment allowed an examination of exactly which segments of information, from the case scenario (see Appendix IV), respondents rated as being important and which were not important ie an information selection and rejection pattern (interpretive rules). The exercise acted as a check which could be compared with what had been said during the T.I.D. sessions. It was a test which was conducted independently of these sessions and which enabled the researcher to assess what information journalists regarded as important and how they rated certain aspects of the scenario. It further revealed how important journalists rated scientific or environmental information.

The press release was divided into eight thematic variables and eight source scientific variables.

These tables of keyword variables are listed below. These results have also been arranged in a final grid so that the construction patterns can be viewed more clearly (see pages 222 and 226).

Vl	Pesticides
V2	Cancer
V3	Water
V4	Illness (Human)
V5	Illness (Wildlife)
V6	Forestry Commission
V7	Benazalox
V8	North East

Fig 21 (a) The table of thematic variables derived from scenario

V9	Police
V10	Quotes (Non-spec)
VII	Quotes (Spec)
V12	Scientists
V13	Doctors
V14	Media
V15	Sources
V16	Named Victims

Fig 21 (b) The table of source variables derived from scenario

V1 Chemical Pesticides Chemical Poisoning	V4 Benazalox Phenoxyalkanoic Biological Magnification
V2 Insecticides DDT, Lindane Organics Organophosphates Organochlorines Herbicides Pest Control	V5 Inhalation Absorbtion Ingestion
V3 Carcinogenic Mutagenic, genetic	V6 Neurotoxicity Toxic Cancer Respiratory Effects

Fig 22 Groupings of scientific variables

Percentages	V1			V2			V3		T	V		V4 V5				V6	T	N7		V8		T	V9		V10		V11			٧	12	Т	V13	T	V14			V15		V16		
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33.40	-	-	-	-	X	-	+	X		+	+	-	×	X	-	-	-	+	+	1	-	+	+-	-	X	+	-	-	-	+	-	1-	++	X	-	-		+	X	X		
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41-50	-	X	x		-	-	-	-		+	+	-	+	+-	-	X	-	-	+	1	-	-		-	+	+	-	^	-	+	+	1-	++	+	-	x	+	+	-	^		
41-50	-	-	-	-	-	-	+	+	-	+	+	-	+	+-	-	-	-	-	+	1	X	+	++	-	+	+		-		-	-	-	+-+-	-	-	1	+	+	1	-		
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Fig. 23 Table depicting the results of the construction exercise (general variables)¹

Each square contains nine small boxes and each box represents one respondent (although only eight reporters took part in the exercise). The crosses show where respondents referred to the corresponding variable and also where in the articles this reference occurred. The shaded boxes represent a greater density of variables ie where a respondent has used the variable more than once.

PI	P2	РЗ
P4	ВІ	B2
В3	B4	

Fig. 24 Table depicting the distribution of respondents within grid

The respondents who took part in this exercise were kept anonymous but the table above shows where, within each square, the press reporters and the broadcast reporters were situated.

¹ The percentages indicate where in the story the variables occur.

Discussion

It is evident from the grid that there are certain areas of coverage which are regarded as important by the majority of respondents. Taking into account that 1-20% is regarded as the beginning of the story, 21-70% is the middle and 71-100% is the end of the story, it can be seen that the heaviest concentration of data appears within the 1-20% section, at variables 1, 4 and 5. However variables 11, 14 and 16 show definite patterns in the lower middle and end of story sections (61-100%).

Overall variables 1, 4 and 5 which are the terms "pesticides", "human illness" and "animal illness" display the highest concentration of data. This is to be expected as this is the information which is the most important in news value terms. The term "pesticides" is the only variable which has been referred to consistently throughout the story. It is, therefore, perceived to be the most common term which is recognised by all sections of the audience.

The results confirm what the journalists disclosed during the T.I.D. sessions, that the human interest news value is the most important information in the story. This is the line or "lead" (Tiffen, 1989, p64) which draws the reader or the viewer into the story. It is in effect the point of audience interaction with the text. This has been revealed by the fact that variables 4 and 5 are heavily used at the beginning of respondents' stories (1-20%). Apparently, of secondary relevance is the geographic positioning of the incident. Very few respondents referred to the North East indicating that the story was perhaps strong enough to stand by itself without the mention of a North East line.

Other significant trends show that variables 11 and 16 are regarded by journalists as less important in that they have included them further down their stories. Reference to these variables, "scientists" and "quotes (spec)" (the latter refers to quotations from specialists eg scientists and doctors) exist in concentrated blocks on the grid. This also confirms the journalists' accounts of news practice because they stated that the importance of scientific

information is secondary to the facts of the incident. This is substantiated by the more detailed study of the selection and rejection of scientific information outlined below.

Variable 14 gives a good account of the other sources which journalists might approach for the story eg the Scottish Office, the Water Purification Board... (operational factors). But the indication from the grid suggests that these other references would be resigned to a lower part of the story indicating their lack of importance. Some journalists stated that these would be used to pad out a story so that it fitted the correct size of news hole. This is underlined by the following evidence.

"...a good front page lead is 40cms...how long it is to fit the page. You have to have....25 paragraphs of information to fit the news story. You can start off with just one fact that you know and you can pad the rest out with suppositions and quotes and reported speech and heresay. If that one line is good enough, you can pad out a story to 40cms. It's not the case that something doesn't get reported because you don't have enough information about it. It depends on how important you think it is." Carlos Alba, The Press and Journal.

The above quotation reinforces how the categories work together. He states that the lack of information (an operational function) has no bearing on construction, it depends on how newsworthy it is (an evaluative function). This underlines the intertextuality of the different rule categories and proves that they are used in combinations by journalists.

The remaining variables have been referred to very infrequently by respondents. The second variable "cancer" is not generally used by the journalists as many of them maintained that to refer to this term at such an early stage of the coverage would be a negation of their social and professional responsibilities. It would cause unnecessary concern among the audience or readership at a time when the tests carried out by scientists were not conclusive. Variables 7 and 13 have been used very little and it can be concluded that the respondents rated these as being of negligible importance. The ninth variable "Benazalox" is discussed more fully below. The grid shows that variable 15 "named victims" has also been used infrequently but whether this is because the people involved would not normally be named at this stage in the coverage, or whether the respondents found it difficult to invent a realistic story is not clear. It may have been

that the journalists were constrained by the differing news values. Consequently, these news stories may have been shorter than the ones which did contain an Aberdeen line, and when the facts were prioritised the victims' names were therefore viewed as irrelevant.

There are no significant differences between the ways in which environment correspondents and non-specialist reporters construct the news story. The rules are apparently standard construction procedures for all journalists. This substantiates the findings from the other categories in the typology as the following evidence demonstrates,

"[You cover this] from a journalist's view first because it is not a piece you are researching or a background piece or an analysis, so you have to treat it as a news story. You need to sort out the news story initially and you would do that strictly from a journalistic point of view. Then I can think about the deeper environmental questions to ask." Auslan Cramb, The Scotsman.

Similarly, there are no definite trends which suggest that the press and broadcast journalists write their news stories in different ways. Although the data from the T.I.D. sessions suggests that broadcast reporters sometimes, due to the pragmatics of the news process, cover the news in a superficial way, there is really no evidence from the construction exercise to underline this.

Contrary to the literature and the respondents who took part in the experiment, there is little difference between the broadcast and print journalists.

The ways in which the journalists selected and discarded the specific scientific variables is discussed below. The groupings of scientific variables can be seen on Page 221.

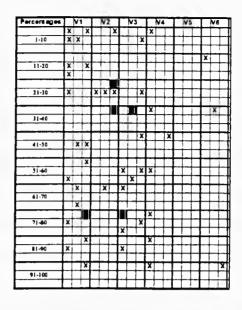


Fig. 25 Table depicting the respondents' use of scientific variables

Discussion

Generally respondents used very little scientific information in their stories and when they did use it, it tended to be "diluted" or popular science. This is substantiated by evidence from the T.I.D. sessions. The terminology they used was populist and their work was free of "jargon". The groupings of terms were again drawn out from the press release (see chapter 2, methodology) and it is evident that very few of them were used in the stories. It is significant that when respondents did make use of terms they tended to do so in the final two thirds of this report. Variable 1 which may be seen as a grouping of the most populist terminology was used consistently throughout but also noticeably at the beginning of the stories. It is not clear from the grid exactly which keywords respondents chose from the groups therefore it must be stated that from Variable 2 "Organics" was the term referred to. Again from Variable 2, "herbicides" was relied on heavily and "genetic", "mutagenic" and "carcinogenic" very infrequently. "Benazalox" was the only term used in Variable 4 and no respondent referred to any within grouping 5. Finally the terms "cancer" and "toxic" were the only two used in Variable 6. It can be concluded therefore that it is the simple, populist terms which have been referred to the most frequently. This, however, reinforces what journalists have said about only using the science that they

themselves can understand on the lowest level. This function where the journalist acts as an intellectual filter for the audience is discussed more fully later on.

There are again no definite trends which suggest that there are significant differences between how environment correspondents and non-specialist reporters select or reject scientific information. From the discourse sessions all the respondents agreed that very little science would be used in the construction due to both the pragmatics of the process and also the audience's ability to understand very little complex scientific material.

The experiment suggests strongly that journalists do write with the audience in mind. It is, however, apparent that some of them are unaware of this and that the image of the audience is tacit. This is discussed later on in more detail.

10.3 The Pragmatics of Construction

"...the news story is - or should be - a product of his [journalist's] disciplined perception and his evaluation of the environment, of the social arena from which the story and its characters come and of the bureaucratic climate in which it is written." (Geiber in White (1964), p173)

Former practitioners like Willis (1991) and Harris (1989) talk about the ways in which journalism students are taught to report in logical sequences and that if these are followed directly a natural picture of reality is obtained. This research has revealed that these sequences become routinised by reporters through experience on the job. Willis (1991) stresses though that,

"...this world of shadows is, for the most part, an unintentionally incomplete or distorted view of reality and if they could, journalists would make it conform even more closely to reality." (Willis, 1991, p11)

Historically, academics have accused journalists of manufacturing the news within particular contexts (Hall, 1972; Gans, 1980) and of mediating an artificial construction as reality. Willis (1991) and others (Harris, 1987; Hodgson, 1989) have started to retaliate by demonstrating that

this is not intentional but a symptom of the news process. This is a view echoed by the respondents.

Many of the rules which emerged from discussions with journalists referred to the practical ways in which a news story is constructed for example the length of the story, the type of language used and the editing techniques involved. Respondents explained the use of quotes, their preferred writing styles and how they are constrained by the amount of space available from their media, as the following evidence demonstrates,

"A quote brings a story to life. It makes it more...it gives it a human edge because there is someone actually speaking...A story is like an upside down triangle. You start with all the important stuff up near the top, and it kind of tapers down so that when you get to the bottom, it's superfluous information. There are two reasons for that...people don't read every paragraph of every story...they just taste test and then they go on to the next one. So it is important to have something that grabs the attention in the first paragraph - the most important information. The other reason is - it's a practical reason - for the sub-editor - if the story is too long and has to be cut down. The best way to do that is to chop off the last three paragraphs and if you have the least important at the end, it's not so difficult." Carlos Alba, The Press and Journal.

As expected, the broadcast and the press journalists differ quite considerably in the ways they construct the news. Television reporters place much more emphasis on the visual components of a story and the press a greater onus on in-depth analysis, photographs and graphics. Time and space are also constraints which serve to underline the apparent superficiality of broadcast news. It is this, in addition to the close attention paid to visual parameters, which has given media critics the opportunity to accuse television news practitioners of disproportionately representing reality. Broadcast respondents replied to this, as follows,

"This one [case 5] is different and highlights things which I haven't explained very much with the others but which is really the first consideration for a television journalist to varying degrees but more so in a news story, that is the pictures. I would ensure that very early on there was an outside broadcast unit there so that they could squirt pictures all around Britain and around the world." Respondent 1.

"...we have been accused of skimming the surface and yes I'm afraid we do skim the surface because of the nature of television news and there is nothing we can do about it. It means that to truly develop that story [case 1] you are talking about five minutes. Now if I develop that to five minutes you're talking about only having

five items a night. I think that to cover an area the size of the one we cover then you need a [lot] more than five items a night. Very often we don't have time to spend on its construction because we're trying to be up to date and as newsy as possible. If a story breaks and comes to our attention within the half an hour to go to transmission, then we only have half an hour to assemble the story. But in an ideal world, which it isn't always, yes if it was a big story we would try and devote a lot of time to it. Time in preparation and time in transmission as well." Alistair Gracie, Grampian Television.

The press are also limited by the space made available to them and this is reflected in the writing of articles. The amount of space is conditional against how many news stories are to be included on the day.

"There is also a question of compression - you're working within the parameters of space in a newspaper. I've always found that this gets forgotton about when the media is being criticised by linguists. There are a number of physical constraints in terms of space in a newspaper." Paul Riddell, North Scot.

"...the front page of a tabloid...will have one paragraph of reporting and the rest will be just a big block headline and perhaps a head and shoulders photograph of somebody. Broadsheet papers...will arrange the top four or five important stories on their front page. Sometimes you've got a good strong story which you can't make 40cms eg if something's the subject of legal proceedings then you are limited in what you can say because of prejudicing a future trial. In many cases you are limited in what you can say." Carlos Alba, The Press and Journal.

It is therefore not always space and time which can prevent information being disseminated. The journalist is bound by legal constraints as well. This suggests that there are a number of factors inherent in the news process which can prevent the flow of certain information from source to audience.

It has been noted previously that there are not any specific differences between environment correspondents and non specialist reporters. This category is no exception. What is noticeable from the specialists' data is that they possess a clearer definition of the audience, and a greater depth of knowledge of the subject area.

"Television is shorter but sometimes you can make more impact...Generally, people closely involved with the story are happier with my radio coverage and that tends to go for the scientists, health experts, doctors etc. This is because I haven't been tied to writing to pictures. Pressure groups vary in their response. They are

visually more pleased to get it on television because it makes more impact and they are campaigning groups who want the publicity." Respondent 2.

This is a view echoed by Friedman (1987) when she talks about how pressure groups bombard the media with press releases in exchange for publicity.

10.4 Dramatic Emphasis

In Jostein Gripsrud's (in Dahlgren and Sparks', 1992) discussion of the aesthetics and politics of melodrama and its application to tabloid news, he states that,

"The melodramatic is...an expressionist aesthetic, striving to externalise what is underneath the chaotic and uncertain surface of modern existence." (Gripsrud in Dahlgren and Sparks, 1992, p87)

He suggests that melodrama is a technique used by the popular press to teach the audience life lessons by demonstrating moral forces at work in society eg the contest between good and evil. It is argued that this journalistic technique extends not only to the tabloid press but also to the quality broadsheets. There is evidence of this type of construction/interpretive technique in the newspaper text examined at the time of the Braer (see Appendix VI). The melodrama inextricably linked with the news text on the Braer is no different to any other emotive newsworthy disaster. This value system is exemplified by trends emerging from the news text eg subject specialists vs damage to the environment; locals vs Braer crew and captain; environment vs the oil. Gripsrud notes how the use of photography and titles is,

"...reminiscent of the standardised iconography of emotions found in the melodramatic tradition in theatre, film and television....The popular press...never tires of informing us by way of such melodramatic, redundant, formulaic texts that emotions are underneath the world's seemingly chaotic surface, that politicians and other important people have emotions, too." (Gripsrud in Dahlgren and Sparks, 1992, p88)

The respondents themselves revealed that the use of drama as a technique is implicit in the constructional and interpretive rules they practice. However, only some of them acknowledged

that there are legitimate and illegitimate uses of drama. Riddell suggests that the legitimate use is, for example, to issue warnings to the public to create an awareness of the danger of a situation.

This use of the dramatic technique has its source in the journalistic role of social responsibility (see chapter 6). It has already been established that in the editorial setting, it is acceptable for the journalist to overemphasise rather than underplay the event (eg the Braer). This phenomenon is explained by the respondent thus,

"In a case [1] like this it's quite easy to [dramatise]...you saw it with the flesh eating virus and everyone just jumped on the bandwagon purely because of the visual image of parts of the body being eaten away. I think it is a contextual problem...very often the media are guilty of [not setting it in context] and there's a sort of drama aspect to it. For certain sectors of the media this is acceptable [providing] they do put it into context." Paul Riddell, North Scot.

10.5 The Aesthetics of Drama

Sood [et al] (1987) report that disasters are like drama which contain the relevant inherent qualities common to melodrama. Not least is the capability for capturing public attention and attracting the largest audiences and readerships. It may be argued that in keeping with the "drama" analogy, disaster reports assume unreal qualitites which succeed in reversing the audience's suspension of disbelief.

When journalists are challenged about the negativity of the drama rule, they blame the audience saying that they are responding to the needs of this audience or readership. As the above respondent states, the media have been guilty, in the past, of not putting an event into context ie juxtapositioning the event beside other similar or related events which have been resolved positively or framing the event in correct proportion to other relevant factors. It is when this context is lost that the alignment in the construction process is altered ie meanings on the information are changed (see Chapter 3) and only a partial view of reality is obtained.

"Melodrama continues to present its audiences with a "sense-making system", a system which insists that politics or history are only interesting in so far as they

affect our everyday life and its conditions, our feelings - fears, anxieties, pleasures." (Gripsrud in Dahlgren and Sparks, 1992, p88)

This function or dysfunction of melodrama is evident in the ways the Braer was covered by the local and regional press. It serves to underline the fact that both soft and hard news is treated to a dramatic emphasis in disaster situations.

Melodrama is a technique which particularly enhances the human interest angle on a news story. The respondents through their discussion of case 2 revealed that the strong human interest angle would make a dramatic line for the story ie the fact that the eight year old girl has died. This lead would generate a great deal of coverage as the following quote substantiates,

"That would be one big story with a lot of follow ups...The wee girl would come in for a lot of coverage of her death. We might talk about what she would have done, what she might have done if she'd grown up. It's one of the things which people would read." Tom Little, Edinburgh Evening News.

Therefore the use of dramatisation ie building up a picture of what the girl's life would have been like had she lived is designed to draw the reader into the story. It is a point of audience interaction. The rationale behind this technique is that the reader identifies vicariously with the victim of the situation thereby becoming emotionally involved with the story.

As the journalists recounted the synthesis of their tasks and described the routines involved in their work, it reinforced the constructed nature of the business. One of the tasks which was identified for case 2 (see Appendix IV) was the need to locate another child with asthma and draw a contrast between this child and the one who had died. The purposes of this exercise were to illustrate how fortunate the parents of the second child were in still having her/him and also to underline the severity of the environmental problem.

"You would try and track down another child who's still alive, with asthma and her parents and get them to say, "we fear the same could happen to our daughter or son"." Tom Little, Edinburgh Evening News.

The use of this type of technique serves to underline the fact that these procedures could influence the construction of the final product. However, journalists talk about their primary aim as being objectivity or impartiality. In journalistic terms this is the highest goal to achieve and is synonymously and inextricably interlinked with professional credibility. But how is the story balanced? Is the story ever balanced?

From the evidence gathered through the T.I.D. sessions with journalists, it can be suggested that practitioners although aware of the academic studies carried out in the area are unaware of biasing the news themselves. When questioned further about this area, respondents indicated that the nature of the news process itself plays an integral part in biasing the end product. Further, the reporters found it very difficult to rationalise how they balance a story because of the tacit nature of this construction rule. The following evidence, taken from the discussion of case 3, substantiates this,

"You try and get both sides. Here the two sides to the argument are, the increase in tourism and the damage to the thing which attracts tourists as well. We wouldn't have to support one particular faction. Often the opponents are the strongest...but that's not necessarily taking their side. You often say, "...fierce opposition has been expressed toward or proposed..." You know you would do it in a balanced way. I would not balance it up by giving three inches to them and three inches to them. It just depends on how it comes along. And that would be about it." Graeme Smith, The Herald.

