

**FACTORS INFLUENTIAL IN THE COVERAGE  
OF ENVIRONMENTAL ISSUES BY THE  
SOUTH AFRICAN PRESS**

by

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Submitted in partial fulfilment  
of the requirements for  
the degree of  
Master of Arts in  
Environmental Science  
at the  
University of Cape Town

FEBRUARY 1991



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## GLOSSARY

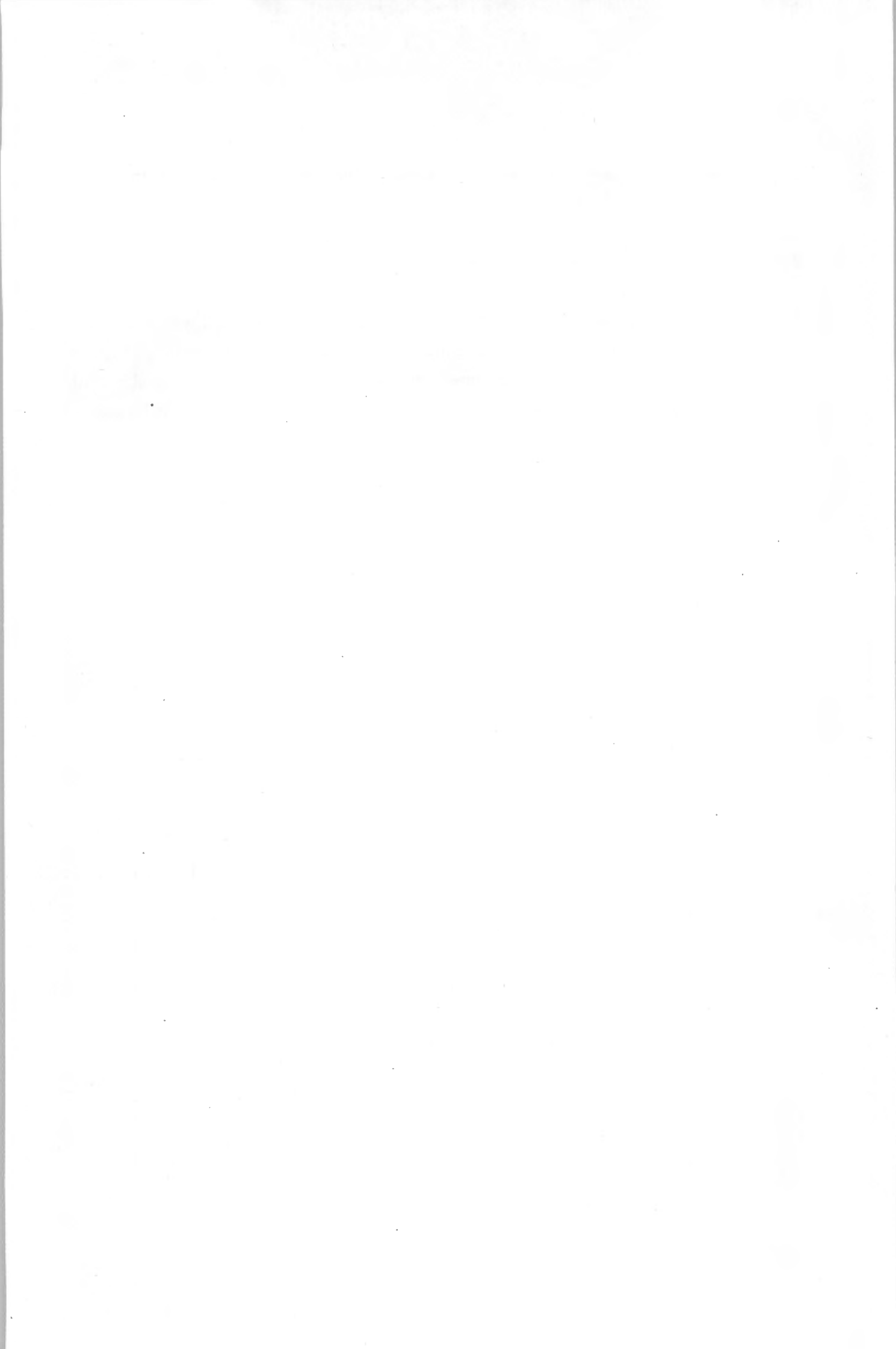
The definitions in this glossary are appropriate to their use in the study.

- Accredited** : refers usually to sources that by virtue of their position in society are considered authoritative by journalists
- Actor(s)** : individuals who play a part in the unfolding of the event or issue which is reported
- Agendas** : issues or events that are viewed at a point in time as ranked in a hierarchy of importance
- Agenda (Media)** : a homogenised set of news topics addressed by all members of the news media
- Agenda-setting** : a process through which the mass media communicate the relative importance of various issues and events to the public
- Beat** : specialisation by a reporter on coverage of one specific category of news, usually to the exclusion of other categories
- Chloro-fluorocarbons** : Chemical compounds used in the manufacture of a wide range of consumer and industrial materials and goods, such as refrigerators, air-conditioners and furniture foam
- Circulation** : refers to the audited average number of copies of a newspaper sold daily (for a daily newspaper)
- Copy tasters** : newsroom personnel responsible for the initial screening of news received from news agencies
- Coverage** : what is published in the newspaper; excludes reports that are written up by reporters but excluded from publication

- Deadline** : the time by which a report must be submitted for editing and production in order to be published in the newspaper edition for which it is intended
- Distribution** : the physical delivery of the newspapers to those areas and outlets where they are to be sold, and to the addresses of subscribers
- Environment** : in this study the definition is limited to the natural environment (biotic and abiotic)
- Effluent** : a by-product of an industrial process, containing various chemicals and/or other substances specific to that process, in liquid form
- Event(s)** : discrete happenings that are limited in space and time
- Feature story** : an article in a newspaper that analyses a current issue in greater depth and detail than a straight news report, and which expresses an opinion about the issue
- Gatekeeping** : the selection and screening activities of the editors in the news organisation (the **gatekeepers**) in deciding which news to print, which to exclude, and how much prominence to give the reports
- Global warming** : the rapid heating of the earth's atmosphere due to the buildup of carbon dioxide, chlorofluorocarbons, methane and other "greenhouse" gases in the atmosphere, which retain the sun's heat within the atmosphere
- Hard news** : news which is event-based, most current, and contains factual information presented with minimal, if any, explicit interpretation
- Holism** : a view of reality which acknowledges the essential inter-relatedness and interdependence of all phenomena
- Issue(s)** : a broad category comprising a series of related events.

- Mass media** : communication news media directed at the general public; excludes limited-audience media aimed at specific interest groups; includes television, radio, mass circulation newspapers and magazines
- News agency** : a local or international agency that acts as a conduit of news, transmitting and receiving news to and from other news agencies or news organisations
- News diary** : a list of current and potential news events constantly updated by the news editor and used as a basis for assigning stories to reporters daily
- News gathering** : the multi-faceted process by which news material is acquired by the news staff; includes the use of news agency reports and first-hand investigation into potential news stories
- News hole** : that part of the newspaper dedicated to general news, as opposed to advertising, sport or entertainment material
- News peg** : a solid newsworthy event on which to base a report containing other material considered as news
- News production:** all processes the news report undergoes after submission for publication, including editing, typesetting and printing
- News value** : a property of a news item which, in conjunction with other such properties, influences its selection as news, according to prevailing journalistic concepts of the nature of news
- Newsworthiness:** a specific quality or qualities exhibited by an item of information that conforms to existing journalistic concepts of news value, and is considered to be worthy of transmission to the media audience
- Ozone** : a gaseous compound comprising three oxygen molecules
- Ozone layer** : a layer of ozone blanketing the earth high in the atmosphere which screens out the sun's ultraviolet rays

- Ozone hole** : a large area over the Antarctic where the ozone density in the ozone layer is dramatically reduced
- Press** : mass circulation newspapers
- Soft news** : News which is not as time bound as hard news, and which therefore can be used to supplement editions when there is a shortage of hard news; examples are medical and technological development, entertainment industry stories, and travel. Environmental research reports are also typical of this category.



## CHAPTER 1

### INTRODUCTION

#### 1.1 INTRODUCTION TO THE TOPIC

Environmental journalism in South Africa has traditionally focussed upon topics relating to wildlife and nature reserve conservation (J. Clarke, Assistant Editor, The Star, pers. comm.). However, the past three years have seen an increase in environmental coverage and a widening of the mass media's interest to include broader environmental issues (J. Clarke, Assistant Editor, The Star, pers. comm.). Furthermore, environmental issues appear to have moved up on the news agenda, both in South Africa and overseas. Environmental issues received 76 percent more coverage in 1989 than the previous year on network news coverage in the United States (Channels, April 1990 : 72).

This increase suggests that the mass media could play an important role in the development of environmental awareness among the public. The material that they select for publication, and the way in which that material is treated, may have important implications for the way in which the public perceives environmental issues.

Greater public awareness of environmental deterioration and increased public participation in remedial programmes are primary objectives of environmental education (White Paper on Environmental Education F/1989). Environmental coverage by the press could play an important role in furthering these objectives.

#### 1.2 THE RESEARCH PROBLEM

The relatively recent increase in environmental coverage by the South African press raises the question of the way in which the press is presenting environmental issues. This necessitates an examination of factors influential in the press' approach to environmental material, which may dictate which issues are selected, which are omitted, and the interpretation of the implications of those issues which do get published.

### 1.3 THE IMPORTANCE OF THIS STUDY

Formal research in this field in South Africa is relatively new, since the increase in coverage is recent. This study is therefore descriptive and exploratory in nature, and attempts to identify factors that may influence the decision by the press to cover or ignore environmental issues, the extent to which they may do so, and what news angle to adopt.

It is important for environmentalists to appreciate the extent to which the press can provide a tool for furthering the objectives of environmental education. An understanding of the norms and constraints under which the press operates can assist environmentalists in interacting with the press so as to facilitate and encourage coverage of environmental issues.

### 1.4 AIMS AND OBJECTIVES

This project takes the form of a descriptive and exploratory analysis aimed at identifying media-related factors that may play a role in increasing or inhibiting press publication of environmental issues in South Africa.

This has been done by pursuing the following objectives :

- identification of intra- and extra-organisational norms and constraints operating in the production of news by the press generally, and by two South African daily newspapers in particular, The Star and The Citizen;
- quantitative content analysis of news articles on three environmental issues in the same two newspapers to ascertain the existence and nature of the news values operating, as an indicator of which aspects of the issues contributed to their newsworthiness;
- qualitative analysis of one of the environmental issues to determine the existence and nature of editorial bias towards or against the different environmental perspectives of actors in the issue;

- comparison of the approaches of the two newspapers in the light of the results of the above analyses, to determine which factors influence both newspapers and which may influence only one of them.

## 1.5 SCOPE AND LIMITATIONS OF THIS STUDY

This study has been undertaken in partial fulfillment of a Master of Arts degree in Environmental Science, and as such is more limited in scope than a full dissertation. The study is confined to identifying factors that have the potential to influence press coverage of environmental issues.

The following areas lie outside the scope of this study :

- determination of the extent to which factors that are identified actually affect the newspapers studied. The identified factors are assumed to play a role in the selection and coverage of environmental issues. The full nature and extent of this role, however, will not be considered;
- assessment of the extent to which publication of environmental material is a response to reader demands, or the effect of this publication on readers. The study focusses on the press as communicators, and the message, not the receivers of that message.

## 1.6 OPERATIONALISATION

### 1.6.1 Method

The methodological approach is as follows :

- a literature review of constraints and norms operating in press coverage in general, established by past research in the fields of communication and media studies;
- a quantitative content analysis of three environmental issues that received a similar amount of coverage in two selected daily South African newspapers, The Star and The Citizen, to determine the news values operating during coverage;

- a qualitative analysis of one of the issues to determine the extent and nature of editorial bias regarding different environmental perspectives;
- informal interviews of ten media personnel and participants in one of the issues, to contextualise and suggest explanations for some of the findings of the analyses. This interview information is treated as a series of personal communications rather than formal research data.

## 1.7 THE INTEGRATED NATURE OF ENVIRONMENTAL CONSIDERATIONS

The reference throughout the report to environmental 'issues' suggests that there is an underlying assumption that the environment should be seen in terms of a wide range of discrete issues. This approach is adopted for convenience, and is to some extent dictated by the newspapers' treatment of environmental coverage in this way.

However, it is accepted that our environment is multi-faceted and highly integrated. Consideration of any element of the environment necessarily demands examination of related aspects, since the interdependence of environmental systems means that impacts experienced in one area of life have an effect on others. A holistic perspective on environmental matters is therefore desirable. For the purposes of the present study, however, the compromise approach was adopted.

## ABSTRACT

The past three years (1987-1990) have seen an increase in environmental coverage and a widening of the press' interest to include broader environmental issues. This increase raises the question of the way in which the press is presenting environmental issues, since the press could play an important role in the development of environmental awareness among the public.

The aim of the study was to identify factors that could be influential in encouraging or discouraging environmental coverage, and the type and extent of coverage.

The study identified factors influential in the coverage of three environmental issues, global warming, atmospheric ozone depletion, and the Sappi paper mill effluent spill into Eastern Transvaal rivers (1989), in two South African daily newspapers, The Star and The Citizen.

A combination quantitative-qualitative content analysis was undertaken on reports by these newspapers to assess the nature of the news values operating during coverage (to determine what made the issues newsworthy), and the existence of editorial bias toward or against the environment. Interviews were conducted with a small sample of news personnel and individuals active in the Sappi effluent spill issue to contextualise the results of the content analyses. The study method was undertaken within the theoretical frame of newspaper agenda-setting.

The results showed that despite differences in editorial bias and source use, the newspapers on the whole displayed the same news values in covering the issues. The main news values operating were a focus on the dangerous and controversial aspects, a preference for 'hard news' events, the relevance of an issue for readers and the activities of elite persons or nations in the issue.

This indicated event-orientation by the press, and a tendency to sensationalise environmental issues. Some over-simplification of the full ramifications of the issues, particularly the atmospheric issues, was found to be operating. The implications of these approaches for environmental reporting and the reader's perception of the environment were discussed. Logistical factors (intra- and extra-organisational constraints) were also found to play a part in coverage.

A wide range of factors were identified that operate, to a greater or lesser degree at different times, in press coverage of environmental issues. These were : the newspaper perception of

its role in society, editorial policy, resources of the newspaper, area of distribution, the 'hardness' of news, the complexity of the issue; the availability of accredited sources, the health of the national economy, international economic trends, the amount and type of other news, 'competitive bind', public awareness of environmental issues, and the role of an environmentally-committed individual in the newspaper organisation.

## ACKNOWLEDGEMENTS

There are a number of people whose help was invaluable in this study. My thanks go particularly to Mr David Wigston of the Department of Communication at Unisa, and Dr Guy Preston, who supervised the study, of the Department of Environmental and Geographical Science at the University of Cape Town. Between them they gave me new insights into the concept of interdisciplinary education.

Mr Wigston has my sincere gratitude for his outstanding helpfulness and thoughtful suggestions throughout the study. I am also grateful to him for reviewing the draft document. Dr Preston gave generously of his time, expertise and encouragement during the study.

Professor Gavin Stewart and Mr Charles Riddle of the Department of Journalism at Rhodes University provided welcome guidance in the early stages of the study. I am also grateful to Professor Richard Fuggle of the Department of Environmental and Geographical Science at the University of Cape Town for reviewing the draft document.

Those people who were interviewed for the study gave generously of their time and provided thoughtful insights. Without their co-operation, this study would have been severely hampered. I would also like to thank The Star for contributing toward the costs of the project.

Constant encouragement was provided by my family and friends. In particular, my mother, Sheila Shaw, has always been a source of seemingly limitless love and inspiration, while Franco Raghianti, Heather Glenn, Jill Blignaut and Alison Dehrmann shared the ups and downs with unflagging enthusiasm.

More than anyone, I thank the Father God for immeasurable guidance and support.

## PREFACE

- i. The page format of this study adheres to the policy of the Department of Environmental and Geographical Science of the University of Cape Town. This includes double-sided printing and 1.5 spacing between lines.
- ii. The abbreviation 'pers. comm.' has been used throughout (in brackets) to indicate a personal communication. This is also accepted by the Department. Other abbreviations have been avoided where possible.
- iii. Source notes are given in the text as follows : (Breed, 1956 : 469), indicating : (Breed, W. 'Analysing news: some questions for research', Journalism Quarterly, 1956, 33: 467-477). Full details are given in the bibliography.
- iv. Titles of individuals holding company positions (such as editor or sub-editor) are given in lower case in the text, but capitalised for clarity when they appear in parentheses, such as: (J. Clarke, Assistant Editor, The Star).

## CHAPTER 2

### THEORETICAL BACKGROUND

#### 2.1 INTRODUCTION

The following discussion describes the various theoretical bases for this study. These include :

- a brief review of general communication and mass communication models
- the 'agenda-setting' function of the press
- the related concept of 'gatekeeping'
- the concept of news value, with particular reference to the Galtung and Ruge model (1965)

#### 2.2 THE COMMUNICATION PROCESS

A brief review of communication models follows to provide a general theoretical background. As this study was undertaken under the auspices of Environmental Science, and not under those of Communication, this discussion is not extensive.

Some fundamental models of communication are those provided by Lasswell (1948), Shannon and Weaver (1949), Newcomb (1953), Gerbner (1956), Westley and MacLean (1957), Jakobson (1958), Maletzke (1963) and Van Schoor (1982). For the purposes of this discussion only two will be described in any detail, largely to indicate the elements present in most models, and some development over time.

Lasswell's early model (1948) consisted of 5 stages :

- |                     |                |
|---------------------|----------------|
| - Who               | (communicator) |
| - Says what         | (message)      |
| - In which channel  | (medium)       |
| - To whom           | (receiver)     |
| - With what effect? |                |

This is illustrated in Figure 1. Lasswell's model is linear, concerned with effect rather than meaning, that is, an observable and measurable change in the receiver caused by identifiable elements in the process. This means that changing an element would change the effect. Most mass communication research has implicitly followed this model (Fiske, 1982).

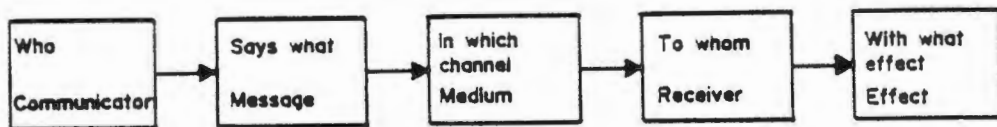


Figure 1: The Lasswell model of communication (after Lasswell, 1948)

Further developments in communication modelling considered aspects such as external noise sources, for example, static (Shannon and Weaver, 1949), the role of communication in maintaining equilibrium in society (Newcomb, 1953), and the editorial-communicating function - deciding what and how to communicate (Westley and MacLean, 1957). Jakobson's model (1958) is important in that it provided a bridge between the empirical (quantitative) and critical (qualitative) schools of message-analysis. The model comprises both a linear aspect (constitutive factors of communication) and hierarchical element (linguistic functions of each constitutive factor). Van Schoor's (1982) analytical communication model is unusual in that it has a philosophical basis: in his opinion communication - when seen from an existential, dialogic perspective - is simply the experience of reality (Fauconnier, 1985).

One of the more detailed models of the mass communication process is that of Maletzke (1963, in McQuail and Windahl, 1981). The Maletzke model shows mass communication as a socially and psychologically very complex process, where explanations of the mass communication process and effects are more likely to be of a multi-factor than of a single-factor type. Figure 2 illustrates that part of the model dealing with factors influencing communicator behaviour, since that is the area of focus in this study.

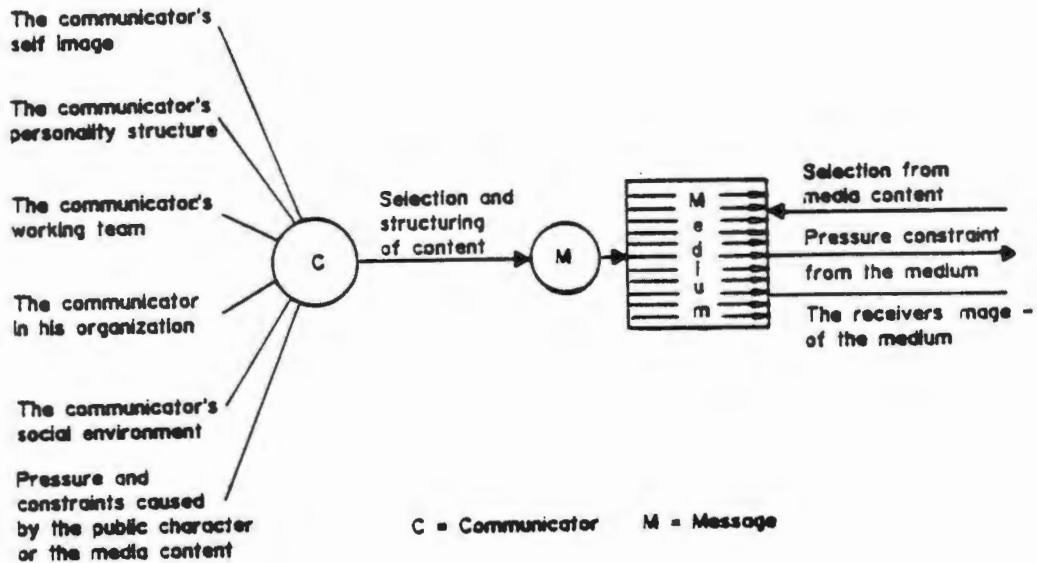


Figure 2: The Maletzke model of the mass communication process (after Maletzke, 1963)

The Maletzke model deals with both message-receiver and communicator-message interaction, but tends to de-emphasise the role of the recipient and the various factors that could influence his or her interpretation of the message. Since this aspect is not considered in this study, however, the model is considered appropriate.

### 2.3 DEVELOPMENTS IN MASS COMMUNICATION RESEARCH

Until the 1960's, the focus in mass communication research revolved around the idea that the media had powerful and immediate effects on their audiences, such as influencing political voting trends. This was supported by what was called the 'magic bullet' theory (Bittner, 1983). Large scale studies of the 1940's and 1950's (The People's Choice, 1940; Personal Influence, 1944-45; 1955) had failed to support this however, and research pointed towards a minimal effects interpretation (Lowery and De Fleur, 1988; 79, 165). The 'two-step flow' model in uses and gratifications studies supported the notion of the media as influentially ineffective (Bittner, 1983).

Gitlin (1978) disproved the 'two-step flow' theory from a qualitative, critical point of view. In searching for a new direction for research, scholars reviewed obvious facts about the media.

One obvious fact about the media in modern society is the constant flow of news. Another is that large numbers of people do read newspapers. The print mass media are thus a significant source of detailed information about issues and events in society. Another obvious fact is that the news industry seems more interested in some events than in others. The press is selective, as a result of its limited capacity for surveillance, factors imposed on 'gatekeepers' (editorial staff responsible for selecting news items for inclusion or exclusion from publication), and the financial limitations placed on media to survive as business enterprises (Lowery and De Fleur, 1988).

Early mass communications theorists had tried to understand the influence of the mass media (particularly with regard to political effects) as generated by the following sequence :

1. The media created an **awareness** of issues among its audiences.
2. It provided a body of **information** to members of that audience.
3. Information provided the basis for **attitude** formation or change by those who acquired it.
4. The attitudes shaped **behaviour**. (Lowery and De Fleur, 1988: 337)

In two reviews of environmental-communications research, Stamm (1972, 1973) concluded that environmental-information campaigns can increase public knowledge and awareness about the environment, but he found little support for the assumptions that increased knowledge changes attitudes or that attitudes predict behaviour.

One of the earliest developments in the search for a new direction came from a comment made by Bernard Cohen (1963: 13), when he said:

'The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about'.

Two American researchers, Donald Shaw and Maxwell McCombs, decided that the first two steps of the awareness-information-attitude-behaviour sequence were more useful for study (McCombs and Shaw, 1972). They felt that it was important to assess people's beliefs about the nature of reality, as represented in the media, that will guide the actions of those people. They believed that if the public consider a situation to be real, they will act as though it is real.

Shaw and McCombs thus placed their hypothesis, which they called **agenda-setting**, in a cognitive, rather than an affective framework (McCombs and Shaw, 1972, 1976).

## 2.4 THE AGENDA-SETTING HYPOTHESIS

Agenda-setting does not define the media as passive transmitters of information to a waiting public. The media are formulators of meaning in their own right, active agents that select, screen, interpret, emphasise and possibly distort the flow of information. Readers in turn attend selectively and develop among themselves various shared interpretations. The agenda-setting hypothesis thus sees a return to the concept of the media as powerful, but this time with *indirect* effects on its audience. The role of active interpretation by the audience is pivotal to this perspective.

The evidence collected thus far consists of data showing a correspondence between the order of importance given in the media to 'issues' and the order of significance attached to the same issues by the public (McQuail, 1983: 197).

Lowery and De Fleur (1988: 340) list six key factors that shape the media agenda:

1. Values and beliefs used by reporters as part of the surveillance process
2. The nature of the medium
3. Editors - their selection of stories that have to fit into the space at their disposal.
4. Conceptions of audience interest
5. Conceptions of profit-making
6. The social organisation of the news industry, for example the positioning of news organisations close to social institutions that regularly produce news, such as the police and law courts.

Agenda-setting is therefore considered to be one of the processes by which the media participate in the social construction of reality for the populations they serve. This provides the broad theoretical paradigm in which the agenda-setting function is located (Lowery and De Fleur, 1988).

The press is thus seen as having a causal role. But agenda-setting does not operate everywhere, on everyone, and always (McCombs, 1976). Rogers and Dearing (1988; 569) suggested three instances when an individual's agenda might not be influenced by that of the media. Firstly, if an individual prescribes low credibility to the particular medium that transmits the information; secondly, when there is conflicting evidence from personal experience or other communication channels about the salience of the issue (very likely in the case of environmental issues, many of which take place away from the individual's area of experience, or across time-scales not easily assimilated by individual perception, such as soil erosion); and thirdly, if the individual holds different news values from those reflected by the mass media.

Rogers and Dearing (1988 : 571) also suggest that:

'.it is inappropriate to expect a one-way causal relationship of the media agenda on the public agenda...both the media agenda and the public agenda are probably mutual causes of each other.'

Salwen (1986) set out to determine the amount of time required for the media to make an issue or set of issues salient among the mass media audience. He content analysed three Michigan newspapers for 33 weeks as to their coverage of seven environmental issues. The public agenda was measured by about 300 telephone interviews conducted in three waves. The week-by-week media agenda had its first effect on the public agenda after the accumulation of five to seven weeks of media coverage of an environmental issue; the peak relationship of the media agenda to the public agenda occurred after eight to ten weeks of media coverage, thereafter the correlations declined with the passage of time.

According to Salwen (1986, in Rogers and Dearing, 1988: 572-573):

'By simply keeping an issue 'alive' by reporting about it for some duration the media may transmit to the public more than just information, but also a subtle message concerning the legitimacy of such an issue'.

Salwen's (1986) study thus indicated that a media item spreads gradually among members of the public, creating awareness of that topic. Short-term coverage of environmental issues may therefore be unsuccessful in affecting the public agenda.

Sufficient evidence exists to support McComb and Shaw's (1972) agenda-setting paradigm, which constituted the central theoretical basis for this study. One other related aspect remains to be considered, the 'gatekeeping' process, which plays a primary role in news production, and hence in the articulation of the agenda-setting procedure.

## 2.5 THE GATEKEEPING CONCEPT

White (1950) first used the concept of the 'gatekeeper' to describe the activity of the editor who must choose a small number of items from the large supply of news agency telegrams which may provide the bulk of news in many newspapers (McQuail, 1983).

Shaw and McCombs (1976: 151) explain the process of gatekeeping as follows:

*'Each day editors and news editors - the gatekeepers in the news media systems - must decide which items to pass and which to reject. Furthermore, the items passed through the gate are not treated equally when presented to the audience. Some are used at length, others severely cut...Newspapers clearly state the value they place on the salience of an item through headline size and placement within the newspaper...'*

The gatekeeping or news selecting activity has been a focus of research interest, mainly because of its potential for revealing 'news values' as applied by the media (McQuail, 1983). The original issue was how far editors applied personal and arbitrary criteria, and this issue has been fairly conclusively settled by evidence of strong consistency in the general pattern of selection (Hirsch, 1977).

Bass (1969) notes the presence in the mass media of a sequential gatekeeping activity, from original idea or event through to publication, with filtering at several stages, as a function of news gathering, reporting and editing criteria. The probability is that much the same criteria are applied at each stage, in the process reinforcing any bias or tendency of content or form, and lessening the chances of variety and uniqueness.