For additional information please see Appendix XIII.

It is evident, then, that the pragmatics of the construction influence the rules journalists use and consequently shape the news product. Although, journalists have been criticised for covering environmental or political issues superficially and therefore inaccurately (due to the information reduction and altering of meaning), it must be stated that much of this can be attributed to the practicalities of the news process.

In interpreting complex information for the audience or readership the journalist must simplify or dilute the material. This is partly due to the practical reasons above and partly to aid the comprehension of the news consumer. The next sections deal with the problems encountered by

reporters in the communication of science or the environment and interpretation patterns which they adopt in order to solve these problems.

10.6 The Communication of Science and the Environment

All the respondents agreed that there are difficulties attached to the communication of science, in terms of the complexity of the information and the jargon in which it is codified. In talking about these problems, it was evident that the journalists possess ready made assumptions about the audience or readership. They assume, for example, that the receivers of the information (audience/readership) cannot make sense of the scientific terminology, nor can they cope with complex concepts. This is perhaps justified in that primary (ie information which exists in bibliographies and directories) and even secondary (ie the information which is interpreted by scientists) levels of environmental information (see chapter 3) are pluralistic, multidisciplinary and technical.

Historically, scientists have believed that the media misrepresent environmental concepts and theories (Funkhouser, 1973). Conversely, the journalists feel that they have a responsibility to their readers, viewers or listeners to explain as fully as possible the science which is involved in issues. However, as the individual media are bound by the constraints of time and space they (specialists and non-specialists alike) believe it is preferable to include as little science as is necessary.

"The problem with the environment particularly with scientists and researchers is...they rarely appreciate the value of giving their work a public aim. Most of the research is locked up in jargon or in their own head...it is presented in such scientific jargon that it's unreportable and you need a degree to understand it. They don't appreciate the value of their work as news." Ian Lundie, North Scot.

The evidence gathered from subject specialists (scientists) (see chapter 5) and journalists reveals a communication stalemate in which both groups of personnel often reinforce their own distorted perceptions of what the other faction needs. Specialists, characteristically, view the media as a

powerful vehicle through which to describe, explain and publicise their research. However, their main grievances seem to be that issues become oversimplified, reduced to basic black and white terms or that complex theoretical information is diluted and reduced to such an extent that it is meaningless. They have, on occasions, accused the media of distorting their theories and of misinforming the public about scientific and environmental issues.

The news media argue that specialists fail to understand the rapid continuity of the news process, the pressures of deadlines and the immediacy with which the news has to be constructed and disseminated. Scientists, they maintain are apparently unaware of not only the value of their work in news terms, but the necessity to explain clearly in simple terminology the essence of their research for the audience. One of the respondents talked about the complexities of science and the difficulties which occur when attempting to communicate it to a lay audience,

"A lot of it is very complex. Global warming is hugely complicated and by simplifying it you can make it meaningless or just inaccurate. By condensing it, it can lose its meanings. I do things on the problems of global warming and I find that my colleagues here, say, "what problems?" The really big environment problems - the ozone layer, global warming, fuel pollution - the scientists themselves don't really understand them, so what hope does the environment correspondent have? You just have to say that this has happened and this is what they are all saying. It's really hard. You can make yourself very unpopular because if I go around constantly telling people that global warming is a bad thing they think I'm mad." Respondent 2.

Scientists perceive themselves as victims of the media. The media retaliate, emphasising that the nature of the news process is such that technical information has to be reinterpreted for mediation to the news consumer. The distortion which may occur is not intentional.

Burkhart (1992) states,

"....media messages add to their credibility with audiences: [they] want to convey information accurately and completely. However, dealing with the mass media entails "costs" for environmental professionals: (1) precision will be lost; (2) frustration may result from confronting such media constraints as deadlines or simplification of complex material; (3) control over the message, guaranteed in scientific and professional communication will be lost." (p80)

The perceptual differences between both groups of personnel is accentuated by their opposing agendas and the misunderstanding of each other's priorities.

The respondents outlined the difficulties of the scientific communication as follows,

"It's about rendering complex information meaningful to the individual and basically it's a process of waiting until you comprehend what is going on and then a feeling that you're probably at the right level. You just have to develop a kind of general understanding of all areas but you don't have that specialist understanding." Carlos Alba, The Press and Journal

"Quite often you are dealing with difficult concepts in terms of science and it's being able to simplify it without getting it wrong and still explain it clearly." Elizabeth Buie, The Herald.

The respondents underline the tacitness of the process by talking about developing this critical understanding of the appropriate level at which to pitch the information. The author has termed this procedure as *intellectual filtering* and this journalistic role is discussed below.

10.7 The Construction of News and the Journalists' Perceptions of the Audience

Tiffen (1989) argues that the audience is a major factor which influences how the journalist writes. Drawing on the idea that the journalist writes with an image of the implied audience or reader in mind, there is qualitative evidence from the discourse sessions to suggest that this is so. Many of the respondents stated that they did not imagine one reader or viewer although that was the way they were taught to write. However, the responses on this theme were mixed as the following selection illustrates,

"No...I don't think of them actively but I've got a gut feeling as I think most journalists have for the audience or the readership. I mean if I started preparing reports while I was viewing my audience as a group of Sun readers or a group of Financial Times readers then that would affect the nature of coverage and the "feel" of the coverage as well as the content of stories but as it is I can honestly say that I never sat down to try and visualise an average viewer because I don't think there is such a thing. Especially for television, we are rather unlike newspapers - newspapers tend to aim at a niche market, we have to appeal across a pretty wide range. So I don't have a view in my mind of the viewer but I have a feel for what I think they might be interested in." Respondent I

"You always have to imagine the readers. I don't know if I have a reader in my head as such but I always imagine that someone is...when I'm looking at my stuff on the screen, I imagine that I'm someone else and would I be able to understand it? Even if it is something which is not necessarily scientific but it's something I know about as it's something I've covered for 3 months or whatever. It's just become common knowledge in my mind. It might not be common knowledge in someone else's mind. I always step back and say (a) is it interesting and (b) can I understand it. You don't really take into account different types of readership, every reader is much the same. But yes you do have an image of the readership. If you don't then you end up writing needless nonsensical stuff." Ian Lundie, NorthScot

For additional responses on this subject see Appendix XIV.

Work carried out by DePool and Shulman (reported in White, 1964) into the ways in which journalists construct the news product, shows that reporters are influenced by images of the intended audience. They talk about the "picures in [journalists'] heads" which appear to be congruent with the images of the audience /readership and which are created by editorial and organisational factors.

"They're quite an informed audience....If I had an image of who would be interested in my stories, it would be just the person in the street....but behind that there is another image which is the university professor who will almost certainly write me a letter saying that I've misunderstood or there is a bit more research that I should have looked into and they're very much the vocal part of the audience." Respondent 2.

This respondent imagines a range of characters and so does not limit him/herself to a stereotypical view of the audience. This in turn has an influence on how he/she writes and constructs the product. This person, being a bi-media correspondent ie radio and television, goes on to acknowledge a slight difference between her/his perceptions of the two audiences.

"I have perhaps in my head a slight sense of difference in the ways a radio audience pays attention...it's probably the same people...but it's...you perhaps expect people listening to radio to listen more closely to what you are saying than someone watching television." Respondent 2.

"[I don't have a picture of the readership in my head]...with any newspaper readership...you very quickly develop a feel for the style. Every newspaper has a style. It's not something you learn. It's something you are aware of when you've worked at the paper for a certain amount of time. You learn to have an idea of

who will read a scientific story in the Scotsman which will be very different from a scientific story in the tabloids." Auslan Cramb, The Scotsman.

The origins of these images are unclear and respondents found it difficult to articulate exactly where they came from. Most journalists stated that they paid particular attention to the market research carried out by the organisation and also the feedback which they receive directly from the "news consumers". These images are reinforced over time (as are the other rules) and become tacit through their continued repetition.

It is evident from the data that through these constructional and interpretive rules, journalists make and sustain assumptions about their respective audiences, for example, that viewers/readers can only understand diluted versions of scientific concepts or populist terminology. The respondents from North Scot the press agency in Aberdeen, explained how on occasions, they prepare two different versions for both the tabloids and the "quality" broadsheets.

"For the tabloids, it's a fairly simple case of "humans been taken ill because of such and such" and fairly straightforward. You'd need a few quotes from people to back it all up and that would be it. A tabloid would probably make an average of about 14 or 15 paragraphs, and that would be the lead story on a given page. For a broadsheet like the Scotsman or The Telegraph then you could perhaps triple the size of the story and be as scientific as you like. You'd still cover the basic story but write it in bigger words...to be quite blunt about the whole thing and you can have enough scientific stuff as long as you understand it." Ian Lundie, North Scot.

This respondent has given voice to the classic stereotypical assumption of which journalists are aware and on which they base this practice, that tabloid readers are less intelligent than broadsheet readers. In their defence, several of the respondents registered their disagreement of this taken-for-granted assumption but acknowledged that it is a stereotype which is embedded in newspaper culture and is irreversable at present (interviews with Carlos Alba: Paul Riddell).

The above respondent also underlines the fundamental differences between the construction process for tabloids and broadsheets and reinforces the alternative types of information which each demands. A study carried out by Funkhouser in 1969 demonstrated that the higher the proportion of university graduates in the readership, the more complex the language in the news

reports (Funkhouser, 1969). This result was substantiated by the present sample of respondents who indicated that this is a valid proposal as regards journalistic semantics but that complex scientific theories will still require to be explained with the lowest common level of comprehension. Therefore, regardless of broadcast or tabloid status, complicated environmental information has to be explained in the most simplistic terms.

DePool and Shulman's Reference Group Phenomenon or Theory stated that images of the intended audience/readership "enters the author's flow of associations at the same time of composition and influences what he writes or says" (DePool and Shulman in White, 1964). The key findings from DePool and Shulman's experiment showed that the construction process provided the journalist with psychological gratification which contributed to a fantasy state. In this readers would admire and praise them and the reporter achieved a worthy status which enabled him to affect the social and cultural processes (DePool and Shulman in White, 1964).

"The news writing situation...is an instance of one-way communication to a secondary audience. The gratification arising from such activities are largely deference and power, either real or fantasized. The communicator is the teacher, instructor, guide ie the authority figure over the passive audience." (DePool and Shulman in White, p156).

There is evidence to suggest that the audience is not passive and the respondents, whilst accepting the power of the media, showed that journalists perceive their role as one of social responsibility, maintaining both self set and professional journalistic standards. This is discussed later on in greater detail. One of the respondents summarised his professional role as follows,

"...the most important journalistic technique is to explain and translate it into simple terms ie stories on any subject. A good journalist should be able to write about a political event, about an industrial story or an environmental disaster...about a whole range of things by distilling the information...by gathering the information and then distilling it into a simple, accessible format. It's got to be accessible...so I'd put in just enough science to be able to explain a story. You have to re-read it because you have to be sure that it is understandable." Auslan Cramb, The Scotsman.

Cramb underlines the need for simplicity in the distilling of scientific information, and in doing so emphasises again that the perception of the intended audience is indeed the rationale for the journalist's role as an intellectual filter within the construction process.

The evidence gathered from the T.I.D. sessions suggests that the respondents reached a consensus of opinion about this matter. Most journalists write with an image of the audience or readership in mind and this is one of the factors which influences how they construct the news. It is also evident that the respondents think about what they write but not about how they write. This process has been referred to as instinctive by several of the journalists who maintained that they do not think about the writing process as such.

10.8 The Journalist as an Intellectual Filter

The secondary stage of the model (chapter 3) describes the construction part of the news process, by defining the way journalists interpret information for the audience, as a filter action.

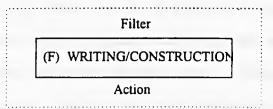


Fig 26 Excerpt from secondary stage of model

This means that journalists having identified the story (evaluative) and gathered the information (operational), are then required to absorb and assess the information so that they can decide what to include or ignore. They can, finally, estimate how to construct the story in order to best explain the complexity of issues for the audience or readership. The tertiary stage of the model, therefore, explains in greater detail and substantiates the hypotheses described earlier in the research by the preliminary and secondary stages of the model (see chapter 3).

It is evident from the discourse sessions carried out with journalists that there are several rules inherent in the interpretive process. These are that the journalist simplifies an issue for the audience, and that the journalist waits until he or she comprehends the issue and reaches the appropriate level to begin communicating it to the reader. This last rule seems to be a subconscious process as there are no yardsticks against which to evaluate this levelling. As a result of these rules, assumptions are made by journalists about what the audience wants and what they can cope with. This levelling of information to suit the audience or readership involves reducing or expanding concepts depending on the issue. There is evidence to support this from the T.I.D. sessions carried out with journalists which follows,

"[the environment] has suffered because it has been popular science and to make it understandable we have had to put pretty pictures on it and tell it in very simple terms. That has made it quite simplistic in itself when actually deep down it hasn't been. It's like the pictures I saw today of the Hubble Spacecraft - it's literally....child's picture book stuff - "Here is Mars - doesn't it look amazing? Here is its star - doesn't it look amazing?", He [science correspondent] knows the science and he will have been told why the pictures are important and what they now show but by the time they translate that into television it is simplified." Respondent 2.

The respondent implies that the medium affects the message and that the information is simplified for the benefit of the audience and by the pragmatics of construction. A key difference (already established) between the specialist and non-specialist correspondents is the depth of knowledge specialists possess about the subject areas. Although the science and environment journalists have only a fraction of the expertise that research scientists have, they are aware of the main theories and issues in their fields. They are, however, limited in the amount of scientific information they can include, by the constraints of their media and perceptions of the audience. Some of the respondents who were not specialist correspondents stated that in the event of an environmental "disaster" they would consult environment journalists who could explain the issues to them. This is yet another level through which the information passes and with each stage the possiblity of distortion becomes more likely.

[&]quot;... You would have specialist writers who would be able to...who would know how to speak to the scientists on level terms - an environmental correspondent, for example, and you would probably ask them to speak to the scientists to put some of

the scientific jargon, that you've got on your data sheet, into layman's terms." Tom Little, Edinburgh Evening News

It has been established that all journalists (press and broadcast; specialists and non-specialists) cover environmental issues as straight news stories. It has further been discovered that reporters, regardless of their position in the editorial chain or their specialisms, include very discrete amounts of science in their news constructions. Respondents have talked previously about the economy of language, implying that, on a practical level, the constraints of space and time precludes the necessity for complex scientific information in news.

Respondents talked about levelling as evidence from the T.I.D. sessions suggests.

"I don't mind the science but it has to be in layman's terms because I can't do a story on the presumption that I have got 30000 scientists listening. I've got 30000 punters whose average news diet would be the Press and Journal or the Record so we have to go at that level. We can't go at the level of the New Scientist or the BALL. We have to simplify it down or have them simplify it down for us." Jonathon Moore, Northsound Radio.

The majority of the journalists stated that they would get the experts to break down the science into its constituent parts and explain the theories or they would attempt to decode the science themselves and check with the expert before using the information.

"The science would be kept to an absolute minimum...The only thing that you might want to say is that you might want to mention the name of the product that is causing the illnesses, and more importantly what it does to people - makes you sick or gives you headaches etc. Little of this in the press release would be used in an article - very very little....you'd be more likely to get some press friendly expert to translate it into layman's terms rather than jargonese." Tom Little, Edinburgh Evening News.

"I can go to a scientist and say "can you please make that as simplified as you can? What does this mean?"... "...well it means that there has been a concentration of it or whatever in the soil there and it is not draining away. It is built up and now with the heavy rainfall it has been washed away and has ended up in the stream."... If I don't know what it means, hopefully I can find someone who can tell me what it means and they can explain to my listeners what it means. That's always what I would aim to do - keep it as simple as possible." Jonathon Moore, Northsound Radio.

Several of the journalists mentioned the fact that they gauged the right level at which to pitch the information for the audience by assessing their own comprehension of issues. This is a rule or a test which the researcher has called the self comprehension test.

"My approach would be to find out about the science...to attempt to understand it myself. When I come to write it up I find time and time again that ... there isn't space for it by the time you explain the basic story there is very little space to put in much science and even if I do put in some it won't hit you as being science with a capital "S", it'll be my understanding of science. If I have time I'll go back to the scientist and say, "look, if I put it like this so that a general audience can understand it, will I still be accurate?" If they say yes...then that's how I'll do it...I would try and explain...what it is that has caused the health problems and I'd try to do that in as lay terms as I could." Respondent 2.

This is not a foolproof test used by all journalists. One respondent in particular talked about having to block out his own knowledge so as not to bias the construction part of the process and to lower his powers of comprehension in order to correctly estimate that of the reader.

"...all this information I'd want explained, from the point of view of transposing it into readable newscopy. I'd have to be able to understand it myself first. As a journalist when you're being trained you are told to use the acid test of only reporting what you understand. It's not a question of what I understand as a graduate...I've got to lower my processes of understanding and take it down to the lowest common denominator ie to what the average person would understand and sometimes you go over the score." Carlos Alba, The Press and Journal.

This journalistic test leads inevitably to simplification and it is apparently preferable to oversimplify rather than undersimplify in order to catch a higher number of readers.

The following evidence demonstrates the form that case 2 would take and the assumptions made by the journalist about his intended audience,

"You'd have a main simple human interest story then inside you might have a more in-depth analysis on the debate and you probably would only bring the science into a simple form - a little panel which is beside the big story and there you might have all these fancy names, the various studies that have pointed to links, in a very easily accessible format. It has to be that way or people would stop reading. If there are two many long words, people stop reading. I would myself. It's boring." Tom Little, Edinburgh Evening News.

The journalists referred, several times, to oversimplification which they regard as unavoidable and a symptom of the news process. Many pointed out that their role was to act as a mediator

explain concepts as clearly as possible and disregard scientific terminology. One of the techniques or rules which journalists use to do this is to write the news by including "signposts" which are terms or descriptions of similar situations which are familiar to the audience. Reporters in a sense construct the story from within the context of previous comparable incidents eg the use of the term DDT to illustrate the effect of the chemical pesticide (see Case 1). This rule is essentially putting the story in a context previously known and accepted by the audience.

"I think as soon as you start talking about organophosphates, you turn off most of the people who might otherwise be interested. Lindane and DDT...if you mention DDT then I think that's something that people are already familiar with...so I might mention that kind of brand and mention the fact that there have been problems with it. But beyond that I am unlikely to get into the real science. I see, here that it can be taken by inhalation...I would say that but I wouldn't go beyond that because I don't think people would be particularly interested." Respondent 2.

"We might put in herbicide but the actual chemical names...we would probably keep out unless it happened to be a well known brandname. It's a question of identification. We might mention something like DDT. They don't really know what it is but they've heard of it. They've got a rough idea that it is not good." Paul Riddell, North Scot.

10.9 Tertiary Model: A Complete Statement

If the news process could be described chronologically, the execution of the different sets or categories of rules would be ordered in this manner - evaluative (1) (chapter 8); operational (2) (chapter 9); and constructional/interpretive (3) with the editorial ones (chapter 7) being applied actively throughout (see following page).

The previous four chapters have in turn described and analysed the different rule categories from within the context of the tertiary stage of the model. The final section of this chapter summarises and concludes the discussion of the model by demonstrating its composite nature and reinforcing how the different types of rules fit together within the news process.