Here bias may mean no more than an accentuation of content characteristics which (1) lend themselves to easy processing and (2) are believed to meet audience demand. However, the same characteristics are also likely to reinforce existing elements of the given media culture (Elliot, 1972, in McQuail, 1983).

The gatekeeping concept is criticised by McQuail (1983) as giving undue weight to the notion of news as a set of objective external views which come to the notice of the media by reliable processes, so that free choice can be made of them according to some objective criteria. He suggests that it is more likely that news is supplied by sources with or without social 'leverage', or even 'ordered' in advance, usually from 'accredited' sources.

Chibnall (1981: 76) refers to the gatekeeper concept as 'dangerously simplistic'. He feels that the model, in emphasising editorial gatekeeping, does not take into account the role of reporters in *creating* the news. As he says:

'The reporter does not go out gathering news, picking up stories as if they were fallen apples, he creates news stories by selecting fragments of information from the mass of raw data he receives and organising them in a conventional journalistic form ... in the process of news construction, the reporter will only rarely utilise his own direct perception of an event. More usually, his raw materials will be the selected and selective accounts of others - his sources...it is within this context of reporter/source interaction that the significant 'gatekeeping' takes place'.

Chibnall (1981) does not reject the notion of gatekeeping, however; rather, he presents a more complex model of gatekeeping, as a process operating throughout the line of communication.

While debate centres around the nature and extent of gatekeeping, it is accepted that it does take place. It is particularly salient in a discussion of 'news value'.

## 2.6 NEWS VALUE

A discussion of what is considered newsworthy in the eyes of the press requires some elaboration on the nature of news itself. Walter Lippmann (1922, in McQuail, 1983) focussed on the process of news gathering, which he saw as a search for the 'objective clear signal which signifies an event'. Hence, 'news is not the mirror of social conditions, but the report of an aspect that has obtruded itself'. Our attention is thus directed to what is noticeable (and worthy of notice) in a form

suitable for planned and routine inclusion as a news report. It is for this reason that newspapers survey such places as police stations, law courts, hospitals and legislatures, where events are likely to be first signalled (McQuail, 1983).

The definition by the media of what topics have news value are influenced by the two-way, mutually-dependent relationship between the public agenda and the media agenda in the agenda-setting process. As Rogers and Dearing (1988 : 571) say:

'Media gatekeepers have a general idea of the news interests of their audience, and this perceived priority of news interests is directly reflected in the news values with which media personnel decide the media agenda.'

Various researchers have made attempts to define the essential properties of news (Park, 1940; Breed, 1956). The most significant contribution was made by Galtung and Ruge (1965), who identified and interrelated the main factors influencing the selection of news, specifically foreign news. They identified three types of factors: organisational; genre-related; and socio-cultural.

The **organisational** factors are the most universal, and have some ideological consequences. They include media preference for :

- **frequency** : events which occur within a time-scale which fits the normal production schedule (24 hours for a daily newspaper, a few days for a weekly newspaper). Some events, however important, are too slow in developing to be really newsworthy for the mass media. This may be the case for some environmental events.
- **threshold/intensity** : large scale or major events, or where the normal level of significance suddenly increases so as to attract particular notice.
- **unambiguity** : the less the meaning of an event is in doubt, the more likely it is to be suitable for news treatment.
- **meaningfulness** : the closer the event is to the culture and interests of the intended audience, the more likely is selection.

**Genre-related** factors include:

- **consonance** : a preference for events which fit advance audience expectations (consonance with past news)

- **unexpectedness** : among events which are equally consonant in the above sense, the more unpredictable and unusual the actual event, the more likely it is to be selected.
- **continuity** : once an event has been defined as newsworthy, there will be some momentum to the continued noticing of the event or related happenings.
- **composition** : news events are selected according to their place in the balanced whole, and some events are consequently selected on grounds of contrast.

Galtung and Ruge (1965) distinguish **socio-cultural** values of the receiving society, or gatekeepers, that will influence choice, over and above the news factors described. While Galtung and Ruge derive these values from 'north European' culture, it is suggested that these could be applicable in other areas. They refer in particular to news values favouring events about:

- **elite nations**
- **elite people**
- **identifiable person(s)** : the event is seen as a consequence of their action(s)
- **negative happenings**

These factors are not independent of each other; there are inter-relations between them. Galtung and Ruge (1965:70) suggest that if all these factors are operating, three hypotheses would arise:

1. **Additivity hypothesis** : The more news factors are associated with a given event, the more likely it is to become news;
2. **Complementarity hypothesis** : if an event is low on one factor, it may compensate by being higher on some other factor;
3. **Exclusion hypothesis** : an event which is low on all factors will not become news.

The Galtung and Ruge (1965) model of selective gatekeeping has been very influential in studies of news content. However, Rosengren (1974) mentions three grounds of criticism. Firstly, the model depends too much on ideas about selective perception by individual gatekeepers. He recommends an alternative approach which takes more account of political and economic factors governing news reporting, an approach which may give rise to additional factors.

Secondly, Rosengren argues that the model is not open to falsification, since, taken together, the additivity and complementarity hypotheses can apply to all cases. Thirdly, a satisfactory test would require reference to 'extra-media' data -evidence of other (e.g. political/economic) variables and also independent sources of knowledge about the 'reality' of events which were or were not covered.

Bergsma (1978), in applying the model to the analysis of news on Dutch television, has cast some doubt upon the tenability of the complementarity hypothesis, but has shown the utility of the scheme in studying the operation of news values (McQuail and Windahl, 1981).

Notwithstanding the limitations to the Galtung and Ruge model, it remains the most cohesive framework to date for an assessment of news values, and is therefore justified in being used in this way in this project.

## CHAPTER 3

### THE NEWSPAPER INDUSTRY

#### 3.1 INTRODUCTION

The purpose of the background information in this chapter is to outline some of the constraints and norms that operate in the making of news. These factors are described and discussed in order to illustrate their potential for influencing the selection, structure and presentation of the news by newsmen. The information is intended to establish the basic assumptions that underpin this study: that all news is not treated equally by the newspapers; that intensive selection takes place constantly; and that various social and intra-organisational factors come to bear on newspaper personnel when making these choices.

The information in this chapter comprises a substantial portion of communication studies. The level of detail in this chapter is appropriate for an environmental report, rather than that required for a communication or journalism study.

This chapter provides a general discussion of the newspaper as a 'mirror' of reality, the problem of the definition of news, and a description of various facets of newspaper organisation and operation that have a bearing on the selection and production of news.

#### 3.2 THE NEWS AS REALITY

The typical conception of the newspaper's role in Western society is that the news media act as 'mirrors' of an objective reality which consists of events having a level of importance (Molotch & Lester, 1981). This concept has been challenged by a wide range of media researchers, for it depicts media organisations and personnel as impartial observers who are not subject to social influences or pressures, and the image of 'reality' presented in the news as almost identical to experienced reality.

In this regard, Cohen and Young (1981 : 21) have noted that numerous systematic comparisons between the assessment of reality by outside informed opinion and that

which occurs in the mass media indicate a lack of correspondence - that the news media 'consistently' get things wrong.

Sigal (1973 : 187) makes the point that news is not reality, but a sampling of reality, and for newspapers to establish standard operating procedures for this 'sampling' necessarily entails selection of information, using understood criteria.

### 3.3 THE PROBLEM OF THE DEFINITION OF NEWS

Information which is considered as news, as opposed to non-news, has proved difficult to define (Whitaker, 1981; Sigal, 1973). To define news operationally as 'whatever the news media publish' is to sidestep the issue of identifying criteria for the news. Whitaker (1981: 23) says that news, by its very nature, cannot be defined, as the circumstances governing its selection are never constant, and criteria change as the circumstances do.

Which issues or events become news depends largely on the choices that newsmen make. These choices occur within a wider framework of social and media ideology, articulated within the narrower confines of the newspaper organisation and operation, and tend to be consensual, rather than individual choices. To understand what news is, therefore, it is necessary to understand the workings of the newspaper industry. The bulk of this chapter is devoted to this discussion.

### 3.4 THE STRUCTURE AND OPERATION OF THE NEWSPAPER INDUSTRY

Newspapers, as transmitters of information to a large and diverse audience, usually require complex formal organisations for their operation. Capital resources are utilised, which require financial control; highly skilled personnel are deployed, who need to be managed; the acceptance and application of normative controls means that there must be a mechanism of accountability to external authority and the audience; internal allocations of authority are necessary, and a structure which ensures continuity and cooperation (McQuail, 1969). All of these requirements can only be met within a formal organisation.

### 3.4.1 Newspaper ownership

The post-World War II years have seen both a reduction of the number of newspaper titles as a result of competition from the broadcast media, and a related tendency towards concentration of ownership. This is true of the European, North American and South African press. Ninety-five percent of South African commercial print media is today owned by four companies, the Argus group, Times Media Limited, Perskorporasie Beperk (Perskor) and Nasionale Pers Beperk. Each of these companies is in turn owned by large corporations, with a number of shareholders. The Star belongs to Argus Holding Limited, the major shareholder of which is the Anglo American Corporation. The Citizen is part of Perskorgroep Beperk, the controlling shareholder of which is Dagbreek Trust (Who owns Whom, 1989).

There are three reasons for this growing monopolisation, based on the economic constraints under which newspapers operate. Firstly, the 'economy of scale' principle operates, which dictates that the larger the newspaper is, the cheaper the product. Maintenance of a low cover price is important to remain competitive with the electronic media.

Secondly, newspaper sales are not the main source of revenue for the newspaper organisation. Advertising provides most of the profit, and advertising is attracted in two ways : firstly, by developing as large a newspaper circulation as possible, and hence the largest target audience for advertisers; secondly, by acquiring the kind of readers most attractive to advertisers, which depends upon the markets being addressed and the disposable income of readers. Newspapers want to sell as many copies as possible, but they must also sell them to the right people (Whitaker, 1981). Larger newspapers with greater resources are better able to do this. The dependence on advertising has a distinct impact on available space and the categorial structure of the newspaper.

The third reason for the growth in monopolisation stems from fluctuations in the national economy. Newspapers have very low profit margins and are thus very vulnerable to slumps in the national economy. The commercial organisations that own the newspapers have business interests across a broad economic spectrum and can cushion negative economic effects on the newspapers.

The implications of this monopolisation for the diversity of newspapers and newspaper content are not clear, but the potential for direct or indirect influence exists, for implicit in ownership of a newspaper is the power to decide what information it delivers to the public. No significant evidence has yet been produced, however, that any corporation owning newspapers has coordinated its editorial efforts to manipulate news coverage (Ault, 1986 : 171). Profit appears to be the primary motivation for ownership.

### 3.4.2 The newspaper as an economic organisation

Economic organisation dictates the necessity for choice in newsmaking by imposing constraints, principally on available money, space, staff and time (Sigal, 1973). Newspaper reliance on advertising in turn depends on the vagaries of the wider economy, since a healthy national economy means that profitable companies have a larger advertising budget. The more advertising a newspaper carries, the larger the newspaper in terms of number of pages and therefore the more space for news coverage and the wider the spectrum of news covered. This is particularly significant for environmental coverage, which in South Africa is much lower on the newspaper agenda than socio-economic and political issues (J. Clarke, Assistant Editor, The Star, pers. comm.).

The less space that is available, the more likely that the space will be utilised for topics at the top of the news agenda. More space also allows for more in-depth treatment of news material.

The greater the resources of the newspaper, the more news staff can be employed. This has implications for the variety of news that can be covered directly by journalists. The more journalists on the staff, the more specialisation is possible, in terms of assigning reporters to specific 'beats', such as court or political reporting, or environmental coverage. These reporters can only be freed to concentrate on specific beats if there are sufficient general reporters to cover *ad hoc*, or spontaneous, news (Sigal, 1973). Greater resources also enable newspapers to maintain news bureaus in other cities or countries. Newspapers seldom have enough reporters to go round, however, and decisions regarding staff location therefore become crucial (H. Tyson, ex-Editor in-Chief, The Star, pers. comm.).

A shortage of reporters has implications for their choice of source material. In order to cover as much news as possible in the short time between each deadline, readily available sources of news are favoured. Most newspapers deploy their reporters in key 'beats', relying on news agencies to supplement news (Sigal, 1973). Aside from agency news, press releases and press conferences provide a major source of available news, which is cheap, easy and timeous. As a result, a great deal of news consists of transcribed material. This material has obviously also undergone selectivity and structuring to favour the perspective of the issuing party.

Newspapers, as profit-oriented organisations, experience severe constraints in terms of gathering and producing news, and this inevitably influences the amount and range of news. To view these constraints in isolation, however, ignores the human element within newspapers and is insufficient to account for news content, which ultimately results from the interaction of inter- and extra-organisational constraints, as well as the subjective influences of individuals.

### **3.4.3 Newspaper hierarchical structure**

Most newspapers have a fairly rigid hierarchical structure. News management in larger newspapers is generally distinct from the daily management of organisational and economic aspects, such as advertising, marketing, and finance control. The editor-in-chief, or managing editor, is ultimately responsible for the entire newspaper but in larger newspapers tends to concentrate on news management. A series of other editors, such as the chief sub-editor, news editors, and sub-editors, the 'gatekeepers' of the organisation, all control the selection and structure of news.

Journalists begin as general reporters, covering stories assigned to them by the news editor. As they gain experience, and if they display an interest and talent for a specific area of coverage, they may be assigned to cover those areas full-time, and become specialist reporters. Senior reporters acquire their status through longevity, efficiency and after proving their capability on different 'beats'. Those that have acquired specialist knowledge over a long time are allowed to write feature stories, which require greater skill and a broader understanding of issues and trends than straight news coverage. Senior journalists are usually selected for editorial positions.

For journalists to move up in the hierarchy, it is essential for their stories to be published. The pressure for publication means that journalists soon adopt similar

criteria for selection and coverage to those used by editors (Sigal, 1973). This may serve as a deterrent for journalists interested in environmental issues, but whose interest is not shared by their editors.

#### 3.4.4 News agencies

News agencies are a powerful source and conduit of news for the mass media. The South African Press Association (Sapa) supplies local and international news to all newspapers, broadcast and print media, as well as to government and commercial organisations and private subscribers. The agency employs 40 journalists nationwide, has a central office in Johannesburg and bureaus in six different cities in South Africa and one in London (E. Linington, Editor, Sapa, pers. comm.).

News agencies play a pivotal role in news transmission. Not only are they able to supply newspapers with cheap, up-to-the-minute news around the clock, they also represent a multi-tiered 'gatekeeper' in the news organisation. While news that Sapa's journalists have covered first hand undergoes the same selection process within Sapa that news in newspapers does, news that is received from overseas has in turn already undergone a selection process in the countries of origin.

Not all of these international reports are automatically re-transmitted. The editor of Sapa, Mr Linington, remarked that some reports are screened out '..because some of it is obviously not of interest to this country. Sometimes there's not enough space in the newspapers to accommodate secondary news' (E. Linington, pers. comm.). This may include stories about the local natural environment of other countries. Sapa thus makes clear choices regarding the news that newspapers are likely to carry.

#### 3.4.5 How news is processed

News that is received from Sapa is checked by 'copy tasters', who decide which articles to submit for publication, and which to reject. These, along with reports from journalists and press releases, are submitted to the news editor, who in turn selects which articles to use. News editors assign stories to the general reporters and sometimes to the specialist reporters, on the basis of the news diary.

The news diary is a list of current issues and forthcoming events, as well as stories that have been phoned in by members of the public or specialist organisations. According to Mr J. Clarke, environmental reporter and assistant editor for The Star, environmental stories in the past were passed directly to him to pursue, without featuring on the news diary. However, in the past year (1989), such stories have become a regular item on the news diary, which he interpreted as an indication that the environment is higher on The Star's agenda now, than before (J. Clarke, pers. comm.).

News editors also determine the news 'angle' for the stories, the aspect(s) of the stories that should be emphasised, and check that all relevant viewpoints are presented. Stories may be returned for rewriting by the reporter to satisfy these criteria.

Once the news editor has approved completed stories, they are submitted to the chief sub-editor, who decides on the position and size of the articles. Articles concerning issues that require editorial approval, for example those that are potentially defamatory, will be sent to senior editors. From the chief sub-editor or editor they go to the sub-editors, who check the reports on the basis of accuracy, spelling and other structural elements, and the articles are then passed on for production.

This is a typical processing scenario. Newspapers differ in the amount of editorial staff they carry, and in smaller newspapers with less resources staff may fulfil more than one of these functions.

### 3.5 THE NEWSPAPER AS A BUREAUCRATIC ORGANISATION

Rock (1981 : 64) sees newspaper offices as bureaucracies :

<sup>a</sup>The business of any bureaucracy is the routine production of sequences of activity that are anticipated and guided by formal rules. Those rules can never be exhaustive. They explicitly and implicitly define the limits of variation in the material that can be processed by the bureaucracy. When an organisation does not exercise total control over that material, there is always the possibility that it will fall outside the defined limits of variation...an organisation can respond by attempting to force the obdurate materials into a workable form; it may modify some of its practices; it may destroy the materials; or it may simply refuse to handle them<sup>a</sup>.

Sigal (1973), Cohen and Young (1981) and Whitaker (1981) have all referred to the bureaucratic nature of newspaper organisations, and the implications this has for news. This organisational structure provides a system of rules for both gathering and transcribing information, and emphasises one of the most important aspects of newsmaking, that it is routine behaviour. These routines are established within the economic constraints and editorial policies of the organisation (Sigal, 1973). Tuchman (1978) notes this central contradiction in the manufacture of news, namely that news work involves the 'routinisation of the unexpected'. Like any bureaucracy, the news media must routinely process information. They must be capable of planning ahead so as not to be at the mercy of unexpected events.

Three aspects of this newspaper routine place significant constraints upon journalists in their daily newsgathering, and have a direct influence on the content of the newspaper : time, space and the editor-journalist relationship.

### 3.5.1 Constraints of time

Time is an economic constraint on newsmaking. If newsgathering, processing and production are not completed according to rigid deadlines, then distribution, and eventually circulation, may suffer. For reporters, deadlines impose an arbitrary cut-off to newsgathering, constraining them to write with the information they have in hand (Sigal, 1973 : 102). One of the most significant consequences of this is what Whitaker (1981 : 47) calls 'the news media's obsession with events'. Newspapers must demonstrate that something significant has happened between editions, and happenings that do not fit the timetable for newspaper production are likely to pass unrecognised as events (Whitaker, 1981 : 47).

The constant shortage of time means that there is less time to develop topics for features or map out strategies for future coverage, both of which are necessary for in-depth reportage and assessment of social trends. This kind of detailed coverage is usually undertaken by news magazines such as Time and Newsweek.

Environmental 'events' which occur over a much slower period and across many different spheres of activity are thus, from the point of view of the time available to the general reporter, difficult to cover. Natural disasters, however, occur in a relatively short time span and are thus highlighted. This could potentially create

an image of the environment as an area of human life that is unimportant until it directly threatens people or their interests.

### 3.5.2 Constraints of space

Space is a daily constraint for both journalists, who are eager for their reports to be published, and for editors, who constantly juggle the need to carry enough advertising to cover costs with a desire to increase editorial share of the newshole (that part of the newspaper dedicated to news). This impacts not only the number and size of stories that are published, but also the type of stories. Each story has to compete with other stories for space (Whitaker, 1981). Categories of news that are higher on the press agenda, such as politics and crime, compete more easily than items lower on the agenda, such as environmental material. This again relates back to economic trends, and suggests that when the national economy is healthy, and newspapers carry more advertising and thus more space, environmental issues are more likely to be covered, and in more depth.

The constraints on space are felt most keenly on page one, since most reporters believe that few readers have the time to read stories on the inside pages (Sigal, 1973). Competition for the best story position often takes the form of bargaining between editors and journalists, and is therefore affected by the dynamics of the editor-journalist relationship.

### 3.5.3 The editor-journalist relationship

Editors and journalists, by virtue of their different positions and functions in the organisation, often have different perspectives on news. Hood (1972 :418) defines good and effective editors as those who are, by their social and political outlook, in tune with the organisation, so that their judgements coincide with the collective judgements of the upper management, or who are able to persuade that management that any changes they wish to make are a logical extension of accepted positions. They are deeply embedded in the routines of news processing, and tend to support revenue goals.

The nature of journalistic work, however, is in many respects non-routine, particularly in the news search process. Journalists are more strongly orientated towards maintaining positive relationships with their news sources, and tend to

support non-revenue goals (Tunstall, 1972). These differing journalistic and editorial perspectives sometimes conflict, resulting in frequent bargaining and disputes over inclusion and positioning of stories.

The bargaining process that arises through what one Star reporter called 'the love-hate relationship' between journalists and editors (P. Fray, pers. comm.), particularly news editors, has a distinct bearing on the selection and presentation of the news.

### 3.6 THE ROLE OF THE GATEKEEPER

A news report is the result of a number of choices by 'gatekeepers', who accept or reject material according to criteria determined by a number of factors, including their class background, upbringing and education, and attitudes towards the political and social structure of the country. More specifically their judgements are determined by what they believe to be possible, tolerated and approved by the organisations for which the gatekeepers work (Hood, 1972). In this way news stories are coded, 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, 1981).

The reliance by gatekeepers on organisational dictates, therefore, means that if senior newspaper personnel consider publication of environmental issues to be important, environmental reports are more likely to be approved for publication by gatekeepers lower down in the hierarchy.

### 3.7 THE SELECTION PROCESS

The role of gatekeeper is not restricted to editorial staff within the organisation. Journalists covering the event also play an active gatekeeping role. As members of social groups, their specific life situations exert a strong influence on their view of the world (Sigal, 1973). In dealing with a number of sources, often with conflicting accounts of what happened or what was said, they have to shape the material into a cohesive, fairly predetermined structure, with a news angle that will create or enhance the newsworthiness of the item and which will pass editorial scrutiny.

Sources also provide information in terms of the way they have understood it, in the case of witnesses, or in terms of the way they wish it to be understood, in the case

of press releases, press conferences or official sources. They bring to the interpretation their own frameworks of meaning and their own interests to protect. The process of selection thus operates through the entire chain of communication.

### 3.8 CONSENSUS

For the news machine to work, choices made by journalists on the beat must conform generally to the kinds of choices that will be made by editors. In particular, a continual exchange of information and interpretation in the workplace means that reporters and editors forge a consensus about what is news, which over time subtly alters assessments of news sources and reshapes perceptions of events (Sigal, 1973). This group judgement, or consensus, imparts a measure of certainty to the uncertainty surrounding what should be considered news.

#### 3.8.1 Consensus formation

Consensus formation among journalists does not take place in a vacuum, but within a context of shared values and organisational structures. These values - the criteria by which news is selected - take the form of unwritten rules. Journalists talk about having 'an eye for news', or 'the news instinct' (Nordenstreng, 1972). This 'instinct' is something that the new recruit learns empirically by seeing what is permitted to be published and what is not.

More indirectly, the development of these values emerges by the reporter absorbing the traditional wisdom of the organisation, which he learns from the conversation, anecdotes, comments and reactions of his fellow workers. Telephone calls and letters from the public and criticism from influential and prestigious individuals also contribute towards the internalisation process (Hood, 1972; Nordenstreng, 1972).

Journalists rarely cover events in isolation. They usually find themselves in the company of reporters from rival newspapers, and discussion and interchange with these entrenches this consensus (Tunstall, 1972). This is important from the viewpoint of self-protection. As Whitaker (1981: 55) says, if all the newspapers say the same thing no-one will believe they all got it wrong.

This does not mean, however, that newsmen consciously and single-handedly shape the news for a passive audience. Writing a story that will be of interest to readers

relies on those readers sharing the values of newspapers. If this is not so, 'interesting' stories may simply appear to readers to be ludicrous or biased (Whitaker, 1981). As Wirth (1948, in McQuail, 1969 : 11) said :

'It is the consensual basis that already exists in society which lends to mass communication its effectiveness.'

One reason for increased press coverage of environmental material in the past three years was the recognition of growing awareness and interest by the public, both overseas and in South Africa, in environmental issues (H. Tyson, ex-Editor-in-Chief, The Star, pers. comm.; P. de Villiers, News Editor, The Citizen, pers. comm.; E. Linington, Editor, Sapa, pers. comm.).

Consensual news values go beyond the personal predilections of the journalists and constitute what Sigal (1973 :3) calls a journalistic creed, or ideology. Most significant among the tenets of the creed is a set of conventions for choosing which information to include in the news and which to ignore.

### 3.9 JOURNALISTIC CONVENTIONS

The use of established conventions allows newsmen to reduce uncertainty about news. Like the routines of newsgathering, they reduce the scope of newsmen's uncertainty by providing a set of standards for selecting news and a catalyst for crystallising consensus (Sigal, 1973). Some of the main conventions operating are the concepts of objectivity, impartiality and bias, reliance on authoritative sources, the use of the 'news peg' (a discrete event upon which to base a more wide-ranging report), and the logical structure of news reports.

#### 3.9.1 Objectivity, impartiality and bias

The conventions of objectivity lay out procedures to follow in composing news stories. One such convention is that of straight news, or 'hard' news, which is usually event-based and where information is given with a minimum of explicit interpretation. Any interpretive material that appears must be attributed to a news source. Objectivity arises from the reporting of facts or incidents that can be verified, but as Whitaker (1981 : 19) observes :

'Facts are nothing more than observations that are - in the general opinion - accepted. So the problem for objective journalists is to determine which 'facts' are acceptable as facts and which are not. Those which are not must either be rejected as 'opinion' or supported by evidence (i.e. more acceptable 'facts')'.

This emphasis on facts lends a greater credibility to hard news reporting than to its corollary, 'soft' news, which is based on the reporter's subjective interpretation of the meaning of events. Indeed, the division of news into 'hard' and 'soft' categories serves to validate the authenticity of hard news, making it appear more immediate and more significant than soft news.

This distinction is important because the majority of newsmen in South Africa tend to categorise environmental issues as soft news, unless the news concerns a natural disaster (J. Clarke, Assistant Editor, The Star, pers. comm.).

Satisfying the 'who, what, where, when and how' hard news formula, and the accurate recording of source statements, provides reporters with a sense of security and imbues the report with an appearance of thoroughness. Newsmen need protection from audience criticism, and the techniques of objective reporting may provide that protection (Sigal, 1973).

The doctrine of impartiality (lack of bias) demands that newsmen display no preference for the viewpoint(s) of one party over that of another, a concept also contained in the principle of 'balance'. However, Goodwin (1988 :19) makes the point that media reports can construct a partial representation of events without telling 'lies', simply by selection and omission. As he says (his emphasis):

'The doctrine of impartiality merely requires that the media select fairly from the available interpretations....thus, it is quite possible to write an entirely partial or 'biased' account of these events and still honestly state 'we just report the facts' (Goodwin, 1988 : 19).

Hood (1972 :417) notes that the assertion that news reports are objective and neutral is fundamental to the concept of impartiality, but that factual accuracy is not in itself proof of objectivity or neutrality. He sees the gatekeeping process as fraught with opportunities for what Hall (1981 :149) calls 'unwitting bias'. This he defines as bias that arises through institutional slanting, not through any devious inclination of gatekeepers but through the 'steady and unexamined play of attitudes which, via

the mediating structure of professionally defined news values, inclines all the media to the *status quo*' (Hall, 1981 :149).

### 3.9.2 Use of accredited sources

Since reporters rarely witness occurrences in person, they are forced to rely on second-hand information. For the reporter, therefore, news is often not what has happened but what someone says has happened, thus making the choice of sources crucial (Sigal, 1973).

The need to fill a set amount of space with factually accurate information within a short time frame results in two main practices. These are the reliance upon specialised news agencies and the tendency for the media to strike up symbiotic relationships with sources that regularly provide material that newspapers consider newsworthy.

Walter Lippmann (1922, in McQuail, 1983) first noticed the routine of news gathering, which is the practice of regularly looking for news at places where newsworthy events are likely to happen, such as courts, parliaments, airports and hospitals. News reporters also depend on sources likely to have both inside information and an interest in its publication, such as politicians, police, and office-holders. Such sources are considered to be 'accredited', largely by virtue of journalistic perception of their influence on events (McQuail, 1983).

These sources also have established channels of information to the press, and regularly supply them with press releases and reports, and hold press conferences. This simplifies the reporter's job by providing him with newsworthy material at a predictable time and place, and in a form that facilitates transcription (Sigal, 1973). More importantly, it supplies reporters from different newspapers with the same information, thereby making use of and contributing to the prevailing consensus on news.

The availability of such highly organised news sources means that ordinary, unorganised people are less popular sources. This is because ordinary people are difficult, expensive and inefficient sources (Whitaker, 1981). While regular sources know what information the press are likely to want and organise their facts beforehand, casual callers may fail to 'sell' a story by not presenting their

information in a form readily understood or appreciated by the journalist. Sensing that the reporter is confused or bored, the caller may then try to convince him by exaggerating the facts, which makes the reporter sceptical (Whitaker, 1981).