Pictorial Analysis of the News Process: Tertiary Stage **JOURNALIST** (1) EVALUATIVE ~ Story Assessment Categorisation of News Recognition of Issue as News Assessment of Newsworthiness Predetermination of Positioning Application of News Values in News Agenda - Geog. Relevance OPERATIONAL ~ Story Investigation ~ Human Interest (2) ~ Ethnocentrism Information Strategies **NEWS SENSE** Negativity Journalistic Approach Information Gathering (1) To Issues CONSTRUCTIONAL. ~ Story Construction Self-Tests Links (Respons. Function) Raw Material (Information) Angles Sources Human Impersonal Organisation of Information Library Prof. Bodies Non-Experts Experts/ Specialists Writing Info. Office Editing Scientific Political Environmental Stylistic Techs. Psych. of Internal Contacts Lang. ~ drama Media Monitoring Colleagues Economy of Lang. (2) Reduction of Complex Scientific information J. as Intellectual (3) Filter **NEWS PRODUCT** MEDIATED KNOWLEDGE II

Fig 27 The Tertiary Model: A Complete Statement

At each stage in the tertiary model the categories are influenced by practical constraints. These are shown by directional arrows on the map. The most common pragmatic factors of the news process, as defined by the respondents, were space and time. These factors (which are related to editorial rules and therefore reinforces how the categories influence each other) tend to demonstrate the differences between the broadcast and print media. Journalists operate within a "stop-watch culture" (Schlesinger, 1977) and this time constraint is at "the centre of decision-making and of news control...usually related to the daily cycle" (Watson and Hill, 1993, p90). Immediacy is generally regarded by academics as a news value but this research also considers it as a pragmatic influence on the construction of news. The nature of news is concerned with immediacy. An event should be reported as close to the incidental time as possible. It is this factor which limits the scope of environmental coverage because the environment tends to exist not so much as singular, isolated events but as collective issues with long term implications. For the environment to exist as news, there needs to be a "trigger" incident which is newsworthy enough to allow it precedence over other news items. Watson and Hill (1993) point out that,

"The danger with such emphasis on immediacy is that news tends to be all foreground and little background, all events and too little context, all current happening and too little concentration on the historical and cultural background to such events." (Watson and Hill, 1993, p90)

Space is another factor which has editorial and evaluative implications. Editorial decisions are based on the prioritisation of newsworthy items in relation to the amount of space available in the newspaper (discounting material from other departments such as advertising). Similarly the news is ordered in the news schedule for television or radio hierarchically and this is dependent on the news sense of the particular editor in charge. News sense is the tacit knowledge which journalists and editorial personnel acquire after the routinisation of the process.

Newsworthy issues are assessed using news values. According to Watson and Hill (1993) who refer to the work of Cohen and Young (1973), issues will be covered if they fulfil the news value criteria. Events or issues have a better chance at being covered if, they are clear, unexpected, have appeared before, seem larger than they are in reality, and if they are relevant geographically. From the evidence gathered in the T.I.D. sessions respondents emphasised the fact that the most

important values were human interest and geographic relevance. They did mention other values briefly but did not rate them as highly. This was due to the design of the methodology which allowed the sample of journalists only to reveal those values which were relevant to the environmental issues they were presented with.

Collectively, the different rules act as the mechanism by which the news product is constructed and disseminated. This product contributes to the ways in which the audience or readership makes sense of the world around them. This point is marked on the bottom of the tertiary model. Many studies have been done to investigate the influence of news on the audience - for example how news language affects the powers of comprehension. (Fowler, 1991; Bell, 1991; Van Dijk, 1990); how news is politically biased (Rachline, 1991; Koch, 1990). This study is not primarily concerned with the receivers of the news product; however, it is necessary to conclude this section of the work by turning our attention to the product the audience consumes. If the news is constructed (as Rachline, 1990, suggests) within particular social and political contexts and journalists themselves make assumptions about the world then the news is undeniably a factor which enables people to make sense of things around them. Furthermore, it is a subjective construct which is put together by people who themselves are influenced by their own perceptions of social reality. It is this reality which is constructed through the product,

"As the hegemonic ideology reflected in and by the news media represents, represents and re-creates the relations of power that characterise the social order, a redefinition of the standards and purpose of the press will not be met without resistance - systemic, institutional and individual." (Rachline, 1990, p134)

Consequently, the tertiary stage adds knowledge to the model in that it highlights and demonstrates in detail the routines or recipe knowledge which is inherent in the news process. It shows the reduction and distillation of information, the journalists information selection processes and the information sources which are used most frequently. Ultimately, it depicts that each category of rules directs and influences the end product and therefore the newly transformed mediated knowledge of the preliminary stage of the model. It indicates how this finally leads to the journalistic construction of environmental reality.

This chapter has described and analysed the constructional and interpretive rules implicit in the news process. The constructional rules have been identified as those used in the writing, editing and presentation of news. The interpretive rules are concerned with the codification and ultimate simplification of scientific or environmental information for the intended audience. These categories have been discussed at the same time due to the inextricable ways in which they are interrelated. An examination of the information selection and rejection patterns of journalists and implicitly, therefore, the ways they interpret scientific information, has been undertaken. Further, an investigation of the various techniques used to write the articles or scripts eg dramatic emphasis and the ways in which these areinfluenced by the pragmatics of the construction process, has been carried out. Themes such as the communication of science and the environment, and the relationship of news values to the writing process emphasising the ways in which each category influences the others, have been developed. In addition, in-depth consideration has been given to the construction and interpretive methods which journalists use through their perceptions of the audience.

Conclusions

The project was initated in response to the fact that no research had been carried out previously into the ways in which the Scottish media constructs and disseminates environmental news. Further, it was evident that no other work was being done to examine the tacit decision-making procedures involved in the mediation of this specific type of information by journalists. The context in which the research appears, therefore, is original. However, the work extends previous research carried out in the field of journalism. Much research, particularly in the United States, lends itself to the study of the news process within specific contexts such as objectivity, or the dissemination and effect of the news on the audience. Previous investigation has been carried out into the news gathering or information strategies of journalists. This research project has stressed the importance of both these facets of the process and emphasised the necessity to study these together with the constructional and interpretive procedures. It is argued that without studying the news process holistically no critical understanding of the integrationalist function of these different rules can be achieved.

The study specified environmental information for a number of reasons. Firstly, due to the fact that unlike other types of information (business, legal or financial) environmental information is scientifically and technically complex. Further, it appears in different formats ie at different intellectual levels and it is unique, in its key difference from other types of information, in that it is multi-disciplinary. Secondly, it is also a type of politicized information in that different professional groups (the media being only one) are using the information for different purposes or agendas. The complex use of this information by these groups emphasises that environmental information can be studied in a scientific way. Thirdly, environmental issues allow for the study of diverse types of reporting such as disasters. This would not have been possible with other types of information. Finally, environmental issues (due to their inherent political characteristics) are made more important than other issues eg financial, and economic via the news process. However, environmental issues still have to be sufficiently newsworthy before they

are recognised by the media. This paradoxical characteristic is defined and exemplified best by environmental issues.

The research developed from the idea that as journalists construct and disseminate the product to the audience or readership a particular version or interpretation of social reality is created. This interpretation is subjective because it is the journalist's (his/her organisation's) perception of an issue. From this developed an interest in the journalist's role in the news process and how this role influences the construction of the product. Early on in the research, a case study was developed using the Braer oil spill as a focus and a comparative analysis between The Press and Journal and The Shetland Times was undertaken. To analyse the structure of the news product in greater depth it was necessary to apply discourse techniques to examples of environmental news thereby breaking down the text into its component parts and examining the language used. The method was based on traditional content analysis techniques and sought to validate the hypotheses developed through the models which were grounded in empirical data gathered through semi-structured interviews with journalists.

The research was designed to address the problem of how journalists construct, interpret and mediate environmental news in Scotland. Out of this research question and from an understanding about the nature of environmental information and the mediation process implicit in journalism, a number of specific hypotheses developed. Starting with the idea that environmental information is pluralistic and complex, the following hypotheses were formed. These were that information changes according to the ways in which it is interpreted and that the flow of environmental information is redirected and influenced by the news process. It was argued that primary or unmediated knowledge is altered into a popularised, commercial form and it appears to have been simplified due to the interpretive journalistic process. The work addressed these claims through the development of a multi-stage model. This model existed in three parts (preliminary, secondary and tertiary). The preliminary stage demonstrated the information flow from unmediated or primary information (KNOWLEDGE 1) through levels at

which different groups of personnel retrieve and interpret the information thereby changing the meanings inherent in it. The last level is the news product or mediated information (KNOWLEDGE II) which is disseminated to the audience or readership. The secondary stage of the model evolved as a result of the application of new data (gathered from journalists in semi-structured interviews) to the preliminary stage. The hypotheses were revised, therefore, in light of new evidence from practitioners. The secondary stage described the news process in greater detail and from within a particular reporting context ie a hypothetical ecological incident or disaster. It demonstrated the different information sources which journalists consult eg the library or scientific specialists. Further, it considered part of the construction process where journalists act as an intellectual filter for the audience (a theme developed extensively in the tertiary stage of the model) or where they simplify complex and technical environmental information for the intended reader or viewer.

Important sub-hypotheses emerged from the secondary model and these were formed on the notion that journalists use taken-for-granted procedures or rules when they practice the news process. It was hypothesised that over a period of time these rules are routinised by the repetition of the same sequence of procedures and ultimately become tacit. From these hypotheses which are concerned with the news process and the news product, the objectives of the research were developed. These objectives (see page iv) were to examine the journalists' information gathering and interpretive practices, to study the sources of environmental information, specifically the library and scientific subject specialists or experts, and to identify (and find the sources or origins of) the "taken-for-granted" rules implicit in the news process.

Berger and Luckmann's "The Social Construction of Reality" (1967) argues that knowledge is a social phenomenon which can be described and critically examined. Their work emphasises the importance of language in signifying knowledge and proved to be relevant to the investigation into the knowledge systems that journalists use to mediate environmental news. This research aimed to develop an understanding of the everyday knowledge which journalists utilise to construct the news product. It was designed to test the hypothesis that when journalists evaluate,

interpret and write the news, they mediate a contextual version of social reality which is conditional, in part, upon their particular image of the audience.

In order to address the objectives and answer the research questions, appropriate methodologies had to be identified and developed. These were mainly qualitative techniques such as interviewing (semi-structured) and a number of different textual analysis methods. The semistructured interviews were carried out with three main groups of personnel. These were journalists, media librarians and scientific subject specialists. The interviews yielded a wealth of qualitative data and this information added to and refined the hypotheses. Thus, various content analysis techniques were implemented, as is the norm within research of this kind, but the main method was needed to extend and develop the work. A hybrid form of ethnomethodology and discourse analysis was used to meet the fourth objective (see page iv). Ethnomethodology is the conceptualisation of how people make sense of everyday procedures and the sense of reality they take from these. To investigate and identify the tacit rules which journalists use in the news process, it was necessary to build on and extend the qualitative methodologies by developing a unique, robust and reliable method of tri-lateral interactive discourse (T.I.D.). Five different case scenarios were constructed each specifying a separate environmental issue (four were hypothetical and the fifth was a real issue, to act as a control case). These cases were each composed of the basic situational narrative and a sheet of technical data, providing the journalistic respondents with backgound to the story. During the session the respondent would talk about the methods which would be used to investigate and write the story. The "tri-lateral" label refers, therefore, to the researcher and the respondent interacting through the text during the discourse session. From the extensive amounts of data, which this type of method generates, and through the detailed analysis of the session transcripts, a number of tacit rules which journalists use routinely were inferred. These rules were then classified according to the following headings, editorial; evaluative; operational; constructional and interpretive and were arranged typologically. The typological approach allowed for a detailed, analytical synthesis of the rules. What this stage of the research aimed to do was to gather data which would complete the information flow model (chapter 3).

The tertiary stage of the model was developed from the evidence gathered from the T.I.D. sessions and describes chronologically the integration of the different types of rules. The categories are arranged thus, evaluative; operational and constructional/interpretive. The editorial rules are applied to each set of rules and this reinforces the fact that the rule categories influence each other and do not exist independently.

Environmental information is pluralistic and complex. The findings from the T.I.D. analysis support the hypothesis that the nature of the information changes due to the process through which journalists interpret and construct the news. There was evidence to suggest that information is reduced to manageable segments, the meanings of which are radically simplified for audience consumption. The work has supplied a rationale for this process. Firstly, that this enabled the journalist to satisfy the basic common comprehension level and secondly, the editorial demand to fill a particular size of news hole.

"...news may be analysed as a "speech act" model, a relativistic conception of news according to which any report of a current event counts as news and is newsworthy by virtue of its being published. On this view the news and the newsworthy are created, not discovered, by the press through its act of publication - they are "whatever the news people say they are". Second newsworthiness may be analysed in terms of the degree of importance or significance, of the news item in question. Third, it may be analysed in terms of people's interests." (Cohen, 1994, p8)

Cohen above, is reviewing Halberstam's paper "A Prolegomenon For A Theory of News", and makes a valid point in saying that the very nature of the news process is such that news is created by the news media at the very instance it is published. It is evident from the data gathered from respondents during the T.I.D. sessions that this is not the only way that the news process and therefore, by definition, the news product can be interpreted. News is constructed within a specific editorial and organisational context. This implies that news exists as a number of different representations, each being manifested through diverse value systems. Certain types of environmental issues are more newsworthy than others. One reason for this may be attributed to the fact that certain issues are high on the public and political agendas. This is ironic in that these issues become important in news terms because of the awareness which is generated

through the media. Other reasons are that environmental issues generally do not possess hard news qualities unless the story is of "disasterous" proportions eg Chernobyl, the Braer. Environmental issues sometimes involve mere assertions and the fact that continuing scientific research is embedded in such issues means that newsworthiness is low.

The evaluative rules were concerned with the ways in which journalists approach environmental issues and assess their newsworthiness. This is done with a knowledge of the organisational policy in mind and an important argument within this thesis is that this knowledge is tacit. For example, reporters know whether or not an issue is likely to be included in the schedule or newspaper because they apply news values which have been developed by the organisation.

The operational rules consisted of the information gathering strategies involved in the news process. It is this category which underlines how important scientific subject specialists are as sources of information to journalists when covering the environment, thereby substantiating the claims of the preliminary and secondary stages of the model. The thesis argues that media organisations encourage journalists to rely on human sources for information as opposed to library based literature or electronic information. Evidence from the journalists themselves states that the pragmatics of the news process prohibits them from wading through the wealth of scientifically complex information which can be retrieved from impersonal sources. The T.I.D. sessions revealed that there were no great differences between the specialist reporters and the non-specialist reporters in terms of the types of sources they would use. With the specialist reporter working constantly in the environmental field, how reasonable is it to suggest that the journalist has evolved as a subject specialist in his/her own right? This would depend on the definition of subject specialist. A journalist having built up even a credible working knowledge of the subject area is not going to attain the same depth of understanding as an environmental scientist. Therefore, even possessing a degree or equivalent qualification in environmental science or related discipline, the journalist could not be regarded as a subject specialist within the scientific arena. However, taking into account the amount of experience the journalist should

possess through the continued reinforcement of environmental reporting, it is reasonable to assume the journalist is a specialist within the field of journalism.

The constructional and interpretive rules were discussed together due to the fact that they were analytically distinct but in practice are interdependent and they are applied by journalists at the same time. This category like the operational one, supports the hypotheses described by the secondary stage of the model (chapter 3). It dealt with the rules which govern the organisation of the raw information, for example, the writing and editing techniques involved in the construction of the product. At the same time, however, it also examined the interpretive rules, for example, the reduction of the scientific information implicit in which is the journalistic function of intellectual filtering.

Finally, the tertiary stage of the model described the routine processes which journalists carry out when constructing the news. It demonstrated the different rule categories and how these interlink or influence each other. Collectively these rules act as the catalyst by which the news is constructed and mediated. The tertiary stage complements and completes the preliminary and secondary stages of the model, which described the interaction between journalists and sources, the procedures and strategies used by reporters to construct the news via the news process and the information flow which occurs from source to product. It provided detailed micro analysis of the news process which promotes understanding of the methods used to transform KNOWLEDGE I from an unmediated state into the mediated news product.

The research involved an analysis of the methods which news personnel use to interpret, mediate and package information into an intelligible format for the audience. The research also paid particular attention to the manner in which information is constructed into a popularised format for the social consumption. The work has investigated the news process, implicit in which are the constructional and interpretive methods which journalists use to create the news. Overall, the project has examined the rules journalists used to evaluate the newsworthiness of environmental issues, and the sources which are consulted for information eg libraries and subject specialists.

The original research question was, "how do journalists construct, interpret and mediate environmental news in Scotland?" The work allows the conclusion to be drawn that journalists construct the news product through a process of "taken-for-granted" rules or procedures. Therefore, this project is not only an extensive investigation into the human behavioural elements of news making in Scotland but also a detailed examination of the information processes implicit within news construction. The thesis focuses on the use of environmental information because of its multi-disciplinary, complex scientific nature but the research has widespread, more general applicability, for example, there are other subject areas to which the work could be applied such as business, politics or law. Additionally, there is scope for future work into the availability and accuracy of electronic information. This could take the form of a study of Reuters news agency where a number of different formats of information, which are used for news construction, converge within the same organisation.

Further, having developed the T.I.D. methodology there is scope for future research in a reception analysis study to assess not only the effect of news on the audience or readership but also to determine the extent to which the social community constructs environmental reality based on news information. The current research only considers the audience from within the context of the journalist's perception of his/her intended readership or audience as he/she constructs the product. Therefore, there is potential for a study of this nature which might make use of a qualitative ethnographic methodology and which focused on Scotland.

The notion of contextualisation (chapter 8) or the ways in which journalists use previous reporting experience to facilitate the coverage of particular issues, is an interesting area which could also be developed. Further, there is scope for research into the mental or cognitive mappings used by journalists to reinforce information strategies. These are extensions of the research which might make use of more quantitative approaches, perhaps including cognitive psychological methodologies.

At a more specific level, the aspects of the research which examined journalists' information strategies, opened up a range of issues which might usefully be the subject of future work. For example, it would be of benefit to have an understanding of how the library is used or not used by journalists and how effective it is as a research tool. Information relating to how underused electronic sources of information are and the lack of awareness there is about these sources among journalists could be developed in the future.

This research contributes to a deeper understanding of the human processes associated with news making. The identification and elicitation of the rules implicit in the news process will enable us to understand better the future development of journalism. Although the research has not concerned itself centrally with computer aided journalism, it is likely that with the passage of time the profession will become more technology based and this work could have relevance for practitioners who may be thinking of introducing a new computer system into their organisations. A knowledge of the rules or work procedures which are utilized by journalists would be useful and might facilitate this process. The work could illuminate and contribute to the designing of computer systems which could automate the procedures identified by the research.

It is important to note that electronic information retrieval is distinct from computer aided journalism. The latter is used synonymously with electronic news gathering (ENG) and although there has been a considerable amount of work carried out on this subject in the U.S. (Musburger, 1991) there is scope for future research into the effects of ENG on the news product in the U.K. Within the context of this research it is difficult to speculate on whether technology affects the news process. The literature (Koch, 1991; Musburger, 1991) suggests that it does but the interviews with practitioners in Scotland suggest that knowledge of computer aided journalism is minimal. To reach any conclusions about this issue would entail undertaking extensive research in the field.

However, as stated at the beginning of the work, a detailed discussion of computer aided journalism is beyond the parameters of this research and speculation about the future of the journalism profession in relation to computer technology is outwith the capabilities of the

researcher. This is another important area of research which should be undertaken in the future because as yet no work has been carried out on this subject within the context of Scotland. Although the research has mentioned the computer aided journalism in passing it should be emphasised that only a cursory discussion has been included.

The role of the research has been to explain and critically evaluate the process by which journalists construct, interpret and mediate environmental news. It has contributed to the provision of an important awareness and detailed understanding of the ways in which the media represent and communicate environmental reality in Scotland.

"Our perceptions of the natural world are, of course, both real and illusory. The certainty of what is reality and what is illusion...is knowable only from points of reference that we accept as defining these two states. These references are not built into the germ-line cells as part of our genetic constitutions: they are developed by culture and by experience and retained within our memory." (Morris, 1986, p14)

It is for reasons such as these, that practitioners and academics alike should read this research. The work would facilitate journalists to become aware of the job they have routinised and more importantly of the synthesis of the rules which they "take-for-granted". The project will, hopefully, allow practitioners to understand the news process objectively, enabling them to distance themselves from the inevitably subjective view of the profession that they possess.