Reporters are, of course, able to see if the story has potential news value, provided it meets their general criteria for newsworthiness. Even if this is so, however, pursuing the story may well take significant time and effort.

There is also the feeling that ordinary people are unreliable sources, not because they are assumed to deliberately falsify information, but because if what they say is contradicted by more powerful voices there is nothing to fall back on (Whitaker, 1981).

In the case of environmental issues, government officials and scientists in universities and research organisations (many of which are located in government) are considered accredited sources. Despite their credibility however, scientists are not always easily accessible. Many feel that the press, in presenting scientific opinion as briefly as possible (because of the constraints on space), are likely to distort the information (J. Clarke, Assistant Editor, The Star, pers. comm.; P. Fray, general reporter, The Star, pers. comm.), and are therefore reluctant to speak to them.

Others are not permitted to speak directly to the press without due authorisation from superiors, particularly in large bureaucratic organisations. In obtaining this authorisation, or waiting for the scientist to obtain it, journalists spend a great deal of time and effort going through different channels or simply waiting for the permission to be granted (M. McGhee, general reporter, The Citizen, pers. comm.). This is frequently time that they cannot afford if they are to meet their next deadline. In addition, the highly differentiated nature of scientific disciplines may give rise to conflicting opinions, and in attempting to find a consensus opinion even more time is consumed.

This is one reason why environmental issues tend to be covered more in the form of feature stories, which have much less rigid deadlines, than hard news stories. Environmental interest groups are much more accessible, and do get used, particularly those that have been in existence for some time, such as the Wildlife Society of Southern Africa (founded in 1902) or the Endangered Wildlife Trust

(founded in 1973). These are both, however, conservation-orientated organisations.

The relatively recent increase in environmental awareness in South Africa has given rise to interest groups with a broader environmental focus, such as Earthlife Africa, but these are still relatively new, and their credibility as sources may take time to become established.

### 3.9.3 News pegs

Covering events is the easiest way for reporters to conform to the restraints of time, because they have a distinct beginning and end. Analyses of long-term trends and in-depth interpretation however, are not always linked to a particular instant in time.

The convention of using news pegs helps to resolve this. News becomes 'pegged' if newsmen can relate it to a discrete event, one that is both determinate in time and recent (Sigal, 1973). The peg justifies the inclusion of the story in a particular issue of the newspaper, and where they do not occur naturally, may have to be created (Whitaker, 1981; J. Clarke, Assistant Editor, The Star, pers. comm.). News pegs also provide the reporter with familiar criteria for selecting the information that makes the news.

An example of 'pegging' a story was provided by Mr Clarke, environmental journalist and assistant editor of The Star. He said that if, for example, there was a report stating that the previous month had been the hottest on record, this could be used to speculate in an article whether this was a symptom of the 'greenhouse' effect (global warming). The temperature statistic would thus be used to 'peg' an article on a wider issue.

The news peg convention tends to give news an episodic character: issues surface suddenly and disappear just as quickly, only to resurface again when a new event takes place (Sigal, 1973). This has implications for environmental coverage. Rather than portraying environmental issues in a holistic manner (operating in and affecting almost every area of human life), the environment is represented as affecting limited and disparate categories of our existence, those areas where events occur to identify issues.

### 3.9.4 News report structure

The information in news stories is traditionally arranged in an 'inverted pyramid' style, with the most newsworthy elements first, followed by details in descending order of significance. This convention makes it easier to cut stories if extra space is needed, by simply removing paragraphs from the end.

Another convention, that of the lead paragraph, provides the gist of the article for the busy reader who doesn't have time to read the whole article. Headlines abbreviate the story even more.

The shortage of news space and the conventions for arranging information within it force newsmen to simplify complexity. The shorter the article, and the shorter the lead paragraph, the greater the need for simplification (Sigal, 1973). The tendency towards simplification is not only a function of report structure, however. The routinised nature of newsgathering is organised so as to focus upon surface manifestations, not the social forces at play beneath them (Sigal, 1973).

Norman Isaacs has accused the press of being 'habit-prone in coverage patterns (and) obtuse about complex issues' (Isaacs, 1986 : 156). Material that is far-ranging and complex, therefore, such as environmental material, is often over-simplified or else omitted.

### 3.10 NEWS CRITERIA AND NEWS VALUES

Whitaker (1981 : 43) equates basic news criteria with the functions of the newspaper, which he defines as the pursuit of profit and the exercise of power. Tunstall (1972) expressed the same concepts in terms of the revenue and non-revenue goals of the organisation, non-revenue goals being the gaining of political influence, furthering of cultural or educational objectives, or merely increasing general prestige. News is thus a product, and to meet organisational goals rests on inferred knowledge about the audience, inferred assumptions about society, and a professional code or ideology (Hall, 1981).

Cohen and Young (1981 : 17) suggest that the criterion for selecting news is public interest, both what interests the public and what is in the public's interest. This

aspect tends to operate far more consciously than economic imperatives (H. Tyson, ex-Editor in-Chief, The Star, pers. comm.).

The news criteria therefore provide the broad framework for the approach to what is news. With these overreaching goals in mind, however, what has come to be newsworthy is information that adheres to what Hall (1981 : 149) calls: 'a set of institutional definitions and meanings, ... commonly referred to as news values'. News values not only determine what will be selected but what aspects of the story will be included, emphasised or excluded.

Galtung and Ruge (1965) established the most comprehensive list of news values to date. These are detailed in section 2.5. One important aspect of Galtung and Ruge's list is the suggestion that bureaucratic and cultural exigencies mediate between events and the news (Cohen and Young, 1981).

Other researchers have tended on the whole to agree with this (Wilkins, 1964; Rock, 1981; Roshier, 1981). Murdock (1981 :207) notes the event-orientation of daily newspapers : information which can be gathered, processed and dramatized within a 24-hour cycle stands a better chance of being incorporated than news which is gradual and undramatic (Galtung and Ruge's 'frequency' news value).

This relates closely to a tendency, specific to the Western press, to personalise the news, where events are seen to occur because of the intervention of important figures, while wider social determinants are ignored. Neither of these characteristics of newspaper organisation and approach are conducive to sustained or in-depth coverage of environmental news.

Hartmann and Husband (1972 :444-445) distinguish two other characteristics of news. They note that material that can be couched in terms of conflict or threat makes better news than that which cannot (Galtung and Ruge's 'negative happening' value), which has distinct implications for the portrayal of environmental issues.

Reporting environmental issues primarily from the danger angle may suggest to readers that the environment is unimportant until it poses a threat to human existence or interests. It may also suggest that that specific danger is the only one. Thus, while a one-off, high magnitude spill of dangerous chemicals into a river may

receive coverage, once the chemicals have been diluted the danger may be seen to be past. The long-term pollution of the same river by, for example, run off of agricultural fertilisers, may be ignored. Higher order impacts may also be disregarded.

Hartmann and Husband (1972) also note that events that can be interpreted within a familiar framework will tend to be more newsworthy. What is important is their suggestion that new events may be interpreted in terms of existing images even if the existing image is not in fact the most appropriate. Growing public interest in environmental issues may be encouraging newspapers to cover those issues more now than in the past, but journalists may not have the conceptual images to frame a holistic perspective on environment, and may fall back on more established conservation and animal-orientated issues.

### 3.11 DIFFICULTIES INHERENT IN ENVIRONMENTAL REPORTING

Tichenor (1979 : Title) called environmental reporting the 'journalism of uncertainty'. Some of the points he made about the difficulties of reporting on environmental issues are summarised by Friedman (1983 : 24-28):

- environmental information is often uncertain; experts frequently disagree. Beyond that, uncertainty is part of the scientific process - the nature of scientific evidence and knowledge is tentative and uncertain;
- there is uncertainty on how to report about environmental issues. The standard journalism format for writing news articles, which emphasises 'who, what, when, where and why' is not always appropriate for environmental reporting; other methods, particularly interpretive reporting techniques, are often needed;
- environmental issues are multi-faceted, involving not just technical information but also financial, political and social considerations. To investigate all of these aspects takes time - which reporters frequently do not have;
- much of the technical information about environmental issues is difficult to understand, and for the reporter, particularly those with no scientific training, difficult to interpret in terms of knowing what is important and what not;

- general reporters are often assigned to cover environmental stories, and they often do not know where to go to seek objective expert opinion; also, because these reporters have to cover many topics in addition to environmental issues, they don't have much time to build up sources to help them interpret technical information;
- many editors see a need to make environmental issues more 'newsworthy' by highlighting conflicts and writing headlines that either scare readers or claim too much for the research involved. Reporters who wish to get their stories printed may slant their reports to comply with their editors' predilections.

### 3.12 SUMMARY

News is thus a manufactured product influenced by a wide range of factors stemming from the organisational dictates of bureaucratic newspaper organisations, the mechanics of news gathering, source-dependent relationships between the newspapers and other social institutions, and established ideas on what constitutes news (which in turn is moderated according to organisational and newsgathering constraints).

The following chapters describe the method and results of an analysis of three environmental issues that have received good coverage in The Star and The Citizen newspapers, to assess the operation of news values, editorial bias, and intra- and extra-organisational factors during coverage.

## CHAPTER 4

### METHOD

#### 4.1 INTRODUCTION

A general assessment of a five-year pattern of environmental coverage was undertaken on a purely quantitative basis, noting which environmental events or issues received the most coverage during that period. This procedure formed part of the sampling process, for from it arose the choice of individual environmental issues for analysis. These were: atmospheric ozone depletion, global warming and the Sappi paper mill effluent spill into the Ngodwana River in the Eastern Transvaal (1989). All available articles relating to these issues in both newspapers were then collected, and a quantitative content analysis undertaken to assess and compare news values. A qualitative content analysis was also conducted on one of the issues, the Sappi paper mill effluent spill, to assess the existence and extent of editorial biases.

As a supplementary measure, key individuals in the newspapers studied were interviewed, as well as two people mentioned in the coverage of the Sappi paper mill effluent spill. These interviews were conducted using an unstructured approach, the intention being to see how closely their professed attitudes and opinions correlated with the content analysis results. The interviews also provided important information regarding motivating circumstances and policies within the newspaper organisations.

#### 4.2 THEORETICAL BASIS FOR THE METHOD

##### 4.2.1 Message-centred theory

This study focused largely on analysis of the message in the 'communicator-message-receiver' triptych of communication theory (Van Schoor, 1982), so as to provide clues about the communicator, from which inferences could be drawn. Advantages of message analysis are that text is the most concrete, least obscure and most open-to-study element in the mass communication process. It is fixed, made public and produced systematically according to the rules of its own code or

language, and by analysis of it, it is possible to derive inferences about its originating culture, meaning and purpose (McQuail, 1983).

The origins of text analysis include structural linguistics and semiology (the general science of signs), but its current developments owe much to the work of Barthes (1972) and Eco (1977), which is qualitative and critical in nature. The underlying theory holds that since the rules of a language are determined and limited by the inner structure of the originating culture, any text gives a 'preferred reading'. Thus we can understand its meaning if we know the rules and are sufficiently familiar with the culture.

McQuail (1983) mentions some key characteristics of this brand of theory. Firstly, the 'meaning' which can be read by careful study of the texts is not necessarily that intended by the originator or that derived by the reader. Rather, it is assumed to be a given, objective meaning derived from the logic of the symbol system in which it is encoded. Secondly, the approach does not deal primarily with the overt, surface or literal meaning of a text, but with the latent, connotative meaning, which may or may not have been intended. Thirdly, the approach is applicable to the analysis of visual, auditory (musical) or verbal material and not limited to the analysis of written language.

#### **4.2.2 The use of content analysis**

The study of content to derive evidence about its producers has a dual role - either giving rise to hypotheses about how a given pattern of content has come into being or validating an analysis of media institution and organisation. In some cases, content analysis may reveal much about the values, assumptions and social milieux of the makers (Gans, 1980). Content analysis can also shed more light on organisational processes of 'gatekeeping' or shaping for certain target audiences, by highlighting patterns of exclusion or inclusion and relating them to the contexts within which those patterns occur.

Content analysis as a method has two streams, traditional content analysis, which derives inferences from frequency-analysis (quantitative), and structural or semiological analysis, which makes inferences from a qualitative analysis of text. The approaches may be used separately or to complement each other, and have two distinct methodologies.

### 4.2.3 Traditional content analysis

The word 'traditional' is used because this is the earliest and most central form of content analysis. Its use goes back to 1937 (Kingsbury and Hart, 1937). The most frequently quoted definition is that provided by Berelson (1952: 18):

*'Content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication'.*

The basic approach for applying the technique is to:

- choose a universe or sample of content;
- establish a category frame of external referents relevant to the purpose of the inquiry;
- choose a 'unit of analysis' from the content (such as word, sentence, or item);
- match content to category frame by counting the frequency of the references to items in the category frame, per chosen unit of content;
- express the result as an overall distribution of the total universe or sample in terms of the frequency of occurrence of the sought-for referents (McQuail, 1983).

The procedure is based on two main assumptions: that the link between the external object of reference and the reference to it in the text will be reasonably clear and unambiguous, and that frequency of occurrence of chosen referents will validly express the predominant 'meaning' of the text in an objective way.

One of the main drawbacks of a frequency-based content analysis is that frequency of occurrence is not the only guide to salience or to meaning and much may depend on aspects of context of a reference, or on internal relationships between references in texts which are lost in the process of abstraction (McQuail, 1983). This is especially true when the object of the analysis is to establish forms of bias on the part of the communicator. It was partly to address this problem that a shift away from the strictly quantitative to a more qualitative content analysis came about.

#### 4.2.4 Structuralist/semiological content analysis

Structuralism is a development of the linguistics of De Saussure (1915, in McQuail, 1983), and combines some principles from structural anthropology with linguistics. Structuralism differs from linguistics in two ways: it is concerned not only with conventional verbal languages but also with any sign-system which has language-like properties, and it directs its attention less to the sign-system itself than to chosen texts and the meaning of texts in the light of the 'host' culture (McQuail, 1983). It is thus concerned with cultural as well as linguistic meaning.

Semiology is the science of signs or signification, and as such includes structuralism. A sign is any image that acts as a 'signifier' of something 'signified', for example a word, or picture. Semiology directs attention to the whole sign-system, from which we derive, or transfer, meaning in communication.

The application of semiological analysis to mass communication texts provides a means of revealing more of the underlying meaning of a text, *taken as a whole*, than would be possible by simply following the grammatical rules of the language or establishing the meaning of individual words. It is particularly applicable in evaluative research directed at uncovering the latent ideology or 'bias' of media content (McQuail, 1983).

#### 4.2.5 Contrasts between traditional and structuralist content analysis

- Structuralism is not quantitative, since meaning derives from relationships, oppositions and context rather than from quantity of references;
- Attention is directed to latent rather than to manifest content and latent meaning is regarded as more essential;
- Structuralism is systematic in a different way than is traditional content analysis, giving no weight to procedures of sampling and rejecting the notion that all 'units' of content should be treated equally and that the same procedure can be applied in the same way to different texts;
- Structuralism does not assume that the world of social and cultural 'reality', the message and the receiver, all attribute the same basic meanings to signs (McQuail, 1983).

#### 4.2.6 Combining the two approaches

A number of inquiries have departed from the pure forms of 'Berelsonian' or 'Barthian' analysis to use combinations of both approaches. The work of the Glasgow University Media Group (1977, 1980) is a good example of this. The group combined rigorous and detailed quantitative analysis of industrial news in relation to the industrial 'reality', together with an attempt to 'unpack' the cultural meaning of specific news stories and elucidate the meaning system of television news.

#### 4.3 SELECTION OF METHOD

Quantitative content analysis was selected in order to establish ranked frequency patterns of news values in the reports studied. These rankings were used to suggest which aspects of the issues covered had received the most emphasis, as indicators of the news values operating in coverage. The limitations of a frequency-based method for analysis of non-quantifiable indications of bias, however, necessitated the use of qualitative structural analysis. This was used on the Sappi effluent spill material only, for reasons given later (see section 4.5.3).

#### 4.4 SAMPLING

The sampling process was not random, since the intention was to identify environmental issues (articles relating to the natural environment) as opposed to other topics, such as crime or politics.

##### 4.4.1 Selection of newspapers

The Star and The Citizen newspapers were selected for comparison, for five reasons:

- both newspapers distribute to the same general areas, mainly the Pretoria-Witwatersrand-Vaal Triangle (PWV) area in the Transvaal, as well as to the northern Transvaal, Orange Free State and Natal, with subscription copies to the Cape. They are thus competing for readers in the same areas;
- both newspapers are English language publications;

- both newspapers are dailies. Both produce morning editions, although The Star, as a bigger newspaper, produces afternoon editions as well. The Star produces six editions per day, while The Citizen produces three editions daily;
- The Star employs a full-time environmental reporter (who also holds the position of Assistant Editor), while The Citizen does not. This suggested a difference in editorial opinion regarding the importance of environmental news which was likely to provide a useful basis for comparison;
- The Star has a week day average circulation of 235 128, and a Saturday Star average circulation of 176 172. The Citizen's week day average circulation is 140 435, with an average Saturday circulation of 103 116 (Audited Bureau of Circulation figures for January to June 1990). The difference in circulation reflects the different sizes of the news organisations, and this was considered a useful basis for selection, since the size and resources of the newspaper may influence their news agenda.

It should be noted that the aim in comparing the newspapers was not to make a value judgement as to which newspaper better serves the interests of the environmental community. Rather, an evaluation of differences in the attitude towards and handling of environmental information by these two newspapers could point towards a wider range of factors that could potentially influence environmental coverage in other newspapers, not included in this study.

#### 4.4.2 Selection of environmental issues

The use of news pegs and the reporter orientation towards events mean that environmental news has been treated by the press as a range of discrete issues falling under the same general category of 'conservation'. This includes hard and soft news items.

'Environmental issues' in this study refers specifically to the natural environment, even though 'environment' usually relates to all aspects relating to human surroundings and existence, including the built or urban environment. Environmental issues in the newspapers studied were thus identified as environmental by the nature of the subject and/or by their description as such in the articles.

Rock (1981 : 77) refers to the 'cyclical' nature of news, the repeated increase and decrease at different times in the coverage of issues, which occurs as a function of the newspapers' need to produce a constant flow of news on a regular basis, and according to the availability of news pegs. This cyclical tendency was noted in the coverage of environmental issues during the study period.

The selection of environmental issues for study went through a number of steps, with a central criterion being to distinguish those environmental issues that displayed a strong 'peak' in coverage, and hence had proved particularly attractive or newsworthy for the press.

The study period of May 1985 to May 1990 was chosen on the following bases:

- the coverage period included May 1990 in an attempt to make the study as current as possible;
- a five year period was selected because various personal communications with press personnel indicated that environmental news has received the most coverage during the past three years;
- only articles appearing Monday to Saturday were considered, since unlike The Star, The Citizen does not produce a Sunday newspaper. The exclusion of the Sunday Star constituted a distinct drawback to analysis, since in-depth feature articles are frequently held back for publication in the Sunday Star (J. Clarke, pers. comm.). Mr Clarke (environmental reporter for The Star) also had a regular wildlife/nature column in the Sunday Star. All of this material was excluded from this study in order to facilitate an equitable comparison between The Star and The Citizen.

A preliminary review was done of all environmental reports between May 1985 and May 1990 in The Star and The Citizen. The aim of the preliminary review was simply to establish which issues had been reported by the newspapers over the five year period, and thereafter to isolate the issues that had received the most coverage. The number of reports in any particular year during the study period was counted. This produced an initial list of 43 issues (see Appendix A).

Of these, fourteen displayed a significant peak(s) in coverage, although they were not equally represented in both newspapers (Appendix A). This second list was then narrowed down again to isolate those issues that had received as similar an amount of coverage as possible in each newspaper. This was based on the assumption that issues that received good coverage in both newspapers were more likely to be indicative of press consensus in terms of the news values operating.

Using the above procedure, three issues were isolated : atmospheric ozone depletion, global warming, (the 'greenhouse effect'), and the Sappi paper mill effluent spill into Eastern Transvaal rivers in September 1989. Each of these issues displayed a distinct peak and decline in both newspapers across a similar period of time, and were therefore presumed to have been newsworthy for both newspapers at that time. No articles on the atmospheric issues were found for the years 1985, 1986, and 1987. This is particularly anomolous for the ozone issue, since the ozone 'hole' was discovered in the early 1980's. The assumption was made that the potential newsworthiness of the ozone issue may not have been appreciated during early publication, and may have been relegated to a 'miscellaneous' archival category.

The coverage of these issues across the study period (in terms of articles per year) is illustrated in Figures 3, 4, and 5. These show the peaks and declines in coverage, and the similarity between the two newspapers. For coverage per month, see Figures 6, 7 and 8 in section 5.

#### **4.4.3 Selection constraints**

Study articles were sourced from the newspaper libraries and the Institute of Contemporary History (INCH) at the University of the Orange Free State in Bloemfontein. Each of these organisations uses cataloguing practices that affected the gathering of material. The practice of separating material into a wide range of topics which were not always cross-referenced means that despite all efforts to do so, the possibility exists that the articles in the sample do not constitute all the articles that were published on the issue.

Each of these organisations also separates articles from accompanying photographic or diagrammatic material, with the result that it was decided to focus upon text only. This was viewed as a distinct limitation to the study, particularly in the qualitative analysis.

In addition, neither the newspapers nor INCH record which edition of the newspaper is used. INCH confirmed that the morning late edition of The Star is always used, but that they receive different editions of The Citizen at different times. For this reason, it was impossible to ensure that the same editions for each paper were used.

While articles sourced from INCH carried page numbers, newspaper library articles did not. Further attempts to determine these by scanning the actual newspapers proved unsuccessful, since not all articles appear in all editions of a newspaper on a particular day. This placed a severe limitation on assessing the importance of articles on the basis of position in the newspaper.

#### 4.4.4 Final sample

Hard news and feature articles were selected for inclusion in the sample, and any editorials relating specifically to the study issues. Commercial press releases promoting 'environment-friendly' products were excluded. Readers' letters were excluded from analysis because of the focus of the study on the news-generating organisations rather than the audiences.

The final sample for analysis over the five-year period consists of 112 articles, broken down as follows :

Issue	The Star	The Citizen	Total
Sappi	19	8	27
Ozone	20	23	43
Global warming	18	24	42
			112

## 4.5 CONTENT ANALYSIS

### 4.5.1 Aim

Content analysis was selected as a method under the belief that the simplest and most effective means of elucidating journalistic news values and stance is by studying the 'message'. Another possibility would also have been a questionnaire

# Sappi Effluent Spill

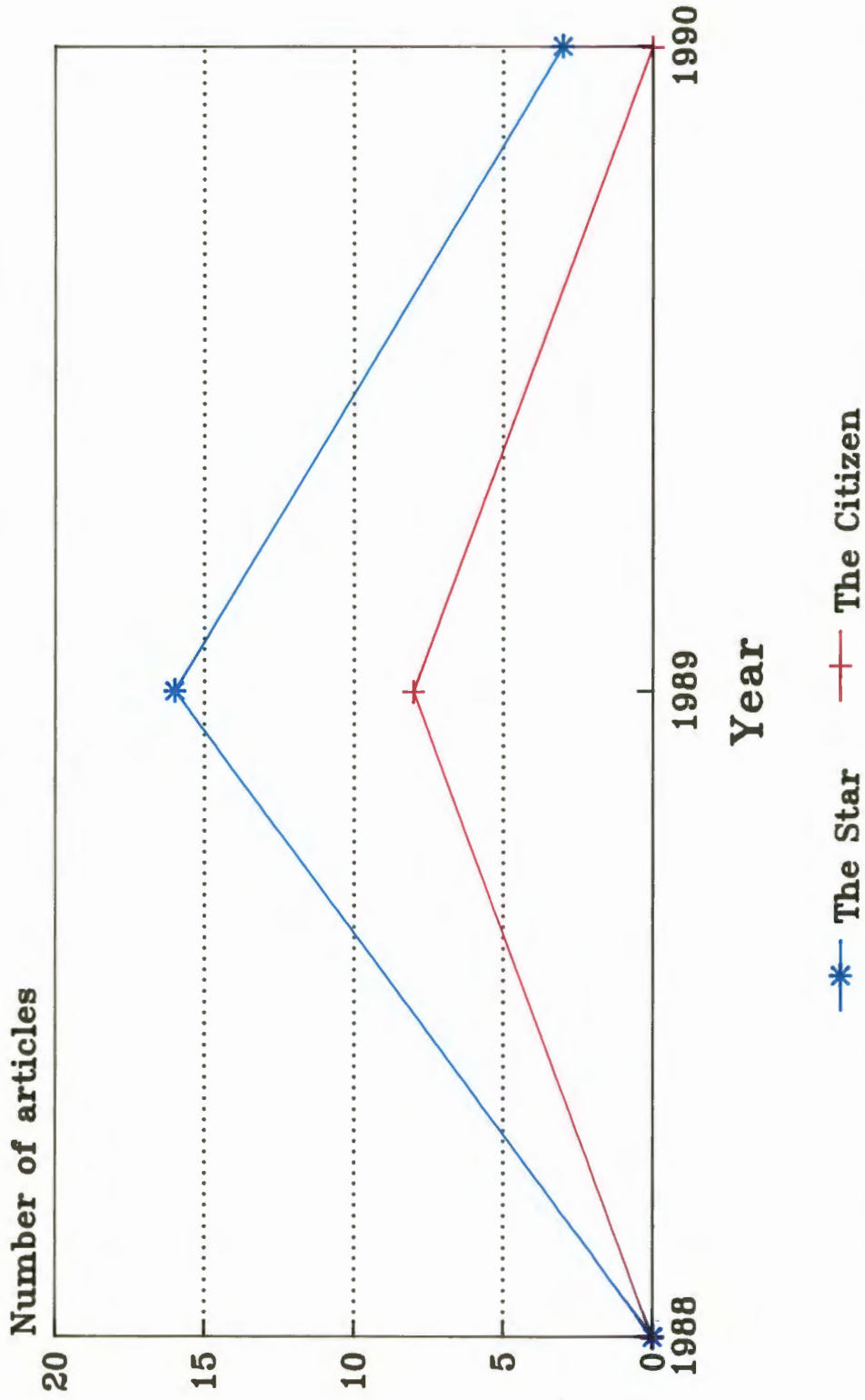


Figure 3 : Coverage of the Sappi effluent spill over the study period in The Star and The Citizen

# Global Warming

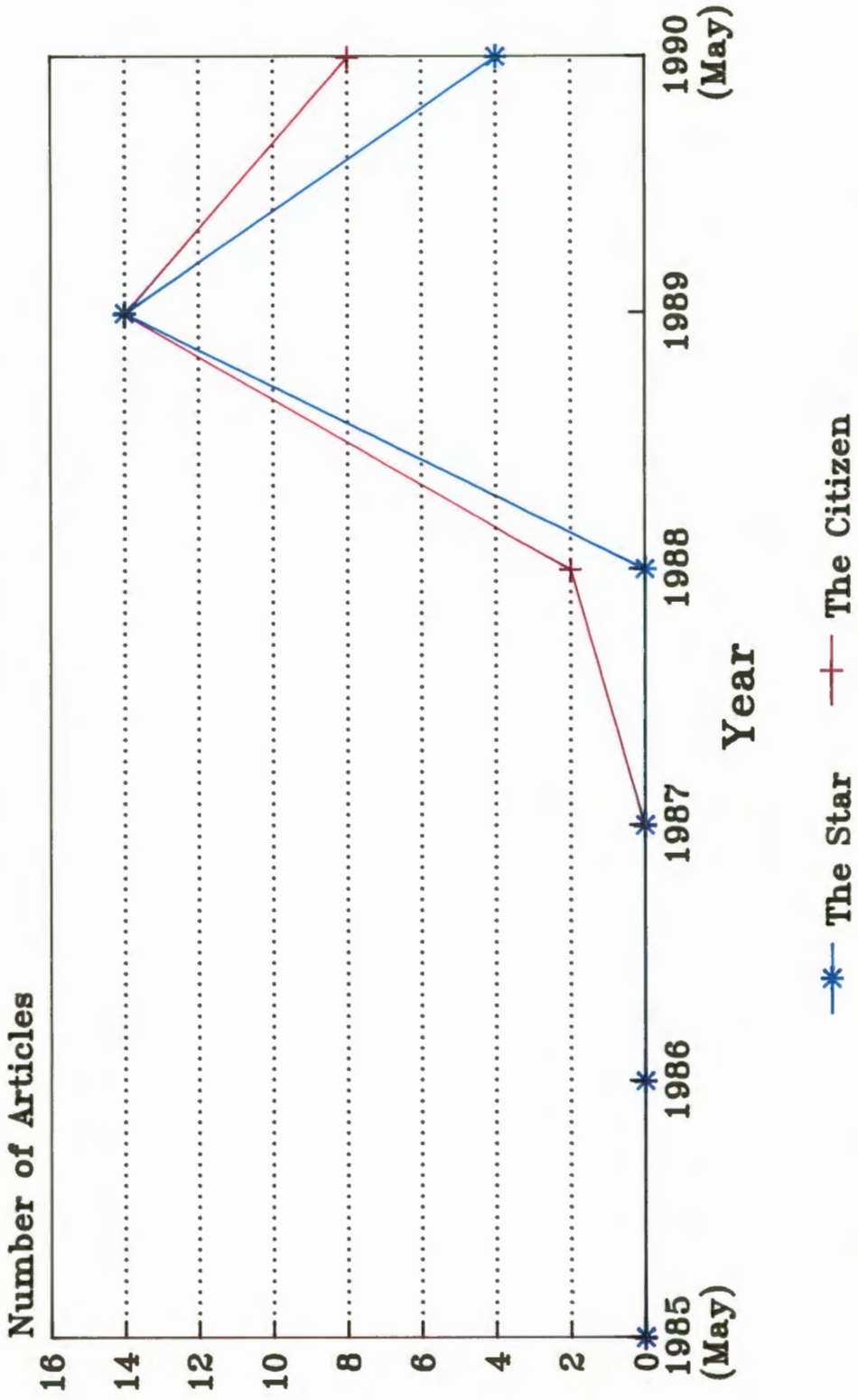


Figure 4 : Coverage of global warming over the study period in The Star and The Citizen