For interest, the thesis mentions computer aided journalism in chapters 4 and 5.

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Appendix I

Appendix I

Listing of Directories

The list of directories and bibliographies used to reveal contacts and interview subjects:

<u>Benn's Media Directory: Incorporating Benn's Press Directory.</u> (1990) Tonbridge: Benn business Information Service Ltd.

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Appendix II

Appendix II

Interviews

1. Media

1.1 Journalists

Ahmed, Kamal

North East Correspondent to Scotland on Sunday, Aberdeen

Journalists for weekend supplements frequently cover environmental issues.

Alba, Carlos

Political Journalist The Press and Journal, Aberdeen

There is no Environment Correspondent at The Press and Journal but Carlos Alba reported on the Braer incident.

Buie, Elizabeth

Environment Correspondent to The Herald, Glasgow

Also reported on the Braer.

Clover, Charles

Environment Correspondent to The Daily Telegraph, London

National and international reputation for covering the environment.

Contacted through selection by directory.

-
Cramb, Auslan
Environment Correspondent to The Scotsman
Reported on the Braer.
Little, Tom
Health Correspondent to The Edinburgh News

Journalist for North Scot Press Agency

Lundie, Ian

Monaghan, Liz

Journalist at Radio Forth, Edinburgh

Nicol, Ruraidh

Environment Correspondent to Scotland on Sunday

Pearce, Fred

Journalist for The New Scientist, London

Riddell, Paul

Journalist for North Scot Press Agency

Rundell, Ken

Journalist for Radio Scotland, Aberdeen

Smith, Graeme

Journalist for The Herald, Glasgow

Reported on the Braer

Stephens, Mark

Journalist for Radio Scotland, Aberdeen

Stirling, Alisdair

Freelance Journalist. Currently the editor of the medical journal "Pulse". Worked previously for BBC and covered Chernobyl Disaster.

Warner, Karen

Reporter The Shetland Times, Lerwick

Covered the Braer and has co-written a book on the subject.

1.2 Producers

Anderson, Arthur

Producer of "Landward" (local, farming, conservation programme)

Works for BBC Scotland in Aberdeen.

Adderton, Paul

Producer of "Country Matters" (local conservation, nature preservation programme) for Grampian Television.

Jones, Andrew

Senior Producer at BBC Radio Scotland, Aberdeen

Involved to a great degree with environmental radio programmes.

1.3 News Editors

Coyle, Mark

Head of News Northsound Radio, Aberdeen

Gracie, Alisdair

Head of News Grampian Television, Aberdeen

Lyons, Ron Editor of The Inverness Courier

Not really involved in the environment unless pertaining to area surrounding Inverness.

Moore, Jonathon

Head of News at Northsound Radio, Aberdeen

2. Librarians

BBC Scotland, Glasgow

Alex Gaffney Acting Manager of Library Services

The Herald, Glasgow

Marie Campbell Chief Librarian

David Ball Information Officer

The Independent, London

Gertrud Erbach Chief Librarian

The Press and Journal, Aberdeen

Duncan Smith Chief Librarian

The Scotsman, Edinburgh

Peter Chapman Chief Librarian

Moira Stevenson Deputy Librarian

3. Subject Specialists (Experts)

Laird, Lindsay

Department of Zoology University of Aberdeen

Fish Specialist - consulted by media on Braer

Matheson, Fiona

Environmental Ranger, Crathes Castle The National Trust for Scotland

Ross, Harry

Senior Veterinary Consultant The Scotish Agricultural College, Inverness. Consulted by the media on Braer. (Wildlife)

Sinclair, Dr Alex

Soil Specialist The Scottish Agricultural College, Aberdeen.

Consulted by the media on the Braer

Synge, Barti

Senior Veterinary Consultant The Scottish Agricultural College, Thurso. Consulted by the media on

Braer. (Sheep)

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Appendix III

This appendix includes a complete transcription of one of the interviews conducted during the course

of the research.

Interview with Kamal Ahmed, Correspondent at Scotland on Sunday

17/5/94

Start time: 10.05am

Finish time: 11.10am

Notes:

The respondent has been issued with a short questionnaire.

The interview commenced with a brief introduction to the project.

The first set of questions relate to policy/responsibility and within this category the view of the

audience and format of environmental news. The second set refers to the importance of

environmental information, priorities within the news schedule etc. Sets three and four include

questions on environmental information use and the information provision and dissemination. The

final two sections are to do with networking and a national environmental information system.

1) Policy and responsibility

View of the Audience

What are a journalist's environmental needs?

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"Journalists want information which affects people directly. Eg we have already all heard about global warming and people are unconcerned about it now. We need material which brings a community to life, something which gives a human edge to an issue. We start with people orientated stories which then reveal the wider issues from which these stories stem."

What are the information gathering policies? eg do they go out to sources and gather this information or do they wait for pressure groups to contact them?

"For the Sunday newspapers we go out and contact people because we only have short deadlines and we can't wait for the pressure groups. We need to be as proactive as possible not passive."

Is the news agenda set, therefore, by other people?

"Well it is a two way process really. People give you ideas for stories and you decide what to do with it. There are three levels involved in the news agenda - I the person with the story

2 the journalist

3 the newsdesk

A reporter works on several stories at once. The news agenda is set on the second level, with the journalist throwing stories at the news desk and the news desk deciding what to include. The news desk is not interested in some things and often stories are excluded or cut down due to the lack of space."

How is it possible to package environmental information effectively for the audience?

"Environmental groups have to have a specific target for an issue. Putting out hundreds of press releases to all the newspapers and media establishments will not be effective. They need to target the

paper with an important story and need to use exclusivity and selectivity. Personal contact with people is much more important. The media watch each other and will refer to what colleagues have done rather than reading press releases which are written in a boring official language."

What is your view/perception of the audience and how do you target information accordingly?

"As a Sunday newspaper we aim for environmentally concerned people, therefore more environmental stories get coverage. Due to the fact the paper is a weekend one, there is greater time and space for indepth coverage. The Sun and papers like it have a different remit and are not going to cater for the same type of readership. Environmental information is complex and on a Sunday paper we can explain issues more clearly. We try to give both sides of the argument. We cater for people who already know something about the environment and who are better informed."

How high a priority is environmental information rated compared to other types of news?

"The environment is not the great issue it was before. One of my news editors said "what happens after the end of the world?" - what is there left to cover? People don't want to go back to reading about river pollution. There has been a lull in the environmental agenda certainly. This has been reflected in the lack of publicity of the green parties. All we need to do is compare the Euro elections of 1988 with that of recently to see the change. We have to work a lot harder to get stories today. Most stories have been done, the issues are old and the environment has not slipped off but slipped down the news agenda."

Will this change?

"I don't know. It has peaked and now it has levelled off. It's not the heady days of the '80s. We seem to have reached an equilibrium with the environment. It is no longer top of the agenda unless of

course something happens eg tons of toxic waste are dumped in the north sea, otherwise it remains constant."

What are the main EI issues which are newsworthy currently?

"The main stories are the pollution of the north sea ie the treatment of the oceans as a resource; overfishing; BSE - agriculture and health issues."

How quickly do these become superseded by others?

"Fairly quickly. The news agenda moves on rapidly. It has to."

What are the major sources of EI?

"We go to the industry involved eg the fishing industry. We use the Scottish Office, anyone who can give some sort of expertise on the matter. We visit Government sources, specialists in pressure groups eg Greenpeace, Non Government organisations etc. We don't ignore anyone."

What happens to the information after it has been disseminated?

"It is recorded for ever and centralised in the library in Edinburgh for research purposes or consultation on a particular issue."

What is the role of IT within the organisation in disseminating the information?

"Scotland on Sunday is just coming out on CD-ROM at the moment. This means that any paper from any part of the year can be searched therefore the information will be much more accessible. There

is also a new system which is being developed at the moment, which can retrieve not only material from the paper itself but also finds what the journalist wrote originally (but which may have been shortened because of lack of space in the paper). This will provide extra information for the public or businesses."

Is there an informal network between the media in Scotland which focuses on EI?

"Yes I'm sure there is. We rely on contacts in the media. Informal networks are the most important way of getting EI into newspapers. Journalists are desensitised by press releases."

Is the Government involved?

"Not that I know of."

If there was a National Environmental Information System (ie a large resource of EI which you could tap into),

what form should it take?

in what ways would it help the media?

"Journalists more often than not come to a subject cold. What is needed is a briefing. We need the latest research and an overview of the significant findings over the past 10 years. We need to know when it became an issue. This information gives our stories authority and I feel that it would be much more useful. Newspapers today are improving their IT facilities and a lot of this information is available already. We need a historical overview in addition to the background facts and figures of the issue."

Would you use it?

"Yes. However, they need to ask the journalists what they want."

If online access were to be provided would this make it more acceptable as opposed to traditional paper based sources?

"Yes. Online will improve efficiency as it is quicker and easier."

If this system were to be brought into operation would you contribute to its expansion?

"I think the newspapers might but that depends on copyright and the financial situation."

A final question which relates to policy. Does the audience make direct contact with you about EI? eg schools, teachers, who perhaps have no other access to EI except through the media?

"They usually make direct contact with Scotland on Sunday office in Edinburgh. Some people do when they are interested in a piece that I've written and want a copy. There is quite a "feedback" system when people are searching for extra information, I give them contacts in the field."

Thank you.

Appendix IV

Appendix IV

Case 1: The Use of Chemical Pesticides in Agriculture

The use of artificial, chemical pesticides in agriculture and other food related industries has concerned scientists since their initiation.

The main classes of chemical pesticides are herbicides (to kill weeds); fungicides (to control [pathogenic fungi); nematocides (to eradicate the eelworm); and insecticides (to kill insects).

Insecticides can be further divided into 2 groups, organophosphates and organochlorines. Many of the organophosphates are extremely poisonous and attack pests through the nervous system. In many cases they are unstable in they can be broken down by the environment. Parathion and TEPP are two of the most unstable, poisonous organophosphates.

Organochlorines are stable ie non-biodegradable and have caused extensive environmental pollution. These compounds are very soluble in lipids or fat. Their biochemical action can cause changes in fertility, hormone and enzyme action. These organic or synthesized chemicals eg DDT (Dichlorodiphenyltrichloroethane), Lindane, Dieldrin (all now banned) can be spread as wind blown dust.

Herbicides are the most widely used form of pest control in the UK today. They are a group of organic chemicals, used to destroy or control the growth of weeds. These can be subdivided into 3 groups - selective (destruction of certain plants eg Benazalox), residual (applied at seed time) or translocated (sprayed onto leaves).

There has been concern about the possible effects of herbicides on humans as some are highly toxic, and may have carcinogenic or mutagenic effects.

Benazalox is a crop herbicide, containing benzolin, a compound derived from benzoic acid. It is a member of the phenoxyalkanoic acid group. This chemical is commonly used in the North East of Scotland, in the production of oil seed rape. It should not be sprayed if raining or windy. It is extremely irritating to the skin and eyes.

Toxic substances enter the food chain by a process known as Biological Magnification. During this, the toxins become more concentrated at each higher stage in the food chain. Top level carnivores (this can be humans) are most badly affected as the poisons are condensed as each level ingests the one below. For example the compound DDT which is soluble in lipids or fat tissues, collects there and is magnified at each level in the chain.

The effects of chemical pesticides depend on a number of criteria, eg dosage, type of exposure, the general health of the person and how easily the chemical can be absorbed. Pesticides are generally

taken in by inhalation, through the mucus membranes eg eyes, nose; through the skin; or by ingestion. The body's metabolism can make the pesticide more water-soluble which can be excreted but it can also increase the toxic effect. Similarly, when the simultaneous use of two or more different chemical pesticides takes place, the resulting interaction can create a substance which is either more or less toxic. Those which may be more toxic can also be mutagenic or carcinogenic. The organochlorines cause chloracne and lesions of the central nervous system and organophosphates eg organophosphorous induces behavioural changes and delayed neurotoxicity. The chronic effects of hazardous chemical pesticides include bone marrow effects eg aplastic anaemia; cancer (in particular, respiratory cancer amongst humans working with arsenical pesticides); male infertility and neurotoxicity. These are more often linked with occupational situations. Non-occupational exposure examples include, accidental poisoning by ingesting food which was contaminated in the transit process. The chronic effects from these situations are cancer and respiratory effects eg asthma.

Scenario

There has been a marked increase in use of pesticides by farmers in the North East of Scotland.

The bodies of dead animals (rabbits and a fox) have been found beside a stream which runs through land presently owned by the Forestry Commission, near Banchory, approximately 25 miles West of Aberdeen.

There have also been cases of human illness reported. These cases are sporadic and geographically dispersed around the hinterland.

Two cases have broken out at one of the farms which is situated in close proximity to the Forestry Commission land. The symptoms include, stomach pains, headache, sore throat, breathing difficulties, tightness in the chest and sore eyes.

Other cases, approximately five in total, have differing symptoms and are less defined. Two of these have taken place in Aberdeen, one in Ellon, one in Alford, and the last in Ballater. The symptoms include stomach cramps, vomiting, headaches and some complain of muscle pain as well.

Doctors say that it appears to be a case of chemical poisoning but specific causes are unknown. It is evident that the farm workers had been working with organic pesticides, spraying oil seed rape.

University of Aberdeen scientists are making tests on the stream water to try to identify the cause of the problem. It is suspected that the chemical could be a herbicide like Benazalox which is commonly used in the production of oil seed rape, to eradicate broadleaved weeds like chickweed or mayweed. They believe that a leaching action has taken place, precipitated by the recent rainfall and the water has been contaminated.

Scientists from Aberdeen University and The Robert Gordon University stress the need for extensive epidemiological tests to assess the correlations between the exposure and effects of the chemical.

Case 2: The worsening of respiratory diseases due to atmospheric pollution

Atmospheric pollution results from the mixture of a number of chemicals which are released into the air. These elements include sulphur, carbon, lead and nitrogen compounds. Toxic gases like nitrogen dioxide, sulphur dioxide and carbon monoxide have worried environmentalists and health scientists for some time due to their harmful properties.

During the combustion process in the engine, a reaction takes place between oxygen and nitrogen, where nitric oxide is produced. Nitric oxide is expelled through the exhaust and mixes with more atmospheric oxygen to produce $\frac{1}{2}$ nitrogen dioxide and the compound nitrogen tetraoxide ($\frac{1}{2}$ O₄). The same occurs between sulphur and oxygen, producing compounds such as sulphur dioxide.

Scientists believe that humans are affected by air pollution of this type, and more epidemiological studies are being carried out to prove this.

Nitric oxide is the main nitrogen component of car emission, which appears to be relatively harmless until it is oxidized and nitrogen dioxide is produced. Nitrogen dioxide is a toxic, brown gas, which has harmful effects on animals and vegetation, although when it is expelled from a vehicle's exhaust, it is colourless.

Nitrogen dioxide has insiduous effects but can be measured easily.

Nitrogen exists in the exhaust emitted from both diesel and non-diesel engines. The National Asthma Campaign state that NO₂ may irritate the airways and make them more sensitive to other triggers. It may also lower the body's defence mechanisms causing a reduced resistance to viral infections which can trigger asthma symptoms.

Tests have been carried out which indicate that sulphur dioxide is one factor which increases sensitisation to air particulates which act as irritants and cause asthma. Scientists are still trying to prove a direct cause and effect link between air pollution and respiratory diseases.

Scenario

An eight year old girl from Dundee has died. The girl was an asthmatic, a bronchial condition which can be serious. Doctors who performed a post mortem believe that the cause of death could be anoxic asphyxiation from an asthma attack. However this report is not conclusive and they say that other factors probably contributed to the death.

The parents of the child strongly believe that one of the major elements which influenced the illness of their daughter was the substantial increase of traffic within the inner city of Dundee where they live. They intend to protest against the problem of increasing traffic by taking a petition to Downing Street, and have been rallying support amongst the other asthma sufferers in the area.

A study is being undertaken by the medical school of the University of Dundee, to ascertain whether people with chest and respiratory diseases who live beside or in close proximity to a major transport route or intensely built up area with increasing traffic problems, are deteriorating due to increased atmospheric pollution.

Health and medical scientists have stated that there is a slight correlation between air pollution and the worsening of respiratory diseases and that this has been defined by studies carried out into large conurbations where the volume of traffic is more intense.

Case 3: The Development of a Funicular Railway through the Cairngorm Mountain Range.

During the 60s a new road development and ski lifts were put into operation at Coire Cas on the Cairngorm. This progression brought jobs and therefore people into the area and the tourist industry benefitted from the increase in trade. This development was linked to the Aviemore village plans which was envisaged as a new all year tourist centre, and which was to include hotel complexes, retail outlets and leisure facilities.

Since its inception, ecologists and environmentalists have become concerned about the damage many of these developments are causing to the natural environment.

Conservationists believe that the construction of the ski facilities, near Aviemore, resulted in more damage to the environment than was necessary. The heavy equipment used to prepare the ski runs has destroyed the thin alpine top soil which may take decades to recover. Such developments not only causes damage to vegetation and soils but can also affect a variety of habitats, for example, those of the birds and animals of the moor and mountain.

Approximately ten years ago, a proposal was put forward to extend the ski development into Lurchers' Gully. This was however unsuccessful because of the severe environmental damage which would occur as a result of this. At present no environmental groups want to see the existing skiing facilities reduced as this would result in loss of jobs for the community. However, there is concern that the funicular proposal will cause greater conservation problems due to the increased numbers of visitors to one particular place and the implementation work itself which will cause more damage than installing ski tows.

Scenario:

The Cairngorm Chairlift Company have submitted a proposal outlining the development of a funicular railway through the Cairngorm ski area to replace the existing chairlift arrangement. It is estimated that the railway will run for approximately 1.9km, from the day lodge (which will be redesigned) to a new development (which will take the place of the Ptarmigan restaurant). The railway will climb to a height of 1097 metres. It is estimated that the railway would have the capacity to carry 1200 people per hour in the busy season and 500 who are seated at other times.

Members of the Scottish Wildlife and Countryside Link and the Save the Cairngorms Campaign have strong reservations about the impact of the development on the environment. Specifically, they have voiced concern about the substantial increases in numbers of people on the high plateau.

Steve Westbrook, an economist, commissioned by Scottish Wildlife and Countryside Link and The Save the Cairngorms Campaign to compile a financial analysis on the development, estimates that 175000 people per year would use the railway outwith the skiing season, which is 125000 more than use the chairlift at present. He states that an extra 50000 people will be attracted to the area, which has implications for the tourism industry.

The funicular railway development is likely to provide the area with more jobs to cope with additional visitors. The area will also benefit from the increased amount of tourism which the venture is likely to attract. The converse side of the argument, highlights the fact that there will be a substantial increase in the amount of people on the hillside using the amenities. This will more than likely lead to conservation problems like soil erosion and habitat destruction.

The development is going to cause damage to the environment in its implementation stages and conservation groups are wondering whether it is a wise economic investment.

Case 4: Destruction of the Marine Environment by Overfishing

Resource Exploitation

In recent years, scientists have become concerned that the human exploitation of natural marine resources is damaging the environmental infrastructure of the sea. This applies not only to mineral resources like oil and gas, but to renewable resources eg fish and shell fish. These stocks are depleted where the rate of harvesting is greater than the rate at which the resource can reproduce or regenerate. Overfishing is, therefore, becoming one of today's most serious environmental problems. Overfishing can alter the environmental balance between species by interfering with the Eco-web structure.

Oceanic organisms provide 10-20% of world protein intake and sustain high levels of economic activity in Britain. In addition the fisheries industry can exist for an indeterminate period of time (if managed correctly) due to the fact that the resource is renewable.