# Atmospheric Ozone Depletion

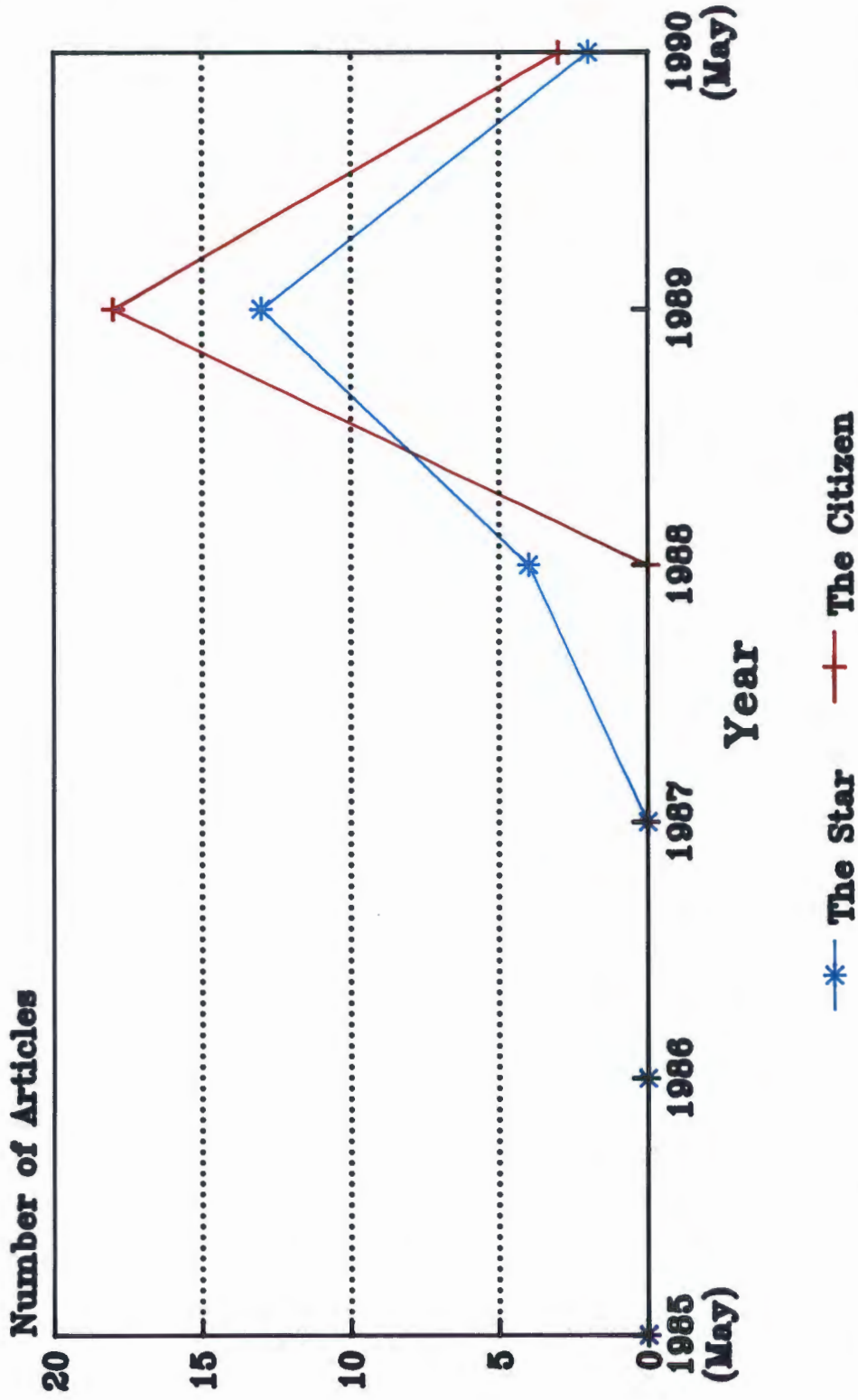


Figure 5 : Coverage of atmospheric ozone depletion over the study period in The Star and The Citizen

and/or interview technique. It was also believed that identification of the news values and stance of the journalists writing on environmental issues could point to other factors that might potentially influence their choices.

A full discussion and comparison of quantitative and qualitative content analysis is provided in section 4.2.

#### 4.5.2 Quantitative content analysis

Quantitative content analysis in this study was used to establish what 'themes' or news values were operating. The analysis follows the process laid out by McQuail (1983), and described in section 4.2.3.

The quantitative analysis was intended to produce a ranking of 'value-emphases' that occurred throughout the articles of all three environmental issues, as well as variations in different issues. These in turn could point towards (but not establish) the existence of prevailing attitudes regarding the newsworthiness of environmental issues.

#### 4.5.3 Qualitative content analysis

The qualitative content analysis was used to ascertain if either The Star or The Citizen were biased in their representation of the groups or themes active in the issue. The underlying assumption was that the treatment of the groups provided an indicator of newspaper stance regarding environmental news. This stance in turn was assumed to be a potential factor of influence in deciding whether to cover environmental issues, and in what depth.

In other words, should a newspaper show a bias in favour of environmental advocates, it would be assumed, at this point in the study, to align itself with their views. The reverse would also hold. The possibility of a neutrality hypothesis also exists. The neutrality hypothesis would suggest either that the newspaper was simply reporting the issue impartially, or that alternative and/or additional research methods would need to be utilised to determine their stance. The significance of a neutral stance would best be determined in conjunction with the quantitative results.

The qualitative analysis focussed upon the coverage of the Sappi paper mill effluent spill, for the following reasons:

- the issue was limited in time, with a clear beginning, stages of development, and end;
- the issue was confined to one geographical area, close enough to both newspapers to allow them equal access;
- the controversy surrounding the effluent spill polarised into distinct opposing groups;
- both newspapers distribute to readers in that area, and thus had an interest in covering the issue;
- both newspapers had access to the same Sapa material regarding the issue.

Global warming and atmospheric ozone depletion, however, are global in their manifestations, and there was a much heavier reliance on overseas news agency material for information regarding them. Allegations of bias, therefore, could not be clearly assigned to either newspaper for these issues.

## 4.6 THE QUANTITATIVE CONTENT ANALYSIS PROCESS

### 4.6.1 Selection and definition of categories

The content analysis categories were selected to cast illumination upon the research question, in other words, to see if the content provided any clues as to factors, particularly news values, that influenced coverage. The same set of categories was used for all three environmental issues in the sample, in both newspapers. The categories were refined during an initial pilot test on one third of the sample. The pilot articles were randomly selected.

Three types of categories were used :

- **structural** categories, indicating importance of the article by virtue of the number and size of articles;

- **thematic categories** suggesting the news values operating;
- **source categories**, indicating the source of the information for the journalist. These sources are recorded according to the group they belong to. The categories are therefore social groups.

#### 4.6.1.1 *Structural categories*

The structural categories were intended to provide a general framework for comparison between the two newspapers. They provided a broad indication of the different levels of importance allotted to the issue by each newspaper, but of themselves were not intended to point to any specific factor. Structural categories comprised the total number of articles per issue and the size of the articles.

**Total number of articles :** This provided a general indication of the amount of space each newspaper was prepared to devote to the issue, and the length of time the newspaper was prepared to pursue the topic, both of which are indicators of how important the newspaper thought it was.

**The size of the articles :** The articles were measured in column centimetres.

#### 4.6.1.2 *Thematic categories*

The thematic categories were designed to illustrate the frequency with which aspects or elements of the issues were discussed in the stories, to show which ones were emphasised. The assumption was that those elements of a story emphasised by journalists indicated the 'angle' of interest to them and some of the news values operating.

The analysis was not intended to determine whether news values were in operation (this was a basic assumption), but rather whether specific news values, or combinations of news values, occurred that were peculiar to environmental issues. It should also be noted that individual category results were not intended to point toward any specific 'factor'. Rather, it was the *ranking* of categories that indicated the news values most likely to be operating.

Three main categories were determined, which reflected the journalistic preoccupation with the progression of the issue over time, and the development of the human response : Event, Response, and Remedy. These three broad categories encompassed eleven sub-categories for more detailed quantitative analysis. In addition, a Miscellaneous category was used. Any material that was not part of the other thematic categories was allocated to the Miscellaneous category.

The thematic categories with their respective sub-categories are given below, (described in detail in the following sections) :

Event	Response	Remedy	Miscellaneous
Fact Context Danger	Argument Justification Legal	Calls Action Responsibility Timing Economics	

#### 4.6.1.2.1 *Event category : sub-categories and indicators*

The Event category related to the environmental issue around which coverage revolved: the depletion of the ozone layer, the experienced or anticipated increase in global warming, or the Sappi paper mill effluent spill. The 'events' are by their nature problematic, giving rise to the other central categories of *Response* and *Remedy*. The sub-categories (bold type) and their indicators are given below.

**Fact of the event :**

- description of what happened, is happening or will happen
- description of how it happened or will happen, the progression of occurrences that constitute the overall event, and including the identified cause (in terms of 'what', not 'who')
- description of latest developments relating specifically to the development of the event, and not to be confused with research developments that are aimed at a remedy
- magnitude of the event : the extent of effects in space or time (specific units of time or space to be given)

**Context of the event (orientational information):**

- explanatory, scientific or historic detail, such as explanation of chlorofluorocarbons, the 'greenhouse effect', prevailing conditions of an area, earlier environmental treaties, and so on. Excludes reiteration of what happened, which falls under 'fact'.

**Danger/threat to or loss of :**

- human health/life
- other living organisms and systems
- livelihood
- recreation
- aesthetic value\*
- spiritual value\*
- educative value\*
- (\* as expressed in source statements)
- and extent of damage or anticipated damage (in the relevant units, for example, 'twenty kilometres of river polluted')

**4.6.1.2.2 Response category : sub-categories and indicators**

The Response category incorporated the reactions and/or anticipated reactions of actors, and discourse, controversy and debate between actors. 'Legal aspects' were included here as a form of response to the event by the central government (non-conservation). It was not considered as a remedial measure addressing the event *per se*, and thus was not included in the *Remedy* category. The sub-categories (bold type) and their indicators are given below.

**Argument :**

- statements of controversy, conflict or disagreement between or within groups active in the reported issue
- allocation of culpability for the event (in terms of 'who', not 'what')
- negative typecasting, that is, the association of negative values with actor groups

**Justification :**

- drawing attention to related aspects in order to diminish the impact of culpability. Relevant only when this was done by the potentially guilty party.

**Legal aspects :**

- infringement of common law rights or statutory regulations
- legal repercussions

**4.6.1.2.3 Remedy category : sub-categories and indicators**

The Remedy category encompassed the need and desire for, and activities orientated toward finding, a solution to the event. Broadly speaking, the search for a remedy was also a response to the event, but it has been separated here for increased clarity and as a response that derives specifically from the problematic nature of the events. The sub-categories (bold type) and their indicators are given below.

**Calls :**

- for renewed or additional research, financial aid, new product development, new strategies, cessation or diminishing of harmful activities, appointment of Commissions of Inquiry (full or partial steps toward a remedy).

**Action :**

- putting the above into action, or anticipated progress (including the anticipated agreement of parties to act) or related obstacles. The suggestion, consideration, anticipation of alternatives. Descriptive details regarding research or other remedial measures (what has been found, or is being done).

**Responsibility:**

- identification of the party or parties with full or partial responsibility for effecting remedial measures

**Timing :**

- time-scales anticipated in which to effect a remedy (for example, 'Ten years in which to cease use of CFCs altogether')

**Economics versus the environment :**

- this sub-category relates to the influence of economic considerations on the formulation, enactment and timetable of remedies. Economic considerations were also frequently given as a reason for not attempting to effect a remedy.

Note: This differs from the 'Justification' sub-category, where the economic prowess of industry may be seen as a mitigating factor in the light of damage already done. It does not relate to the remedy.

**4.6.1.3 Source categories**

Source categories were devised in order to determine any use of accredited sources, and who those sources were. This could provide a general indication of whom journalists would consider an accredited source in dealing with an environmental issue. It also suggested that the presence and interaction of those groups could contribute to the news value of the issue.

Indicators of source were taken to be whenever a particular group or group member was identified as constituting a source of information for the newspaper, in the form of direct or indirect quotations, press statements, reports or other material. The six groups (categories) isolated in the articles were as follows:

**Conservationists**

- members of environmental interest groups, such as the Wildlife Society. These were distinguished from the general public in that their value as sources lay in the society or interest group they represented;
- the society or group as a whole.

### **Experts**

- scientists, researchers, academics and other specialists not identified in the articles as belonging to any government organisation (as defined below), or employed by an industry involved in the issue. In the latter instance they would be scored as representative of that industry.

### **General public**

- directly affected, such as local residents, in the case of the Sappi spill issue, or the public at large in the case of the global warming and ozone depletion issues

### **Government/quasi-government (non-conservation function)**

- State controlled bodies responsible for functions not directly related to environmental conservation or monitoring, and their departments (including the judiciary);
- official representatives of these.