"In 1988, global fishery harvests amounted to some 85 million tonnes (92 million tonnes if aquaculture). 15 million tonnes below the Food and Agriculture Organisation (FAO) estimated maximum global sustainable yield of 100 million tonnes". (The State of the Environment. OECD, 1991, p90)

The global concern at the moment is that resources are pitched below sustainable levels and consequently some of the more valuable fish stocks have been seriously depleted. Overfishing has occurred, historically, due to the increasing global need for protein and improvements in harvesting technology.

Overfishing is, therefore. linked inextricably to commercial activities. Consequently economic factors and environmental facts are often in conflict. Despite increasing restrictions on fishing, many species are becoming endangered by extinction, due to these measures.

Scenario

Due to the increasing amount of fishing activity off the North East coast of Scotland, stocks of some species of fish have noticeably depleted.

Marine scientists have reported that the North Sea is one of the most heavily used and exploited ocean environments. Ecologists are worried that certain species such as haddock and in particular cod, are in danger of being unable to reproduce sufficiently in order to survive. In the late seventies, supplies of herring were seriously depleted in the North Sea and the fish processing industries never fully recovered.

This will have serious consequences for the North East fishing industry and the economy of Aberdeen and its surrounding area. Unemployment in the area will increase dramatically. Fishing towns outside Aberdeen and Peterhead do not benefit from the oil industry nor from aquaculture so an alternative form of employment such as fish farming would not be appropriate.

Ecology and pollution experts are already concerned about the state of the North Sea. They have been monitoring it closely for industrial and municipal discharge, waste dumping and more specifically, petroleum hydrocarbons, trace metals and synthetic compounds. These factors combined have already contributed to the partial prohibition of species degeneration, overfishing will increase this to a higher level.

Case 5: Pollution in the North Sea

Marine pollution can have many different causes. Occurrences can take place from leakage of liquids eg fuel, lubricants or alcohol based deicers. Often major oil pollution occurs as a result of a tanker disaster eg the Braer or Exxon Valdez. It is one of the most visible forms of pollution and also the most recognisable to the general public.

"Massive accidental spills can be lethal to many forms of marine life, including seabirds and marine mammals. More chronic forms of oil pollution in estuaries or near oil rigs can affect benthic populations, other resident biota, and critical habitats such as spawning grounds." (The State of the Environment. Paris: OCED, 1991, p73)

Oil used for fuel sometimes contains, PAH or polycyclic aromatic hydrocarbons (JetA1 fuel does not) which are poorly biodegradable and are classed as having toxic, mutagenic and carcinogenic effects. These hydrocarbons exist in crude oil and occur, therefore in fuel, petroleum and bitumen tar.

Aviation fuel is one of the lightest forms of the oil derivatives and it is highly flammable.

The vapour from this product is heavier than air and oil producers suggest that a foam blanket be administered to the affected area to prevent ignition. Oil companies further suggest that in cases of spillages at sea or in any event whereby the product mixes with water, the spread of fuel should be prohibited by barriers and authorised dispersants used.

All or Avtur, a type of jet fuel, will react strongly with oxidising agents, and thermal decomposition will cause smoke, and other hazardous gases. This product is inherently biodegradable, unlike some other oil based compounds. It is extremely toxic to aquatic life. when spilt on water a film of fuel is formed on the surface and this can physically damage marine organisms and can impair oxygen transfer. The fuel acts as a seal on the water and is preventing the oxygen exchange across water.

Scenario

A train travelling to Aberdeen to supply the airport with aviation fuel, is detailed crossing the Tay Rail Bridge. Three of the cars are carrying 31000 tonnes of Avtur, a type of aviation turbine fuel, and two of which have become partially detached from the rest of the train. The fuel has begun leaking into the water - the Tay Firth.

The chemical breakdown of the fuel includes a number of different hydrocarbon compounds which is produced by the distillation of crude oil. The product releases fumes which should not be inhaled and on burning the fuel, the fumes become toxic.

Ecologists and zoologists are concerned over of the presence of a seal colony on the Firth and a large population of wintering ducks. The oil affects the insulation properties of mammals' skin and the creatures also ingest and inhale the fuel product. The oil is also accumulated by fish and consequently their flesh becomes tainted.

The extent of the damage which the fuel may cause to marine and animal life is unknown at present. Scientists are monitoring levels of pollution as best they can by carrying out tests on water samples.

ScotRail have issued a statement saying that they are investigating the circumstances surrounding the incident.

Producers of the fuel warn personnel to avoid contact with the product. In the event of skin contamination the area should be washed with soap and water. Protective clothing should be worn at all times when handling the product.

Appendix V

Appendix V

List of scientific and medical personnel who validated the case scenarios:

Professor Seaton Baxter Faculty of Design, The Robert Gordon University

Mrs Fiona Begbie School of Nursing. The Robert Gordon University

Mr Richard Brown Off Shore Survival Centre, RGIT Ltd. Aberdeen

Dr Lindsay Laird Zoology Department, University of Aberdeen

Dr T. N. N. MacLeod Old Machar Medical Practice, King Street, Aberdeen

Dr Maureen Melvin School of Applied Science, The Robert Gordon University

Appendix VI

Appendix VI The Disaster Story

"Disasters" are high on the list of priorities for journalists. Natural disasters such as famine in Ethiopia (1985); the earthquake in India (Oct 1993), and more predominantly man-made disasters eg Chernobyl (1987); Exxon Valdez (1989); Braer (1993), receive specific coverage by journalists, which allows us to make sense of the world. With man-made disasters, the issues are complex due to the fact that the persons involved eg experts, local people, Government officials are intricately interlinked by particular circumstances and news media can emphasise or deemphasise these relationships in the framing of a particular concept, ie putting a spin on a story (see chapter 10).

Sood [et al] (1987) quote from Fritz's (1961) definition of a disaster.

"...an event, concentrated in time and space, in which a society or a relatively selfsufficient subdivision of a society undergoes severe damage and incurs such losses to its members and physical appurtenances that the social structure is disrupted, and the fulfilment of all or some of the essential functions of society prevented." (Fritz (1961), p655 in Sood [et al], (1987), p27)

To evaluate a "disaster" like the Braer oil spill in these terms is impossible because no lives were lost and the damage to both the eco-structure and Shetland's industry was not irrevocable. The media made value judgements about the incident by labelling it as a "disaster" and a "tragedy" but these can be seen as misleading, if one attempts to compare objectively, the above definition to the situation which took place in Shetland. It has also been discovered, from the respondents' data, that in situations which are potentially disasterous, reporters are strongly encouraged to overemphasise a story. Reports using this kind of emotive language can be toned down afterwards if the incident turns out to be not as serious as expected. But for journalists who approach the event cautiously and write underemphasising the importance of the situation which is in fact disasterous, serious consequences ensue for missing the story. This is supported by the following.

"The Braer had the potential to be one of Britain's worst environmental disasters and that had warranted the initial coverage. The way the so-called disaster righted itself virtually overnight, rough seas broke up the light crude, was unprecedented and unexpected. But it happened at a notoriously slow time of year in the newspaper business and so probably ran two or three days beyond its duration." Carlos Alba, political reporter for the Press and Journal.

A "disaster" is always high on the news agenda because of its unexpected nature and its wide reaching effects, but there is also a negativity which surrounds the term. The event is framed by the news media in conflicting terms or meanings, therefore, a paper can condemn the situation as the worst in history one week and reverse its opinion the next. This may be attributed to the fact that more information is revealed to reporters as time progresses and the situation is constantly changing. For example, papers sell more issues during periods of disaster, however there are other factors which influence how this type of story is covered and these will be addressed later.

Baum (1988) suggests the fact that disasters are man-made as opposed to natural, affects the ways in which people think and respond to them. He says that, secure in the belief that man's technology is controllable, society is alarmed by the disasters which occur to disprove this theory.

In emergencies like Three Mile Island or the Braer which are emotional, panic often ensues very quickly. During the Braer crisis, the media described the event in full, moving on to the related issues eg effects on the community, industry etc. later. Journalists tried to discover facts about where the blame lay by investigating the reasons behind the incident and the circumstances surrounding it. The representation given to a disaster, by the media, is fractional, in comparison to the time it takes for the crisis to be resolved. This is due to the fact that an inherent part of media culture involves the constant evaluation of news issues against news criteria. However, because life moves continuously and other news events take place, the disaster moves down the news agenda. It may be said, then, that the process of news construction, dictates to a greater extent, how long coverage of issues should be. Sood [et al] (1987) maintain that other factors contribute to the newsworthiness of a disaster.

"...the 1979 Three Mile Island disaster increased the news value of Chernobyl, as must have the cold war relationship between the United States and the Soviet Union." (Sood [et al], 1987, p37)

Therefore, it could be said that journalists possessed a heightened sense of awareness ie contextualisation (see chapter 8) was in evidence at the Braer oil spill, due to the previous oil incidents like Torrey Canyon and Exxon Valdez. Journalists, apparently, construct the news having contextualised the event with the knowledge of previous, similar stories. The respondents who were presented with case 5 (the train derailment) (see Appendix IV) indicated the urgent necessity for pictures of wildlife before the incident and then afterwards covered in the black oil, despite the fact that aviation fuel is light and colourless. Reporters, therefore, contextualised the imaginary situation with images of the Braer oil spill (see chapter 8).

The Braer incident was selected for investigation not only because of its relevant nature at the time but also because it was an indigenous occurrence being specific to the North East of Scotland.

1. Background

On the 5th of January 1993, an incident involving the Liberian oil tanker Braer occurred off the South coast of Shetland.

The Braer was travelling from Norway to Canada, transporting 85000 tonnes of light crude oil. The route involved passing between the Shetland Islands and the Fair Isle, a strait only 41 kilometres across. The tanker's engines failed as she ran aground at Fitfull Head on the Southern most point of Shetland. The weather conditions exacerbated the situation and with gales between Force 10 and 12, the sea was whipped up into storm waves. The Braer was battered and blown and the 85000 tonnes of oil began to leak into the water.

The accident was covered by the world's media, and national and international television crews converged on the island of Shetland. Pictures of the "disaster" were flashed around the world via satellite technology and each newspaper had front page spreads of dying wildlife and the ship half submerged in an inky black sea. Rumours fled around the country that this was the worst oil related disaster since the Exxon Valdez was wrecked on the Alaskan coastline.

1.1 Dynamics of Papers

The Press and Journal is a daily, regional paper which covered the Braer oil spill for approximately 18 days, whereas The Shetland Times is a weekly paper which covered the incident in detail for over four weeks. It was difficult to assess the amount of coverage by each paper due to the ways in which each is produced. For example, it was obvious that The Shetland Times followed the event for a greater length of time (i.e. in real time) than The Press and Journal but this was due to the fact that it is a weekly paper.

1.2 Tables depicting the movement of the Braer story from the papers

	FP	FP	FP	l ₃	I ₂	I ₁	OP
	(F)	(D)	(L)				
6	Х				X		X
7	X				Х		Х
8		Х			Х		
9		Х		X			Х
11			X			X	Х
12			X			X	Х
13			X			X	
14			X		X		X
15						X	
16							Х
18						X	
19						1 11	
20					Х		
21						X	
22			X			X	

	(F)	(D)	(L)	15	10	5	-5	R
8	Х					Х		Х
15	х			X				х
22			X			X		X
29							Х	

Fig 1 The Press and Journal

FP (F)	Front Page - Full Coverage (story occupied the whole front page)
FP(D)	Front Page Dominant Coverage
FP (L)	Front Page Lesser Coverage
1321	Inside Pages occupied by the story (3; 2; 1 pages)
OP	Opinion Column is dominated by the story

Fig 2 The Shetland Times

(F)	Front Page - Full Coverage (story occupied the whole page)
(D)	Dominant Coverage but not complete
(L)	Lesser Coverage
1 15 10 5 -5	More or less than 15; 10; 5 pages covered the story
R	Related issues eg adverts. public notices etc.

The Shetland Times being a weekly paper is slower to produce copy, therefore, the issue was kept "alive" for longer. The Press and Journal produces what seems to be, a greater amount of coverage, initially, but loses interest in issues after a shorter length of time. The Press and Journal seemed to elongate the story and The Shetland Times compress it. The Press and Journal needs to fill the paper every day with stories relevant to its readership but The Shetland Times being a weekly paper has longer to find, research and construct stories.

It is evident that, there are discrepancies relating to uneven coverage of issues e.g. more or less coverage of a particular story, but this is due not only to the amount of time given to each paper to produce copy but also to the differences in the news values of each paper.

A number of points presented themselves at the beginning of the analysis. One of these was, firstly, that a daily, regional paper covering an environmental issue for approximately 3 weeks would presumably need to expand coverage in order to keep the story "alive" i.e. to provide more information, faster and for a shorter time. This would have accounted for the story's rapid movement off the front page. The Press and Journal covered the issue for 18 days but the story was no longer making the front page after the first 10 days. Secondly, the analysis has revealed that The Shetland Times and The Press and Journal provide a different type of coverage in terms of content, taking into account length and amount of coverage. The Shetland Times content provided an intensification of detail, due perhaps to the fact that the paper occupied a central position in the conflict and was inextricably linked with the situation. In contrast, The Press and Journal coverage appeared superficial but this was maybe due to its "distance" from the issue, the fact that it is daily, and has a differing set of news values.

1.3 Why was the Braer Picked up by a regional paper?

This issue was covered by The Shetland Times because it had geographical, cultural and social implications for Shetland.

The amount of coverage given by The Press and Journal was reflected by the news values practised by the paper. It's aim is to serve not only Aberdeen but the whole of Grampian, the Highlands and the Western Islands, in addition to Orkney and Shetland, i.e. much of the mainland as well as the islands. As the incident took place off the coast of Shetland, the story was of relevance to those living and working there. It was also of relevance to those living in similar environments, e.g. other islands. The people of Lewis and Harris might have been implicated in the same way had the tanker been routed through the Minch instead.

By comparing the Braer to other stories of the time e.g. hazardous weather conditions, it could be seen that it received a generous amount of coverage and copy space in The Press and Journal, but the story was given more "important" coverage for longer in The Shetland Times.

1.4 Findings from Arrangement

Both papers started coverage at the same point by highlighting the same issues. Patterns in initial coverage indicated that both The Press and Journal and The Shetland Times started by reporting "current events" i.e. the state of the Braer and what was happening at the scene. Evidence from journalists substantiated this in that reporters always start by covering the immediate situation first which in this case would be the details about the state of the tanker and what had happened (interviews with Carlos Alba and Tom Little).

The analysis revealed that the news over this 3 week period changed in both papers: from describing the incident itself and the conditions under which it occurred and the environment which it affected, to an analysis of factors and values arising from the incident e.g. the litigation; the compensation for farmers; the politics and prevention measures. However The Press and Journal highlighted issues more immediately and in less depth than The Shetland Times e.g. health issues appear on Fri. 8th, whereas this was emphasised by The Shetland Times in the second week. i.e. 15th. Did this paper have more impact because it is being produced every day?

As the Braer became more "socialised" i.e. the public became familiar with the story, the themes which emerged changed, and other related topics came to the surface. For example, in issue 1 of The Shetland Times and the first week of The Press and Journal, the themes were descriptive and predictive, and included what happened in the hours preceding the spill; the description of the tanker itself; the reactions of the people who live there; whether the PM is going to pay for the damage; the prediction of problems in the next few days as the oil spreads... These were facts rather than newspaper analysis.

In subsequent issues of both papers the type of information being mediated, changed. Both papers reflected the implications of the oil on the life of Shetland and included health topics, the areas most badly affected, veterinary opinions, effects of dispersants. It was evident that the coverage was no longer the same as at the beginning of the crisis. The description of the Braer's last moments had metamorphosed into retrospective analysis in an attempt to elicit the facts of the case i.e. the reasoning behind the incident. One of the reporters who worked on this story for the Press and Journal said,

"Newspapers accurately reported how the tanker ran aground, how much oil spilled, how much wildlife perished etc. But the broader picture of impact and damage was skewed by the demands of the reporters' own agenda. There is pressure on everyone in a newspaper's chain of command to sell story ideas to his/her superior. Events are often given greater prominence than they deserve and there is the danger the story can begin to feed itself." Carlos Alba, political reporter The Press and Journal.

Both papers arranged the articles in a chronologically structured order. The stories initially (i.e. first week) described the tanker and related details; the people involved e.g. crew, captain, Shetlanders, emergency crews, media, the wildlife, political issues not directly involved with the Braer sinking but rather only implications of this, i.e. compensation claims, review of anchors, policies on shipping etc.

During the second and third weeks' coverage, a logical order was perceived with The Shetland Times articles but this was not mirrored in The Press and Journal. The types of story which were included were the same thematically but the arrangement within each paper and the way the themes were reported was different in terms of language, information content, political reasoning. These were still important issues but had now become meditative rather than simple reportage.

The readership was reflected in the coverage e.g. stories on victims, Shetlanders, fishermen, farmers etc. There was less emphasis on current events and this was probably due to the fact that there was little to report about the ship at this point. The reporting had shifted emphasis from discussing the vessel to studying the effects of the spill on Shetland, both in terms of people and culture. The coverage was mono-centric, which concentrated on one area, as opposed to the Press and Journal's multi-centric approach, which focused on many areas e.g. Shetland vs Western isles; Aberdeen.

1.5 Why does the Coverage differ between the two papers in 2nd and 3rd Weeks?

The Press and Journal is the larger paper and it was further removed from the incident, therefore, the issue was important for a shorter time than within The Shetland Times. The Shetland Times, on the other hand, was more focused i.e. the incident was happening there in Shetland and the immediate effects could be seen by all. However, the immediate recovery could also be seen and when public opinion changed, the printed word also changed to reflect the new situation. This re-emphasises the immediacy of news.

The Shetland Times included analysis more quickly because readers were aware of the current situation and simple reportage failed to inform them or enhance their understanding of the incident any more. The coverage during weeks 2 and 3 of The Shetland Times had changed but the rest of Scotland had apparently been caught in a "backlog", being slower to accommodate the change and due to the fact that they were further removed from the scene.

1.6 The Nature of the Coverage

Initially, the comparison of The Press and Journal to The Shetland Times served to underline the apparent superficiality of The Press and Journal's coverage of the issue. The Shetland Times treated the subject to an in-depth analysis, emphasising the effects of the incident on farmers, locals, children, animals i.e. community and environment. This analysis revealed a substantial examination of the Braer by The Shetland Times once the emotive nature of events had dispersed from the coverage i.e. after the first week. The Shetland Times appeared to be more serious about discovering the reasons

behind the event because there was a greater number of these reflective stories included in these issues.

Again, this was due to the fact that it is a weekly paper and has fewer deadlines with more time to meet them.

It appeared that The Press and Journal had given the issue a "lighter", less worthy coverage. This was underlined by the fact that there was less coverage of the issue, and the event did suffer at the expense of other news stories (it could be superseded by more "immediate" news). However, this was probably due to the fact that the paper was "distanced" from the event; the readership and expectations of the paper were different.

2. Vocabulary

It has been said that language is an ideological code which can influence the ways in which people make sense of the world (Fiske, 1987; Fowler, 1991). Linguistic interpretations can frame the cognitive or thought processing patterns of the audience within a particular context. From this point of view, therefore, language is not neutral and bias can be inferred through it, although this is not always intentional and in-depth examination of the news process (chapters 8-10) revealed that bias is often a result of the news process itself. Journalists may aim to report news objectively but this is often difficult because of the meanings communicated through language.

2.1 Method

The text of both papers was appraised by examining vocabulary descriptors for the purpose of identifying the type of language used in this type of coverage (see chapter 2.4). More specifically, an examination was carried out into the negative and neutral terms used to describe the event. This was an attempt to investigate the accuracy of the language used. Scientific experts interviewed by the researcher maintained that the press were ill advised in using this term "disaster". The Shetland Times, however, acknowledged this idea put forward by the experts and included this as a theme in week 2 but continued to use "disaster" and gave reasons for doing it. This issue is developed further below.

The findings are subdivided into the three main areas of the research. Discussions of vocabulary, informational content and expert contact follow.

2.2 Findings

Descriptors or words which appeared to be used in a sensational or exaggerated sense eg "disaster"; "dramatic"; "calamity"; "horrific" were examined in order to ascertain whether the use of this type of language is heightened during this type of crisis. The following extract appeared on the front page of the Shetland Times,

"It is a disaster so enormous that while many have spoken of it as having been an accident waiting to happen, now that it has, its long term impact is almost too horrific for the imagination to grasp." (The Shetland Times, 8 Jan 1993, p1)

The first article in issue one of The Shetland Times "Worst fears realised as tanker spills DEADLY CARGO", used the greatest number of descriptors in the issue (particularly on the front page (F)). It is notable that the use of descriptors diminished the further through the paper the reader goes. The numbers along the bottom of the graph indicate which inside page contains negative descriptors.

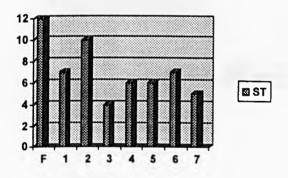


Fig 3 The Shetland Times (Week 1)

The graph shows the use of descriptors which portray the scene in a negative light. As with the coverage by The Press and Journal, it was evident that the stories dominating the front of issues employed the largest amount of descriptors.

The graphs differ with the Shetland Times coverage starting high and tailing off with an occasional fluctuation around the centre of the paper. This is due to the fact that the initial stories were descriptive of the event itself. The graph shows a wide trough and this can be taken to represent the mainly technical stories which were arranged in that part of the paper. The peak following this is due to the greater number of "victim" (human interest) stories which occurred.

Coverage used terminology which was, on the whole, negative as might have been expected for this type of incident but it was sometimes unnecessary and for effect, for example,

"And after all the frustrations and the nauseous realisation of the scale of the disaster it was now time for questions - lots of them...within 24 hours there was claim and counterclaims about how the tragedy could have been prevented." (The Shetland Times 8 Jan 1993, p3)

"Tragedy" is an emotive descriptor. Scientific specialists or experts felt that its usage was inappropriate in this context as the term is often reserved for a situation involving the deaths of many people eg the Lockerbic Air Disaster, Zeebrugge Ferry Disaster.

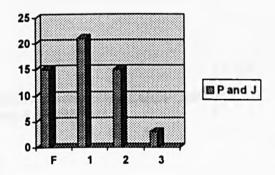


Fig 4 The Press and Journal (Week 1)

The vocabulary graph for The Press and Journal depicts a greater number of descriptors on the front page (F) as compared with The Shetland Times. One of the underlying factors for this may have been due to the fact that The Press and Journal had produced a larger amount of textual material during one

week than the Shetland Times. The Shetland Times gave the impression that news about the Braer had

been compressed into one issue, thereby indicating that the selectivity and bias of news was different

from The Press and Journal. This was probably due to the organisational differences between the two

papers.

The amount of descriptors peaked on the inside page of The Press and Journal, the reason for which

could be attributed to the arrangement of news. There was a large number of human interest stories eg

the self congratulatory "Rescue Crew Brave Gales" and the subjective accounts "My Bird's Eye View at

Birth of Disaster" and "A Sea of Black: Braer Lies Wedged on Rocky Bed". As with The Shetland

Times, the number of descriptors decreased the further through the issue the reader went. This

suggested that this particular type of explicit language might have been used, initially, to entice readers

to buy and study the paper. During the second week, the arrangement of news was a factor which

influenced the use of vocabulary. However, the majority of the stories included in the first week's issues

of The Press and Journal were human interest and emotional eg "Battered Braer Holds On to the Rest

of its Deadly Cargo".

The front page headlines of both papers (first week) revealed a particularly sensationalist framework.

Eg The Shetland Times:

"Worst Fears Realised as Tanker Spills DEADLY CARGO"

(The Shetland Times, 8 Jan 1993, p1)

The Press and Journal:

"Night Hides Our Worst Nightmare"

(The Press and Journal, 6 Jan 1993, p1)

"The Price We Have To Pay"

(The Press and Journal, 7 Jan 1993, p1)

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The articles which appeared near the front of the papers (particularly within the first couple of days) were very descriptive, and inherently emotional as the following extracts from "My Bird's Eye View at Birth of Disaster" demonstrate.

"Dropping to 500ft and almost within touching distance of the stricken oil tanker, it was a different picture - one of devastation and disaster." (The Press and Journal, 6 Jan 1993, p9)

"The approaching sea was a boiling cauldron." (The Press and Journal, 6 Jan 1993, p9)

"...the Shetlanders and the Government will have to face up to a pollution disaster of horrific, financial proportions." (The Press and Journal 6 Jan 1993, p9)

The Press and Journal's coverage of the incident was, therefore, similar to that of The Shetland Times, pessimistic in tone.

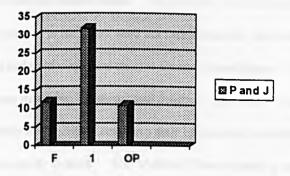


Fig 5 The Press and Journal (Week 2)1

¹ OP denotes opinion column

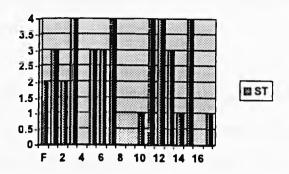


Fig 6 The Shetland Times (Week 2)

The second week's graph for The Press and Journal demonstrates that the use of negative descriptors are less, in general, but this might have been due to the fact that there was less coverage. Week 2 appeared to be less sensationalist in tone but in comparison to The Shetland Times the coverage seemed superficial and lacked depth. It was evident that The Press and Journal had exhausted the issue in the first week, and was now attending to other stories. The Shetland Times coverage was more moderately paced and all the issues relating to the Braer were not included in the first week. Other themes are "unpacked" in the second and third weeks and thus the coverage lasted longer. As The Shetland Times is a weekly paper there was more time to prepare and construct the news. In contrast, The Press and Journal has the responsibility for producing news on a daily basis which meant that the time constraints on journalists were more strictly defined. The Shetland Times showed a definite decrease in the number of negative descriptors used to refer to the oil tanker Braer and, in comparison to the Press and Journal showed a sizable discrepancy between the two papers in terms of explicit sensationalist terminology.

The type of language or vocabulary used depended very much on the types of articles eg an emotive piece on the wildlife such as "Mercy Flight For Oiled Birds" (The Press and Journal, 13 Jan 1993, p11) as opposed to "Litigation Lawyers Urge "don't rush" (The Shetland Times, 8 Jan 1993, p8). It became evident that the political stories contained a lower number of negative descriptors than any other type of story and the language seemed more "controlled" ie less sensational eg "Euro MP Calls for Exclusion

Zones" (The Press and Journal, 14 Jan 1993, p8) and "Major: I'll Consider Immediate Action" (The Press and Journal, 13 Jan 1993, p1).

The Shetland Times dramatically altered the use of exaggerated language in the second week. There was a change in emphasis from the negative framing of journalists' perceptions of the event to a more positive sense as, for example, Shetlanders started to look to the future. There also appeared to be a higher information content in the Shetland Times, with the Press and Journal seemingly caught up in a "backlog" ie not up to date with the issue and the implications for Shetlanders. The coverage of the Braer by both papers was noticeably diverse from the beginning of the second week.

Furthermore, The Shetland Times reflected the fact that the incident was a past negative which accounted for the definite change in terminology. The humour, absent from the first issue was seen to be evident in this week's paper eg the "Tanker off Skye Claim" story (The Shetland Times 15 Jan 1993, p8). Qualities such as the Shetlanders ability to turn the situation into a positive experience was inherent in the coverage by the Shetland Times but was unrecognisable in The Press and Journal.

The use of negative descriptors greatly depreciated in The Press and Journal during the third week's coverage. This is due to the fact that there was less coverage. There was less opportunity to use descriptors. The figures were so low that differences were negligible. (It is due to this fact that no graphs were compiled for the third week's coverage.

It should be noted that The Shetland Times (at this point in time) made no over use of "vivid" vocabulary to exaggerate the situation. The use of language in the coverage over the three week period had changed considerably. The language was more objective and the number of extreme or "vivid" negative descriptors was negligible.

2.3 The use of Specific Vocabulary eg Disaster

The text was appraised by examining descriptors ie words or phrases which framed the incident in a negative way. Specifically, certain terms were located and noted in an attempt to ascertain as to how journalists perceived the incident and therefore how these perceptions were conveyed to the readership.

The term "disaster" had been used throughout the coverage by The Press and Journal, indeed the event was referred to as The Shetland Oil Disaster from the first day. Again, as with the reporting in The Shetland Times, the term was used liberally, without substantial evidence to indicate the extent of the damage to the environment. According to experts, the claim that the spill was of disastrous proportions was misinforming and comparisons should not have been drawn between the Braer and the Exxon Valdez (1989) as each incident occurred on a completely different scale. Within three months the environment had started to repair itself and within, approximately, eighteen months, Shetland was "given the all clear" (an article which later appeared in the Press and Journal) - the environment had healed itself.

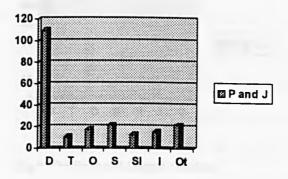


Fig 7 The Press and Journal (week 1)²

The letters along the bottom of the graphs represent specific negative and neutral vocabulary descriptors and are as follows (from left to right): DISASTER; TRAGEDY; OTHER (Negative); SPILL; SLICK; INCIDENT; OTHER (Neutral).

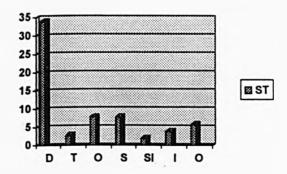


Fig 8 The Shetland Times (Week 1)

The graphs show clearly that the use of the term "disaster" was over used by both The Press and Journal and The Shetland Times in comparison to not only the positive terms like "spill"(S); "slick" (Sl); "incident" (I) and "tanker" (O) but also the other negative words such as "tragedy"(T); "trauma" (O); "catastrophe" and "nightmare" (O). It is significant that the two papers have used the terminology so similarly, regardless of how much copy has been produced.

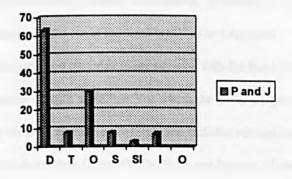


Fig 9 The Press and Journal (week 2)

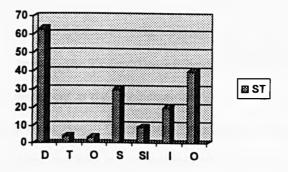


Fig 10 The Shetland Times (week 2)

During the second week of coverage The Press and Journal persisted in using the term "disaster" without any reference to why this is so. In contrast The Shetland Times included articles about the terminology used in the coverage citing that experts maintained that the event was not of disastrous proportions but that The Shetland Times would refer to it as such because of the negative effects that they perceived.

The Press and Journal used the term "disaster" as frequently as during the first week of coverage. However, there was an increase in the use of the word "spill" as an alternative. The Press and Journal had on numerous occasions compared the Braer to the situation with the Exxon Valdez (1989) and also included an article on another oil spill at Sullum Voe which the Braer allegedly caused. The paper, thus, persisted in framing the incident in negative terms and included recrimination in its coverage eg "Duke "took more interest in lunch than Disaster" (The Press and Journal, 11 Jan, p7); "Govt., did not do Enough to Avert Accident" (The Press and Journal, 16 Jan 1993, p8) although in keeping with the changes in news information at this point, it included "Captain of Braer Defended by Skipper" (The Press and Journal 12 Jan 1993, p7).

The use of negative descriptors to refer to the Braer was higher than the use of neutral ones. This was indicative, not only of the type of vocabulary in use in this week's coverage, but also of the perceptions of the journalists involved and of the meanings which had been framed for the readership.

The Shetland Times made a point of controversy over their usage of the term "disaster" both in the editorial and an article "MP asks "was it a disaster" (The Shetland Times 15 Jan 1993, p14). This issue was ignored by the Press and Journal. The Shetland Times referred to experts (political) who suggested that the incident was not as disasterous as the terminology indicated and that to use this word might have caused misrepresentation of the event. The Shetland Times decided to continue using the term because to these reporters, the issue was only real if described like this. This suggested that they had had an emotional involvement with the incident. The Press and Journal could claim no such involvement but persisted in using this particular descriptor.

"...many councillors including convenor Edward Thomason, expressed concern over the use of the word "disaster". Mr Thomason said that this implied it was impossible to step forward. Councillor George Pottinger said, "disaster implies irrecoverable". (The Shetland Times 15 Jan 1993, p9)

During the third week's coverage by The Press and Journal, it was evident that the only significant use of descriptors is the term "disaster", which had been used consistently throughout the reporting. It implied that journalists had the knowledge and ability to evaluate the severity of the situation, which was not the case.

During the third week The Shetland Times were still referring to the incident as a "disaster", as they indicated they would. It could be taken to be understood that this persistence could be attributed to the news team's proximity to the incident. Having concluded this, it should also be pointed out that a noticeable effort was made to refer to it with other neutral descriptors (see table below).

There are no graphs for the third week as there was insufficient data.

Disaster	Tra	Oth (Ng)	Spill	Slick	Incid.	Oth (Neu)
34	l	0	30	3	11	23

Fig. 11 Table of vocabulary descriptors

2.4 Consensual Reality - A Common Theme

The front page of the Press and Journal was dominated by the headline, "Night Hides Our Worst Nightmare" (The Press and Journal 6 Jan 1993, p1). Apart from the descriptor "nightmare", the language used what Hartley (1982) calls consensus techniques, where the readership is "entreated" to become one entity through a nationalist framework. The language is ambiguous because it can say a number of things. Firstly it may state that we as the readers, were observing Shetlanders describing their fears. The Press and Journal journalists (mainlanders) were, therefore, trying to indicate what the victims (Shetlanders) were experiencing or feeling. Secondly, the headline was communicating what we [as a Scottish nation] were or should have been feeling, bound together in a common time of trauma. This served to heighten the sense of drama and therefore emotion ie knowing that we were part of the situation. Thirdly, it might have been that the audience as readers were able to empathise vicariously and emotionally with the Shetlanders during the process of interaction with the reality of the situation. The reader was intertextually drawn into the situation by the headline and the news text, for example,

"The Price WE Have To Pay" (my emphasis) (The Press and Journal, 7 Jan 1993, p1)

This was a further example of the consensus factor. The language bound the readership together as a nation ie as Scots. Different meanings could be taken from the text depending on the subject positions of the audience (see chapter 1, pp37-39). The headline suggests that there exists a "them-and-us" situation, which might have been more accurate as an "us-against-oil" scenario. The "them-and-us" interpretation was reinforced by the large numbers of articles implying recriminations against the

captain and crew eg "Outcome of Accident Impossible to Predict" (The Press and Journal 6 Jan 1993, p8) and "Crew Complain of Tough Times on Tanker" (The Press and Journal 8 Jan 1993, p8).

The consensual reality theme of the first week was not apparent in the second weeks coverage by the Press and Journal. The paper appeared to be even more removed from the issue and through the lack of evidence of this technique, seemed to be attempting to assume a position of objectivity.

2.5 Social Construction of Reality

The Press and Journal pursued a "battle" theme throughout the coverage. This war analogy was reflected in the stories "Veterans of Sky Set To Do Battle" (The Press and Journal 6 Jan 1993, p9), (a war time plane used to administer detergent on oil slick); "Dakotas Lead Air Attack: But Grim Effects Are Already Taking Toll" (The Press and Journal, 7 Jan 1993, p6); "Weather Halts Battle and There's Worse to Come" (The Press and Journal, 8 Jan 1993, p7) etc. This is a technique used with consensual overtones which had a dual purpose. War is a concept (like the oil) which has had to be dealt with or endured by everyone at some time or another. The crisis affected people universally and served to impose standards on them. Secondly, the analogy positively encouraged the readers who feel that with a "united force" the trauma could be overcome satisfactorily. This interpretative approach by The Press and Journal contradicted the other articles included which were negative in tone. One would have expected, therefore, the reader to be confused but without an ethnographic study into the effects on the audience it is impossible to conclude that this was so.

Language descriptors are all highly emotive and are designed to invoke a strong reaction from the readers as well as informing them of events as they take place. The papers (more The Shetland Times) attempted to balance the coverage by including articles which were "neutral" in content ie they did not contain descriptors, which are superfluous except for dramatic emphasis.

3. Information Content and Emotional Emphasis

Emotion or emotiveness was inherent in the coverage of the incident by both papers, but to differing degrees. Emotion is a quality which is implicit in language and it is difficult to separate the two. Language allows the text to externalize the feelings and beliefs of the actors involved in the crisis. The examples below are quotations, from The Shetland Times, which conveyed perceptions of sentiment and which were designed to invoke reactions from the reader.

"...and the people of Shetland despaired." (The Shetland Times 8 Jan 1993, p2)

"As we watched we felt pathetic." (The Shetland Times 8 Jan 1993, p2)

Both statements allowed an interchange of meanings between text and reader, permitting the readership to identify vicariously with the "victims" (the people the spill has affected), thereby arousing emotions of pity, sorrow and anger.

The Shetland Times constant in its largely negative previous coverage of the incident, during the first week, changed its approach in the second and third weeks, framing it in a positive way eg "Ten days on and now is the time to look ahead" (The Shetland Times, 15 Jan 1993, p2); "Agriculture gets organised to look towards the long term" (The Shetland Times, 15 Jan 1993, p12).

The Shetland Times provided a higher factual, informational content perhaps because there was a greater demand for the facts from the reader. People needed to be informed as to what procedures should be carried out and where to go for help. The Press and Journal's coverage was different to that of The Shetland Times. The urgency for hard core information was not as clearly defined and therefore the tone of the coverage was more reflective.

The emotive qualities inherent in the coverage and evident in both papers changed over the three week period. From the time closest to the event to the time when the incident recedes in priority, there was a

scale of information "vividness". This "vividness" was weakened as the amount of time increased from the incident.

The coverage was analysed by investigating the type of story included in the paper. Articles were classified under the headings, human interest (this refers to the information of relevance to the Shetlanders or articles about them); political (articles contain political reactions to or implications of the situation), and technical (stories which tended to describe procedures for example use of dispersants on oil). The categorization of the reportage by the researcher attempted to reflect a scale of emotion/fact, reaching from the emotive to the non-emotive. In some cases two further categories developed out of political and technical categories. These were political reflective (P_R) and technical reflective (T_R) . These classified articles which were high in factual content but which had been written with a reasoning tone rather than simple reportage and which often attempted to look behind the immediate situation to the underlying themes.

A high proportion of stories were classified as human interest (particularly The Press and Journal). This was presumably due to the news values of the paper which are to educate and inform the reader ie they reflect issues which are of significance to the readership. Firstly, some of the stories did bear relevance to the readership eg "Minch Warning We'd Be Wiped Out" (The Shetland Times, 6 Jan 1993, p8), which told of the implications for the Western Isles in a similar scenario. This was relevant to the wider catchment area. a key difference from the Shetland Times. Secondly, stories appeared which interested readers by appealing to their emotive side eg "Worst scenario for Island's wildlife" (The Press and Journal, 6 Jan 1993, p8). However, this attempt at a balance between information and entertainment was lost in the following week's coverage (week 2). There was a marked difference between the two weeks and it was evident that the articles became less educational and more emotionally appealing, in the second week. For example, there was a decrease in the amount of stories which were relevant for people across the readership and an increase in reflective pity for the Shetlanders. Eg "Island in Mourning"; "Prayer Devotion Beat Braer Pollution" (The Press and Journal, 16 Jan 1993, p8); "Baptism Brings Hope" (The Press and Journal, 11 Jan 1993, p9).

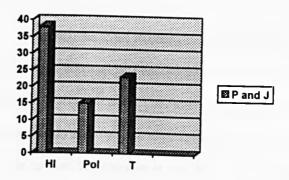


Fig 12 The Press and Journal (Week 1)

It is evident from both graphs that the other categories are smaller in comparison to human interest. The technical and reflective technical contain a similar amount of articles. The reason for this was that the stories about the "actual" state of the Braer eg "New Spill as Storms Lash Hulk" (The Press and Journal, 12 Jan 1993, p7), had decreased and the paper's objectives had been diverted into analysis (not description) about the state of the ship eg "Dilemma over Ship's Anchors Begs Questions" (The Press and Journal, 16 Jan 1993, p8). What was evident towards the end of the three week period was that The Press and Journal was dominated by more political stories than human interest ones. The coverage of this oil crisis has reflected that the initiation point generates a greater amount of emotive, people oriented articles than the later reflective, questioning pieces informing people of the outcome.

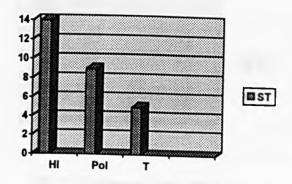


Fig 13 The Shetland Times (Week 1)

The Shetland Times (see Fig 13) like The Press and Journal was particularly emotive during the first week's coverage where the "vividness" of the language was noticeable. However, as The Press and

Journal remained constant in its reporting of the issue, The Shetland Times underwent a change in its coverage. The vocabulary was altered to a more neutral position and the emotive tone of reporting ie how coverage "sounds", was reduced. One of the recurring themes of the 2nd week, however, was the effectiveness of the dissemination of information (from officials to locals) and the media's (particularly the Shetland Times) role in this information flow. The "new" coverage reflected this theme and also addressed the idea that the media may have been instrumental in the misrepresentation of the event by referring to it negatively. The result of this alteration in reporting was demonstrated by an increase in technical stories and a decrease in human interest which are generally inherently emotive.

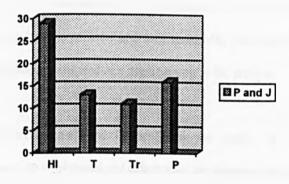
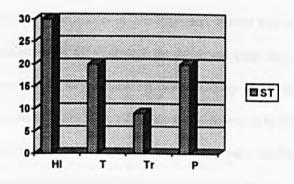


Fig 14 The Press and Journal (Week 2)



, Fig 15 The Shetland Times (Week 2)

3.1 The Consensus of Reality

It was mentioned, in the previous discussion of the vocabulary that The Press and Journal had drawn an analogy between the "disaster" and war. The theme prevailed throughout the issues (eg "Veterans of the Sky Set to do Battle"(The Press and Journal, 6 Jan 1993, p9); "Dakotas Lead Air Attack" The Press and Journal, 7 Jan 1993, p9)). It evoked from the reader an image of mankind at odds with the elements, the outcome of which would see mankind triumphant. The consolidation which was felt with fellow readers, was instigated by our images or perceptions of patriotism and nationalism. The narrative read "problem-as-defeated-by-Scots-as-nation". This was underlined by the fact that the crew were consistently framed (this was intensified by The Shetland Times for the first week) by the coverage as being the "enemy" or the polluters and their nationality (although not the only contextual factor), which was mostly Philipino was read as a negative trait in the scenario.

Local ethnocentric characteristics are used frequently by the media, where indigenous events, progression and development are emphasised and deficiencies are forgotten about (Breed, 1955)

These consensus reality techniques were not utilized by The Press and Journal after the first week however. The coverage had changed from a "readers/Shetlanders-against-the-oil" scenario to a "Shetlanders-vs-crisis" situation. The readers of The Press and Journal had been positioned as on-lookers to a far removed situation. By the third week the theme was weak, but the paper attempted to combine the readership in sympathy for Shetland, eg "Call for Unity and Trust in the Wake of Oil Disaster" (The Press and Journal, 13 Jan 1993, p2). This weakness was to be expected due to the fact that the story had reached its temporary conclusion. There was more consensus in The Shetland Times as the readership was directly involved and less able to emphasise this temporary conclusion.

Temporary in that the issue would surface in months to come as new developments take place.

The following quotations are taken from "Convenor praises emergency team" (The Shetland Times, 8 Jan 1993, p4). The convenor of the Shetland Islands Council congratulates the emergency services which acted promptly in response to the incident. They illustrate the idea of consensus.

"At a press conference he said, "Our economy and society could be at risk. A younger person might begin to wonder if there is a future in Shetland" (ibid.).

"There is a future in Shetland, " he said adding that it was still a rigorous and enterprising community. "My message is that Shetland is still a good place to be and we can approach life with confidence."" (ibid.)

Many of the emotional components in the Braer dispute seemed to be perpetuated by officials and quoted by journalists. The inclusion of these statements by journalists may be said to have shaped the readers' images and opinions of the incident.

"...everyday workers on the fish farms and also shell fishermen are going to be affected by the events of last week. "We must not forget them. We must make sure they survive this also." Major Anderson said, that these groups involved over 2000 people, many of them young, who all add their bit to Shetland." (ibid.)

It was evident that the consensual reality used by journalists to create a "textual solidarity" (drawing the readership together), was still being employed by The Shetland Times even if it was not so much in evidence at The Press and Journal. During the first week the narrative indicated that the victims (readers, Shetlanders, journalists) had been locked together in grief/sorrow. It revealed a cultural and social solidarity. The second week showed that the nature of the coverage had been turned around. This is due to the fact that news dates as quickly as it is constructed. The readership was now combined in optimism and sharing in the resilience of the Shetland islanders.

"Our plans for the viability of our community after the oil era has had a serious setback with the disaster". (The Shetland Times, 15 Jan 1993, p5)

"Despite initial fears brought on by not knowing exactly what was going on , the local community has managed to keep its spirits up." (ibid.)
(My emphasis)

3.2 Journalists' Involvement with Issue

There was evidence to suggest that journalists had become emotionally involved with the scenario. This view is supported by personal accounts of the situation, which inferred bias, eg "My Bird's Eye View at Birth of Disaster" and "A Sea of Black: Braer Lies Wedged on Rocky Bed" (The Press and Journal, 6 Jan 1993, p9). In The Shetland Times, it was mainly officials who were perpetuating emotional trends, but The Press and Journal feature some of their journalists' views. The effect of this technique succeeded in presenting the audience with information written within a personal context. It also made readers feel personally involved and created an artificial type of relationship between the reader and the journalist. As a greater amount of time passed between the event and the coverage, there was less evidence to suggest that journalists were so involved with the story. This was due to the fact that there was a decrease in the number of subjective eye witness accounts.

3.3 Recriminatory Issues

The first week of coverage (by both papers) included articles which implicated the Braer captain and crew as the instigators of the incident. This angle was reversed later on as new information became apparent about the circumstances surrounding the event. But initially, the reporting tone of both papers (particularly The Shetland Times) was accusatory and there was the possiblity that the emotions of news practitioners became confused with the issue being reported, for example,

"Outcome of the Accident Impossible to Predict" (The Press and Journal, 6 Jan 1993, p8)

This article was about the crew and implicit in this was the fact that someone should assume responsibility for the spill. Recriminatory meanings were only implicit in coverage by the Press and Journal (The Shetland Times was explicit in week 1).

Due to the emotional nature of the issue (in week 1), The Shetland Times coverage moved from the scene of the spill and description of the tanker and its movements, to the reasons behind why it

happened and who was to blame. These recriminations were reflected in the paper's treatment of the issue, to some extent. For example in the article "Plea for tanker ban in channel", one of the councillors was asked for his opinion,

"Asked who he <u>blamed</u> for the accident, Mr. Tait said, "I <u>blame</u> the crew for this disaster. I don't think they acted quick enough. If it was a British ship with a British crew I don't think they would have done what they did" he said". (The Shetland Times, 8 Jan 1993, p5)

The journalists included this, presumably, to reflect a council opinion and to allow for all points of view to be expressed. However, it shaped public perceptions of the issue and it was designed to arouse not only feelings of anger but also feelings of patriotism and cultural solidarity. This is ironic in that most of the coverage was concerned with compensation claims and the speculation as to whether the Government will pick up the bill for the incident.

"Patriotism or national ethnocentrism is a value protected by the media. When an individual is accused of disloyalty, favourable discussion of him by the media is sharply checked. He cannot be dramatised as an individual or a leader only as a "controversial" person under suspicion." (Breed, 1955, p328)

Recriminations were less explicit (in the second and third weeks) for there was evidence to suggest that the Captain was not to blame for the accident. The Press and Journal reflected this accordingly and accurately eg "Captain of Braer Defended by Skipper" (The Press and Journal, 12 Jan 1993, p7); "Help Call Not Delayed, Says Operator" (The Press and Journal, 11 Jan 1993, p7). It was now the Government which had replaced the Braer crew and Captain in this category as "villain". Eg "Smith has new Hook role in Braer Drama" (The Press and Journal, 15 Jan 1993, p6). This was an ambiguous headline which conveyed the idea that John Smith the, then, Labour leader was not going to let "the Prime Minister off the Hook" ie the Government was implicated as the institution to blame.

What was significant now was that the Braer Captain had been forgiven (in the second week of coverage) and exonerated by The Press and Journal in "Braer Captain "took right actions" (The Press and Journal, 13 Jan 1993, p8). The paper was a week late with this compared with The Shetland Times, but this served to underline the fact that The Press and Journal was slightly further removed from the situation and that there was a backlog or time delay as the paper tried to catch up with

developments. The recriminations had been completely reversed by both papers. The Captain was no longer portrayed as the evil perpetrator of the "disaster" but, rather, the human being faced with difficult decisions eg "New Claims over Tanker Masters Role" (The Shetland Times, 15 Jan 1993, p1) and "Master Praised by Coast guard" (The Shetland Times, 15 Jan 1993, p6).

3.4 Emotive Reality and Information Content

Both papers relied heavily on the wildlife stories. These articles were guaranteed to arouse the emotive responses of the readers and were designed, perhaps, to spur them into action. Many of the stories included a personal viewpoint of the journalist eg "Oil in the Loch of Spigie Bird Reserve" (The Shetland Times, 8 Jan 1993, p6).

"...in many places where pollution occurs at a distance from the wreck of the Braer it will probably be similar. It won't make spectacular pictures for television like the thick, brown concentrated oil at Quendale bay, but it will be unpleasant to be in the vicinity and its long-term effects on wild birds and sea mammals which become covered in it, thus losing their natural insulation, will probably be just as deadly as thicker crude." (The Shetland Times, 8 Jan 1993, p6)

The language was emotive due to the heavy reliance on descriptors. According to the experts involved, however, it was also exaggerated as it would appear that the wildlife suffered very little in comparison to how the press reported it.

Another technique used by both papers was making use of children by quoting and referring to their reactions to the incident. This was guaranteed to get an emotive response from the readership.

It was evident that for the first week of coverage, both papers used similar techniques to cover the Braer. However this similarity ends in the second week when, The Shetland Times reported from a more positive viewpoint and included greater informational depth to the coverage.

The vocabulary changed to become more neutral and the emotive tone of reporting reduced greatly.

One of the recurring themes of the week was the effective dissemination of information from officials to the people of Shetland and the media's role in this information flow.

"Dr. Cox has found the best way to disseminate information into the community has been to hold meetings with key people in the district to keep them informed of developments and dangers and letting them spread the news or reassure people." (The Shetland Times, 22 Jan 1993,p8)

The "new" coverage of the issue seemed to reflect this theme and also the fact that the media may have been instrumental in the misrepresentation of the event by referring to it negatively eg "Disaster", "catastrophe" etc. The result of this changed reporting style demonstrated an increase in technical stories and a decrease in human interest which were, generally, inherently emotive.

4. Experts and their Uses

4.1 How have experts been defined?

Experts or subject specialists can be defined as persons referred to by the media for explanations, or advice or comments which provide new insights into the situation. This does not include eye witnesses or local people who have commented on the incident and who have been quoted by reporters. It tends to refer, therefore, to people who work in academia, or specialist fields or who hold positions of authority. The social actors referred to in the articles, then, fall into two categories - victims (eg farmers, local businessmen, fishermen, citizens...) and experts such as the ones described below.

4.2 How have they been classified?

Experts were classified by five main categories which include.

a) Scientific

- b) Environmental
- c) Political
 - (i) National
 - (ii) Regional
 - (iii) Local
 - (iv) Party Specific
 - (v) Other eg European
- d) Technical
- e) Industrial

See chapter 2.4.

Some of the people referred to by The Shetland Times were also journalists working for that paper.

This emphasises the intertextuality of the situation in Shetland.

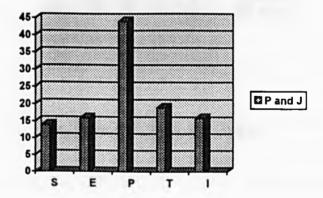


Fig 16 The Press and Journal (Week 1)²

The letters along the bottom of the graph refer to Scientific (S); Environmental (E); Political (P); Technical (T) and Industrial (I) experts.

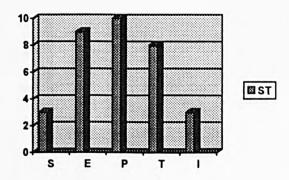


Fig 17 The Shetland Times (Week 1)

The Press and Journal relied on political "experts" the most often and scientific ones least often. This is significant in that category (a) is the most likely to have the expertise and knowledge about the factors involved in the situation and the reasons behind it and The Press and Journal persisted in framing the event negatively by using the term "disaster" indiscriminately.

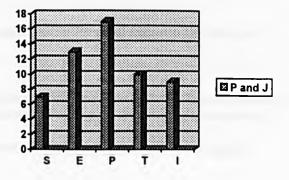


Fig 18 The Press and Journal (Week 2)

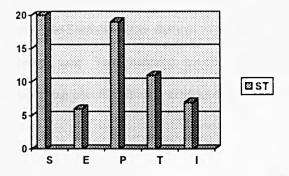


Fig 19 The Shetland Times (Week 2)

4.3 Scientific Experts

Scientific and environmental experts were among the minority of those interviewed by journalists. In The Press and Journal references were made to Dr. Jonathon Wills, a wildlife expert, who resides in Shetland. Unlike the scientific experts quoted in The Shetland Times who presented a more neutral balanced view, Wills comments were surrounded by negativity and could be classed as subjective.

Eg. These excerpts were taken from the Press and Journal, 6 Jan 1993, p8.

"...he said it was the worst-case scenario in Shetland's major disaster plan - with no realistic prospect of preventing the ship breaking up completely."

"From that moment on, Dr. Wills said, disaster was inevitable."

"Dr. Wills added that this "was the disaster that was not supposed to happen." (Journalists quoting Wills)

This was an important factor - a scientist referring to the incident as a disaster when the extent of the damage was unknown. He disagreed with the four experts (interviewed by the researcher), in whose professional opinions the incident would resolve itself within months.

In comparison with The Press and Journal, The Shetland Times initially referred to very few scientific experts. Mentions were made of the local agricultural officer and veterinary surgeons who gave advice

to the local farmers about hay and feed. Where The Press and Journal reported holistically, trying to put the incident into perspective, The Shetland Times reported with a more immediate view, mediating advice from experts for the present time. This illustrated not only the different types of approach to covering the event by both papers but also the different expectations and demands for information by each readership.

"Veterinary surgeon Edwin Moar has been down to the area taking samples of grass for analysis. He is sending them to the veterinary research centre in Thurso." (The Shetland Times, 15 Jan 1993, p11)

Scientific experts gave authority to the articles and their comments often reinforced the suspicions of the public which beforehand were only speculative. Readers were supposed to take comfort from reading specialists accounts. Quotations were confident sounding and provide reassuring solutions to specific parts of the problem.

There was a marked increase (by both papers) in the number of references to scientific specialists in following weeks (see figs 18 and 19 above). Dan Lawn, the Alaskan professor who had been called in to give assistance in the Exxon Valdez case, and a number of health experts were cited in keeping with related health topics receiving coverage. Other experts include the same veterinary consultants who had been cited previously during the coverage.

4.4 Environmental

Environmental experts were also referred to by journalists by both papers, although to a greater extent by The Press and Journal than The Shetland Times. Groups like the Shetland Bird Club; the RSPCA: Shetland Natural Heritage and Greenpeace were included for comment. Initially, wildlife articles appeared which served to emphasise the fact that the effects of the oil on wildlife was still undetermined at this stage. However, journalists stressed that the use of experts by the press does allow readers to see their "favourite" environmental groups being at the forefront of the issue and being closely involved with the rescue work. The environmentalists also receive publicity from the paper.

"The environmental campaign group [Greenpeace] was not here to carry out research as such, more to draw media attention to their long-running campaign for safer transportation regulations concerning dangerous substances such as oil." (The Shetland Times, 15 Jan 1993, p2)

This paper used irony to emphasise Greenpeace's involvement with the incident which originated from the promotion of safer shipping loads and the routes used. The political core of the piece was laying the blame on the side of the Government.

4.5 Political

Generally, reference to experts or subject specialists did seem to be skewed in favour of political ones.

These political specialists range from local and regional councillors to national government ministers.

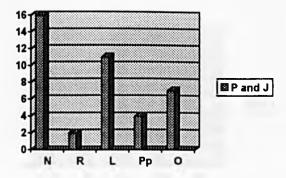


Fig 20 The Press and Journal 3

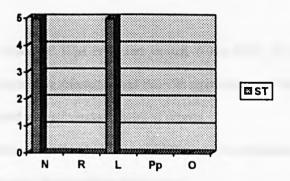


Fig 21 The Shetland Times

The letters along the bottom of the graphs in figs. 20-23 represent, National (N); Regional (R); Local (L); Party Specific (Pp) and Other eg European.

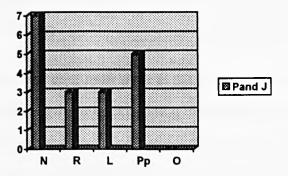


Fig 22 The Press and Journal

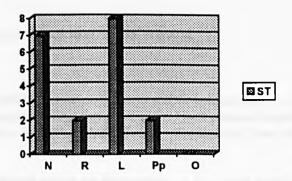


Fig 23 The Shetland Times

"Hazard Agreement Not Enforced" (The Press and Journal, 6 Jan 1993, p8) is a typical example. Within this article, six experts were referred to and this was representative of the political coverage of the issue which was saturated with references to political experts.

At some points political bias against the Government had been used to substantiate articles.

The following excerpts are taken from the Press and Journal.

Eg "We do not consider there are any areas where oil tankers sail which are also environmentally sensitive and would require the implementation of the convention."

Department of Transport (The Press and Journal, 6 Jan 1993, p8)

"Alex Salmond called for the Government to underwrite all the clean up costs and demanded an assurance that there would be no limit on the resources needed to deal with the disaster." (Ibid., p8)

The Government and Braer crew came under attack in this paper's coverage. The reporting of the incident had moved from the cultural issue of the grounding of the tanker to attempting to lay the blame somewhere. The technique may have been used to placate the readers by investigating issues behind the main story, which journalists perceived to be the ones readers wanted explained. It may have been used to get to the truth and find out the reasons for this incident.

In The Shetland Times, the local and national Government/political experts were referred to considerably during coverage of this incident. Many of the stories were politically oriented and the referents were often MPs.

Eg The article, "Ewing demands actions of tankers" is typical,

"The destruction of their coastal environment and the potential death of so many birds, animals and fish is exactly what they [Shetlanders] were promised would never happen when the oil industry arrived", said Mrs. Ewing". (The Shetland Times, 8 Jan 1993, p6)

The language used was biased against the Government, as one would expect, because the MP is a member of the Scottish National Party.

Other stories referred to different political experts eg council officials, MPs, Government officials. All offered reassurance to readers in an attempt to play down the fears of the people living in the area. For example,

"The council's environmental services director Martin Hall said there was currently no health hazard to the locals "with the present weather conditions". (The Shetland Times, 8 Jan 1993, pl)

This gives hope suggesting that conditions were stable at that time and the article is honest in mentioning what to expect when the weather changes. It is an attempt to inform the public without causing unnecessary alarm.

"Yesterday morning MP Jim Wallace sent a letter to Prime Minister John Major seeking immediate assurance that the Government would meet the costs..." (The Shetland Times, 8 Jan 1993, p3)

It may be assumed that journalists quoted Jim Wallace to allay readers' fears that the Government would assume responsibility for the incident. Therefore, it may be argued that the journalists write with the implied audience in mind ie that the reporter not only writes the news, according to the editor's line and a set of news values but also that he/she has a particular image of the readership in mind (see chapter 10)

It is evident that the Press and Journal referred more frequently to a wider range of politicians and emphasised less, the local politicians. This served to underline the fact that the Press and Journal is further removed from the issue than The Shetland Times and it was harder to ascertain the political persuasion of the paper. It was noted that The Shetland Times referred to only local and national political experts.

4.6 Technical

There were less technical stories in The Press and Journal than there were in The Shetland Times (see section 2). There was an indication from the language analysis, that the information content of these was more superficial than The Shetland Times. These were articles which were concerned with the actual operations carried out at the scene of the grounding. The technical experts used were the people carrying out these operations of the tug master, maritime controller, helicopter pilots etc. Eg "Veterans of the Sky set to do battle" (The Press and Journal, 6 Jan 1993, p9) was about six wartime planes which were to be used for spraying dispersant on to oil to try and neutralise it. The experts in this story were mainly pilots from Air Atlantique in Inverness. "The countdown to Disaster" (The Press and Journal,

6 Jan 1993, p1) is a further example which recounted the rescuing of the Braer crew by an RAF helicopter crew.

General coverage of the issue by The Shetland Times can be divided into three main categories of experts - environmental, political and technical (see figs 16, 17, 18 and 19). Technical articles included eg "Last Ditch bid to save ship from the rocks" (The Shetland Times, 8 Jan 1993, p3) which described the procedures involved in trying to salvage the Braer. Jim Dickson, Sullom Voe's pollution control officer (who had been cited throughout the coverage), was referred to in this article. The story was descriptively dramatic, (as were most of the stories in the beginning of coverage), and told of what happened in Dickson's own words.

"As the men were giving up the ghost, the tanker struck the ground. I have never been so scared in my life" said Mr. Dickson." (The Shetland Times, 8 Jan 1993, p3)

This described the second day of the oil spill. Three technical experts were referred to,

- a) Captain George Sutherland, Shetland Coastguard
- b) David Bedburgh, Department of Transport Marine Pollution Control Unit
- c) Jim Dickson, Pollution Control Officer

The tone of the article, despite the headline, was positive and the expert comments were reassuring.

The experts all gave encouragement and hope eg that everything possible was being done to control the oil and that an international team of specialists were dealing with the slick. They also stated that the weather was helping to naturally disperse the oil slick which was quite "narrow" and small anyway.

Experts seem to serve two purposes, then. Firstly, to give credibility and value to a story so that it is believable ie creates a natural picture of reality. Secondly, to reassure people that the problem will be resolved and that the natural order of things will be restored to the correct balance. The public put their

trust in experts and like to feel secure in the knowledge that no matter what happens there will be someone trained in a specialist area that can help to solve and explain the mystery.

5. Conclusions

The content analysis has provided a detailed, microscopic examination of the news product within the context of a real environmental issue. The investigation aimed to provide an insight into the vocabulary used during the coverage; the informational content/emotional balance in the tone of the reporting; and the selection of and reference made to experts or subject specialists at the time.

The use of this traditional yet reliable methodology has generated a considerable amount of basic and representative analysis. However, this analysis was insufficient on its own, and it is for this reason that the Braer work supports the main text as an appendix. The method did not take account of processual considerations, for example, the ways in which journalists evaluate, research, construct and interpret the news. Content analysis simply provided the foundation upon which to develop, extend, and apply a more sophisticated methodology to uncover these news process rules.

Appendix VII

Appendix VII

This is a methodological appendix which includes evidence gathered in the T.I.D. sessions. Its purpose is to demonstrate how the researcher "tidied up" quotations from respondents without altering the meaning or sense of the quote.

The following is taken from the discussion of journalism training.

During the session:

"I think that young journalists now because of the nature of the business are thrown into the deep end and I think they are out an awful lot because, you know, but that's the changing nature of the job. I went out with them, alongside them, as a sort of legman and they told you what to do and you learn by that. If someone tells you once in a forceful way you don't do it again, whereas now they do it and it gets in the paper and they think its all right. Also they don't have the techniques that reporters had - like ways to approach people - where you persuade them. You pick things up without being aware that you're doing it."

After editing:

"I think that young journalists now because of the nature of the business are thrown into the deep end and I think they are out an awful lot...but that's the changing nature of the job. I went out with...them [experienced journalists] as a kind of legman and they told you what to do and you learned by that. If someone tells you once in a forceful way [not to do something], you don't do it again, whereas they [novice journalists] do it now and it gets in the paper and they think it's all right. Also they don't have the techniques [now] that reporters had - like the ways to approach people-where you persuade them. You pick things up without being aware that you're doing it."

As can be seen from the above, it has sometimes been necessary to add words in square parentheses to clarify the meaning of the sentence. Similarly extraneous words have on occasion been omitted and in these cases have been replaced by dots. However, at no time has the sense of meaning of what the respondent has said been changed.

Appendix VIII

Appendix VIII

This is a copy of the methodological and ethnomethodological coding categories used during the resessarch to organise the data gathered from the tri-lateral discourse sessions.

The Coding System

"Codes label and reorganise the data according to topics which open the inquiry and permit the researcher to make sense of the thousands of lines of words. They are retrieval and organising devices that cluster the relevant segment of the data relating to a particular theme or proposition." (Miles and Huberman, 1984, p23)

The researcher constructed a system of methodological and ethnomethodological coding categories to which data could be assigned as it was gathered.

Methodological Coding Categories

These categories contained basic scene setting information which provided background data for the ethnomethodological study.

Setting

This category included two types of journalist ic broadcast or print and indicates the degree of experience in either the journalism or the environment field.

Output -

This category referred to the position of the environment story in the paper, the amount of coverage it would receive and its topicality.

Ethnomethodological Coding Categories

Substantive

1. Type of Story

1.1 Recognised TS(r)

1.2 Unrecognised TS(u)

Reveals how familiar journalists are with the environmental issue, if at all.

2. Newsworthiness

2.1 Unworthy NW(u)

2.2 Degree of Worthiness NW(Sp)

2.3 Newsworthy NW

Categorises how different issues are more serious or relevant than others and reveals the criteria journalists use to determine this. This refers to a learned, experiential process practised by journalists.

Strategic

This refers to the strategies journalists employ to construct the news.

1. Journalistic procedures

1.1 Research

Information Selection

Experts IS(e) Personal Contacts IS(c)

Libraries IS(1) Public IS(p)

Electronic IS(el)

Information Rejection

Experts IR(e) Personal Contacts IR(c)

Libraries IR(1) Public IR(p)

Electronic IR(el)

1.2 Contact

Interviewees -

"victims" Con(v) Experts Con(ex)

1.3 Interview

Pragmatics Int(pr)

1.4 Write

Pragmatics Wri(pr)

Theoretical Wri(th)

Reflective Coding Categories

1. Definitions	Def	
2. Perceptual		
Personal view of environmental issue		P(per)
Professional view of environmental issue		P(pro)
3. Processual		
3.1 View of Profession or job		Pro(j)
3.2 Change/time		Pro(t)

The reflective coding categories were used to analyse data mainly from follow up interviews where respondents talked or reflected on their profession or the definitions of their work.

Appendix IX

Appendix IX

The following evidence demonstrates the rationales which journalists gave for their prioritisation of the cases (see chapter 8, page 168).

The Press

The Edinburgh Evening News

"...the one outstanding story which is national and the evening news would splash on - is the aviation fuel one. You've got three (1, 2 and 4)that you could probably find a local angle on and that's basically what they'd do. They'd hand some press agency copy or a cut from this paper to report on and say, "find a local angle on that". But the Cairngorm one is not interesting unless you are a local person." Tom Little

The Press and Journal, Aberdeen

This respondent listed the cases in order of newsworthiness:

"Case 5 is a huge environmental disaster with implications for health of the local population. This story has everything - human interest, safety implications, environmental damage to the coastline and wildlife. Case 1 - this story is important in that the human tragedy brings into focus the issue of pesticide use. If the farmworkers died it would be a first (1 think) and would therefore make the story bigger. Case 3 - the destruction of Scotland's natural resources has economic as well as environmental implications ie tourism, which would make this story big. Any planning scheme on this scale which would attract objections from a cross section of the population will always draw media interest. Case 4 - this story has in fact developed in the past year and is drawing closer scrutiny. It is important for the fishing industry, but newspaper reports have in the main been restricted to specialists pages publications. Case 2 - the strength of the story will depend on how convincing the parents' case is. If it's a hunch, then it would be restricted to local papers. If they have some data, and perhaps the support of a local MP to back them up, the story will be bigger." Carlos Alba

Broadcast

Grampian Television, Aberdeen

"...the most important one would be the railway one, I quite like the asthma one it's a good human interest one, the skiing is a good visual story, fishing four and pesticides, five. I am making my mind up in terms of it's being a picture medium. It's television and I'm looking for human interest stories as well. I mean the railway one is the most obvious because it is a big story. It's a visual one, something to see. The second one, it's a good human interest story. It touches the lives of everyone who's watching. The third one, again, is a good visual story. It's related to jobs. The fourth one is an important story but it is not a news story, however, fishing is something which runs and runs. The pesticide one - there's sort of an "ify" quality about that...It's potentially a big story but I'm undecided about its newsworthiness."

Alistair Gracie

"The train comes first as it is an immediate threat to human life and it would prove, I would have thought to have good pictures. The Cairngorm one because of the passions that it would arouse and the fact that it is an actual proposal which if implemented would affect a lot of people and will spark a lot of debate from a wide range of interest groups. The pesticides rates only third because the link hasn't been established but the doctors are making a connection and again this would depend on the number of deaths of animals. If there were a large number of deaths it would obviously rate the story that much more highly. The fishing is as far down as it is because, again, having had experience of the issues, there is nothing new in this but it is a reasonable feature woth some discussion and a lot of people are affected by it, given the number of coastal communities and a lot of people have an interest in it through the ecology and environmental issues. The Dundee one unfortunately because it is neither a story...it is not a news story and it is not a feature...but it is a possible element in a feature. It doesn't stand by itself but it could be an element of something else." Respondent 1.

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Appendix X

Appendix X

The following quotes are to be read in conjunction with chapter 8, page 161.

"...there is hard news which is obviously stuff which is breaking and coming in at very short notice that we respond to. There is feature type news whichis perhaps an indepth examination about something. There is soft news where there are light stories like two headed elephants and there are very light stories which we cover as well. There are many categories of news. It's a range of things." Alistair Gracie, Grampian Television.

"...we have diary news...something at the Court of Enquiries. We'd have running stories - stories which are happening and they're like major hard news stories. We also have off beat, quirky things like whales getting beached and that sort of thing. They're hard and soft and probably a bit in between as well." Ian Lundie, NorthScot.

"...there are diary stories which are self explanatory. They come up in advance and they tend to be press conferences, photocalls, launches...and these are the things that you put in the office diary and you go through on a day to day basis. Then there's the breaking stories which break during the day and you have to be able to respond to them like fires, road accidents. There are developing stories...they begin with a critical event and then they begin to develop and take on a whole news life of their own and there are different areas of investigation - different areas of concern to follow up. There are off diary stories which tend to be light hearted human interest stories which generally tent to concern individuals - humans." Carlos Alba, The Press and Journal.

"Each programme has a pretermined structure and if you follow a programme through you will see that the strongest story is inevitably at the top. Sport tends to come towards the end of the programme - we tend to want to leave people smiling but not invariably and the pompous, analytical pieces tend to be further down. The news does vary considerably and we tend to try for a variety of pace within a programme - so short pieces, little bits of news, more indepth analysis, a chance to let the story breathe. There are no rules but there is a framework within which we will work. There are quite often unwritten guidelines as to how something should be structured." Respondent 1.

Appendix XI

Appendix XI

Respondents quotes included in this appendix provide additional information. The following should be read in conjuntion with chapter 8, page 178.

"You would assume that this has come from some report from scientists or whatever. It would depend...if it has come from some reputable body - university scientists and it was backed up by the fishing industry itself, then we would take it extremely seriously." Ian Lundie, NorthScot.

"Because of the context in which I've worked, this isn't new so I wouldn't treat it as a news story again. If I was doing it at all, I would be doing it as a feature because in all this there is no news line. This is just confirmation of a trand we've reported on before. It would only merit major coverage if a very important body came to us and said, "the ecology of the North Sea has collapsed", and "here is the evidence. We're showing it to you for the first time." But it would have to be pretty strong before that happened." Respondent 1

"My difficulty with this is that I'm not sure...that unless you have a specific report of a claim being put forward, that there is necessarily a story. It's a newspaper story, when there is an incident or one day there are fish in the sea and another day there are not. Contrast and change is the lifeblood of journalism....as an actual hard news story it is limited." Paul Riddell, North Scot.

"If a scientist said that there was genuine...that there was something in the claims...that there had been research done and that this was the long term prognosis then that would make it stronger. On the face of it, it would be a good story and I think it would probably be given quite a good showing." Carlos Alba, The Press and Journal.

Appendix $X\Pi$

Appendix XII

The following evidence, which emerged from the discussion of case 3, should be read in conjunction with chapter 8, page 170.

"this [case 3]...is a far clearer story than either of these two. The first one was potentially a very strong story, the hurdle being that more research was needed to discover the link. The second one wasn't a story in itself but an element in a feature. This one is a hard story that stands by itself and will interest a lot of people. It is harder in the sense that it is more obvious. In the first two you had something in dispute. In the first one we had the disputed connection between the chemical pesticides and the animal deaths and human illnesses. The second one-there was even more dispute between the asthma and the girl's death. In this one it is undisputed that a company wants to do something that will have an impact on the area, so the question is whether or not it should happen so suddenly. It is very live." Respondent 1.

Appendix XIII

Appendix XIII

To be read in conjunction with chapter 10, page 233.

Balance

"...there are operational factors like, if somebody's being accused of something or is even being spoken about in a story you normally try to get a balancing comment from them, but I think you are asking me about balancing truth and higher moral concerns like that. A lot of the time stories aren't balanced. A lot of the time, the fact that a story is being run is creating an imbalance in the status quo. In terms of the practicalities of it, you try to balance up, you know, claim and counter claim." Carlos Alba, The Press and Journal.

"It's very difficult to give a very impartial view. Everyone is always speaking for it or against it. You should never have an opinion at all, on anything. Unfortunately what would probably happen is that one side wold accuse you of favouring the other side. You have to take a line - who's doing what. The story [case 3] would be...conservationists trying to prevent a major ski development taking place. The conservationists might not like that and say that it casts them in a bad light but there's no way round that. You can't say that a development will lead to the erosion of the plateau. You have to say claimed or alleged to cover yourself. One side claimed or one side accused the other. You have to be very careful about the way you word your sentences." Ian Lundie, North Scot.

"You just have to speak to the parties who are involved in a particular story. You try to get both sides of it or at least give all sides the opportunity to comment. If they don't want to comment then that's their problem but they have to be given the opportunity to comment. If they are approached and they say "no comment" then you explain in the story that such and such a company declined to comment on certain allegations or whatever." Elizabeth Buie, The Herald.

[Balance] is something you've got to be aware of yourself. You have to train yourself to do it even though there may be a pretty good line which might make one party look good and another party look bad....and that's pretty much a golden rule from day one. If you didn't do it there's someone else who will check your copy...the news editor. You have to make sure you have balancing comments from the other side." Ian Lundie, North Scot.

Appendix XIV

Appendix XIV

Journalists Perceptions of the Audience

To be read in conjunction with chapter 10, page 237.

"I do have a kind of picture of the audience in my head. I don't relate anymore to one person which is how I was taught to begin. Sometimes when I'm stuck in the middle of a story I say how would I explain this to my granny....or to my husband or whatever and sometimes that just gets you out of a kind of writers block but I've a much more general image in my head and that comes from the amount of feedback that I get from humping into people and in terms of the environment it is quite a middle class audience. They're quite an informed audience." Respondent 2

"You have to have a kind of picture. You have got a line....but before that there's a style, that just happens to be....if you work on a newspaper the style becomes actually ingrained and you just do it...but when you're writing a story you have to think in terms of the style of the newspaper which is going to print it. Very often we do two - a story for the tabloid and one for the heavy papers - sometimes we don't because the subs will deal with it. But yes I do. If you didn't you wouldn't be doing your job properly." Paul Riddell, North Scot

"...we wouldn't necessarily insult their intelligence as to suggest...that they wouldn't know what some of these terms meant. If I was working for a tabloid paper that would be different...I would break that [indicates paper] down into two sentences. You would break it down into people who had been poisoned by the over use of chemical pesticides and that is about the extent of the scientific explanations you'd go into." Carlos Alba, The Press and Journal.

"....broadsheet newspapers probably endeavour to explain a little more of the science than the tabloids would. There's this great assumption, probably false that broadsheet readers are more intelligent than tabloid readers but I personally would try and explain as much of the science as possible." Paul Riddell, North Scot.

"...of secondary importance would be the kind of scientific research - that's not necessarily important. I mean all this [indicates background scientific information] is worthy but from a news point of view it is meaningless because to the lay person this doesn't mean anything...I mean this could be broken down into two paragraphs...about precisely what had caused it. I think we would be more concerned or newspaper readers would be more concerned with how the people are...what their symptoms are and they'd only be broadly interested in what specifically caused it." Carlos Alba, The Press and Journal.

"You basically have to leave it in the hands of your readers...not abdicate responsibility - you don't want to become a totalitarian force and tell your readers what to think. You need to report the thing and leave it to their intelligence to work out." Paul Riddell, North Scot.

"I don't have pictures of the readership in mind. I write for myself. My tutor used to say that he wrote his stories for his wife or with her in mind. But if you mean vocabulary - that has to be pitched for the lowest common denominator. You have to break things down. You try to avoid being condescending to your reader but make it universal as well." Tom Little, Edinburgh Evening News.

To be read with chapter 10, page 240.

The interpretation of Science

"I have no limitations on the science but obviously it has to be comprehensible pure and simple or the fact that it could be a common problem - it could be affecting people all over if it has gone into the water table for instance. It is of serious interest and therefore you have to try and communicate that to as many people as possible. If, however, it is airborne through pesticidal spraying, obviously then farmers have to be told of it but even then it has to be comprehensible - farmers have to know about it at the same time." Mark Stephen, BBC Radio Scotland.

"Not much science goes into stories...because you have to explain whatever science you put in a paper. It is no use using scientific terminology, even in a newspaper, like the Scotsman, unless you are going to explain it. If you are using jargon, you've got to explain it." Auslan Cramb, The Scotsman.

"The trick is to break down the science into levels which readers can understand. I don't want to read about toxins and things." Tom Little, Edinburgh Evening News.

Appendix XV

Appendix XV

Writing is Curtailed by the News Values of the Paper

To be read in conjunction with chapter 10, page 175.

"Writing is curtailed by the paper's news values. I was once told by an executive of the Daily Record that they would never take a story that was over 14 paragraphs long...and if you look at their page lead, it generally is about 14 paragraphs and it is also 14 snappy paragraphs...the economy of language is really the in-thing there. If you are doing it for a tabloid then keep it short, snappy and to the point. If you are doing it for the heavy papers, then you can afford to waffle on...it is actually easier to do it for the heavier papers. You don't have to think about how to shorten your sentences. It is easier to use 50 words than 25. It's more of a skill to cut it down." Ian Lundie, North Scot.