### **Government/quasi-government (conservation function)**

- State controlled bodies responsible for functions directly related to environmental conservation and monitoring, (such as the Departments of Water Affairs, Forestry, Nature Conservation, Environment Affairs and others) and their departments;
- official representatives of these, including Cabinet Ministers;
- their 'expert-evidence' representatives, such as scientists and researchers employed by the state body.

### **Industry**

- manufacturing organisations;
- commercial retailing organisations;
- their representatives.

#### 4.6.2 Units of analysis

The paragraph constituted the unit of analysis for the quantitative content analysis, with the report operating as the contextual unit. Paragraphs were identified by standard format indentation. In those instances where the reporter posed a question, which was followed by its answer, the question was included with the first paragraph of the answer as a single unit for analysis.

#### 4.6.3 Process of analysis

The analysis considered the following relationships:

- the number and size of articles;
- the number of paragraphs allocated to each thematic category and sub-category in each newspaper;
- the ranking of themes according to the percentage of paragraphs allocated to individual issues and all issues together;
- the source-types relied upon by each newspaper in covering the issue
- a comparison of the above in The Star and The Citizen.

#### 4.6.4 The use of double-coding in quantitative content analysis

Constraints on newspaper space means that paragraphs in reports frequently refer to more than one theme. This creates difficulties in terms of content coding, since an additional value judgement is required by the coder to allocate a level of significance to the different themes, and decide which is the most prominent in the paragraph. The practice of double-coding was developed to overcome this. Double-coding allows the coder to allocate the paragraph to two thematic categories.

This approach was initially utilised by Deutschmann (1959, in Budd et. al., 1969), and has subsequently become a recognised practice in analysis of content (D. Wigston, Department of Communication, UNISA, pers. comm.). Scherl and Smithson (1987) extended this concept with the use of 'fuzzy' or 'blurred' categories in thematic category analysis, which allowed for overlapping between categories.

In the present study, double-coding was used for those paragraphs that referred to more than one theme, in order to clarify the relative ranking of theme use in the

newspapers studied. The practice results in coding totals in excess of 100 percent, but according to Deutschmann (1959 : 64, in Budd et al, 1969 : 45), this disadvantage is offset by the reliable information about the relative *emphasis* given to a kind of content.

## 4.7 THE QUALITATIVE CONTENT ANALYSIS PROCESS

### 4.7.1 The nature of bias in the press

In this study, bias in the press was equated with two aspects : firstly, the treatment of adversarial groups whose basis for conflict was projected as a stance for or against an environmental transgression. It should be noted, however, that frequency of mention of a group's viewpoint (in terms of space allocated) does not necessarily indicate bias in favour of that group on the part of the newspaper, nor does equal space allocated to all groups necessarily mean unbiased coverage (Finn, 1978; Holsti, 1969). It is the way in which the group's viewpoint is treated by the newspaper that indicates the latter's stance. The amount of coverage considered in conjunction with the qualitative treatment of the group's viewpoint(s) is likely to yield the most significant results.

Secondly, the handling of certain themes could provide useful information regarding the techniques the press used in interpreting both the nature of the event and the significance of it for its readers. The themes considered were similar to those in the quantitative content analysis, though not all were utilised.

### 4.7.2 Indicators of editorial bias

Some indicators of editorial bias in one or a series of newspaper articles are :

- the consistent use of one source-type over another;
- the balanced use of sources (allowing them the same amount of space), but juxtaposing relevant, colourful comments from one source against dull, irrelevant comments from another;
- the structuring of articles in such a way as to diminish or enhance one source-type's comments or opinions at the expense of another's. One way in which

this can be done is by placing the primary source's comments closest to the beginning of the article. This operates on the basic premise that few readers peruse an entire article from start to finish, and the opinions presented in the earliest sections are most likely to be read;

- the use of value-laden or emotive language where this is not necessary to develop the story. This can take the form of single emotive words, or an article that uses more adjectives and adverbs than is needed to communicate the information. This tendency can relate to the treatment of sources in the stories or the suggestion or development of thematic under- or over-tones.

#### **4.7.3 Identification of groups**

In the qualitative analysis, two opposing 'factions' and two neutral groups were identified : those that protested against the Sappi effluent spill and other, sometimes indirectly related, environmental transgressions, and those that attempted to defend the effluent spill, for example by calling it an unavoidable accident, and defending Sappi on the basis of its economic contribution to South Africa, or its good environmental record.

The first group of people (protesting the spill) consisted of local Eastern Transvaal residents, farmers and businessmen, the Lowveld branch of the Wildlife Society of Southern Africa, and various conservation officials. The second group consisted of representatives of Sappi.

The Hey Committee (a small group of scientists appointed by Sappi-Kraft Limited to investigate the causes and extent of damage of the spill and make recommendations to redress the situation) played a neutral role. The scientific sources drawn upon by either side were also considered neutral, as frequently the same sources were utilised. This identification followed that projected by the newspapers.

#### **4.7.4 Process of analysis**

Qualitative analysis relies on a cumulative interpretation of the articles (Finn, 1978). The articles were therefore not considered whole and finite units of meaning in themselves, but were linked with other articles to assess the nature of themes and editorial bias as they/it developed throughout coverage of the issue.

## 4.8 INTERVIEWS

Unstructured interviews were conducted with ten newspaper personnel and individuals identified in the coverage of the Sappi issue. The interviews were intended as a supplementary measure to attempt to identify the reasoning behind some of the approaches discerned through the formal analyses.

The interviewees are listed in Appendix B, along with a basic list of interview questions. The small number of interviewees and the unstructured approach to interviewing meant that interviews were treated as personal communications rather than formal research data.

The most significant constraint arose from the refusal of the editor of The Citizen, Mr M.A. Johnson, to be interviewed. The next most senior man in the organisation, Mr P. de Villiers, the news editor, agreed to be interviewed, and the information derived from this interview must of necessity be taken to represent the views of senior editorial management.

Geographical distance imposed a logistical constraint regarding those individuals situated in the Lowveld. Interviews with these people were conducted by telephone, which imposed recording limitations.

## 4.9 RELIABILITY

### 4.9.1 Reliability in quantitative content analysis

Quantitative content analysis, despite its systematic and empirical nature, requires continual value judgements on the part of the coder in allocating material to the relevant category or categories. Reliability is best established by using one or more additional coders who conduct the content analysis independently. The results of different coders should conform to a minimum of a 0.75 degree of correlation (Budd et al, 1969; D. Wigston, Department of Communication, UNISA, pers. comm.).

#### **4.9.2 Second coding**

In this study, second coding was conducted by a graduate of Journalism and Media Studies with exposure to the techniques and practice of content analysis. Detailed explanation and discussion of the method, categories and sample material was provided before the analysis began. The second coding was undertaken without reference to the first coder.

#### **4.10 VALIDITY**

The study is largely descriptive, and as such requires only face validity. The interviews with media personnel were intended to shed some light upon the accuracy of the results, but the unstructured nature of the interviews and the possibility of unconscious, habitual news production excludes the conclusiveness of interviews for validity.

## CHAPTER 5

### CONTENT ANALYSIS RESULTS

#### 5.1 INTRODUCTION

The results of the quantitative and qualitative content analyses are presented in detail in this chapter. Conclusions are drawn, where appropriate, throughout the chapter, and a brief summary of the main points provided at the end of each main section. The results of the content analysis are considered in conjunction with the interview findings in chapter 7.

#### 5.2 QUANTITATIVE CONTENT ANALYSIS RESULTS

##### 5.2.1 Introduction

The primary aim of the quantitative analysis was to identify which news values were operating in the coverage of three environmental issues, global warming, atmospheric ozone depletion and the Sappi paper mill effluent spill in the Eastern Transvaal in 1989, and very broadly to see what level of significance was allocated to these issues. A second consideration was the analysis of source treatment, to assess the kinds of sources journalists have considered to be accredited in reporting the issues. Each issue is dealt with individually.

The bulk of this section (5.2) covers the results of the content analysis in terms of the categories and sub-categories, and equates these results with the relevant news values, which are summarised in section 5.2.6.2. The news values are identified using the terminology employed by Galtung and Ruge (1965), and detailed in section 2.6.

##### 5.2.1.1 *The significance of placement*

Measurement of the importance a newspaper places on a subject relies upon a combination of factors, usually the number of articles covering the issue, the position of the articles in the newspaper (proximity to the front page), the position of the

articles on the page (above or below the fold, which quarter of the page), and the size of the articles. The headline size can also be taken as an indicator.

A complete and accurate assessment of importance, involving a significance factoring procedure, necessitates the inclusion of the above information (D.Wigston, Department of Communication, UNISA, pers. comm.). In this study, however, the cataloguing practices of INCH and The Star and The Citizen libraries excluded much of this information. For this reason, only the number and sizes of articles are utilised (the headlines being included as part of the article size), to provide a very broad representation of importance.

Comparison between broadsheet (The Star) and tabloid sizes (The Citizen) presents difficulties in terms of the significance of the article in relation to the page size. While it is possible to 'normalise' these sizes by calculating them as a percentage of page size, this ultimately does not yield any additional information, since the percentage of space taken up by advertising on the page is an unknown variable and cannot be taken into account. For this reason only the actual sizes of the articles were compared.

The number and sizes of the articles for all three issues in both newspapers are expressed in column centimetres and are provided in Appendix C. The article number and sizes for each environmental issue are dealt with under the relevant issue heading.

#### 5.2.1.2 *Thematic analysis*

In the thematic analysis results, the percentage figure is used as a basis for ranking because of the different amounts of paragraphs analysed in each newspaper. The percentile thus represents *the number of paragraphs allocated to the relevant category, as a proportion of the total number of paragraphs making up the coverage of the issue in each newspaper*. The use of double-coding tends to produce totals in excess of 100 percent.

#### 5.2.1.3 *Source use*

The routine use of accredited sources by journalists was discussed in section 3.9.2. Paragraphs were scored on the basis of whose viewpoint or opinion was being

presented, and took the form of direct or indirect quotes, or information attributed to a source. Paragraphs that showed no clear evidence of the source of the material were not scored for source use, and percentage calculations were based on the number of paragraphs that displayed source attribution, not the total number of paragraphs for that issue. The source percentage scores for all three issues are presented in Appendix D. The scores for each issue are provided in the relevant sections.

## 5.2.2 The Sappi paper mill effluent spill

### 5.2.2.1 *Number and size of articles*

These are presented in Table 1. The Star carried a total of nineteen articles, between 26 September 1989 and 21 May 1990 inclusive, as opposed to The Citizen, which printed eight reports, between 27 September 1989 and 22 November 1989 inclusive. Both newspapers carried the first story as the page one lead (26 September 1989 in The Star and 27 September 1989 in The Citizen), indicating that both considered the issue important. This initial importance was the result of the treatment of the issue as hard news.

While The Star continued to cover the issue, however, The Citizen did not, suggesting that The Star placed more importance on it than The Citizen. The Star apparently continued to carry the issue in order to remind readers that it had not yet been resolved (in that the findings of the Hey Committee of Inquiry had not yet been completed or made public). This emphasises their commitment to the issue. In addition, The Star covered the issue in an editorial, which The Citizen did not, which supports this. The Citizen appears to have been interested in the short-term newsworthiness of the issue, but did not display the same level of interest in the environment as The Star.

Three of The Star's nineteen articles (16%) were in excess of 100 column centimetres (col. cm.), while five articles (26%) were between 50 and 99 col. cm. long. This indicates that The Star attributed a high level of importance to the issue. Eleven of The Star's articles (58%) were less than 50 col. cm. long, and these articles took the form of updates regarding the progress of the Hey Committee.

Table 1: Sappi effluent spill : Number and size of articles

	STAR	CITIZEN
ARTICLE NO.	SIZE Col cm	SIZE Col cm
1	119	113
2	130	59
3	76	49
4	69	49
5	35	49
6	60	59
7	96	64
8	28	18
9	127	
10	24	
11	54	
12	17	
13	17	
14	18	
15	15	
16	27	
17	27	
18	35	
19	32	
Total	1006	460
Min	17	18
Max	130	113
ARTICLE SIZE	No.*	No.*
1 - 24 col cm	5	1
25 - 49 col cm	6	3
50 - 74 col cm	3	3
75 - 99 col cm	2	0
100+ col cm	3	1
* Number of articles within that size range		

Only the first of The Citizen's articles was in excess of 100 col. cm. Thereafter the articles were much shorter, with three of the eight articles (38%) between 50 and 74 col. cm. long, and four of them (50%) less than 50 col. cm. This supports the above suggestion that The Citizen's interest was largely in the hard news aspects of the story.

Figure 6 illustrates the development of the issue over the coverage period in both newspapers.

### 5.2.2.2 Thematic categories

The results of the Sappi content analysis (thematic categories) for The Star and The Citizen are given in Table 2.

Table 2: Sappi effluent spill : Thematic category scores

Category	Sub-Category	Star (n=286)		Citizen (n=105)	
		No.*	%	No.*	%
Event	Fact	77	26.9	36	34.3
	Context	25	8.7	2	1.9
	Danger	89	31.1	30	28.6
	<b>Total</b>	<b>191</b>	<b>66.7</b>	<b>68</b>	<b>64.8</b>
Response	Argument	65	22.7	17	16.2
	Justification	9	3.1	3	2.9
	Legal	28	9.8	16	15.2
	<b>Total</b>	<b>102</b>	<b>35.6</b>	<b>36</b>	<b>34.3</b>
Remedy	Calls	9	3.1	1	0.9
	Action	44	15.4	26	24.8
	Responsibility	1	0.3	0	0
	Timing	0	0	0	0
	Econ/Env	5	1.7	0	0
	<b>Total</b>	<b>59</b>	<b>20.5</b>	<b>27</b>	<b>25.7</b>
Miscellaneous		7	2.4	0	0
	<b>Grand Total</b>	<b>359</b>		<b>131</b>	

n = Total number of paragraphs scored.

\* = Number of codings allocated to that sub-category.

Note: The practice of double-coding results in figures greater than 100 percent. The grand total reflects the number of codings, which is more than the number of paragraphs.

The Sappi results are rearranged to show the ranking of categories and sub-categories for each newspaper, and provided in Table 3. This shows a similar scoring percentile between both newspapers for the categories, with Event scoring the highest (66.7% and 64.8% for The Star and The Citizen respectively), then Response (35.6% and 34.3% respectively) and finally Remedy (20.5% and 25.7% respectively).

# Sappi Effluent Spill

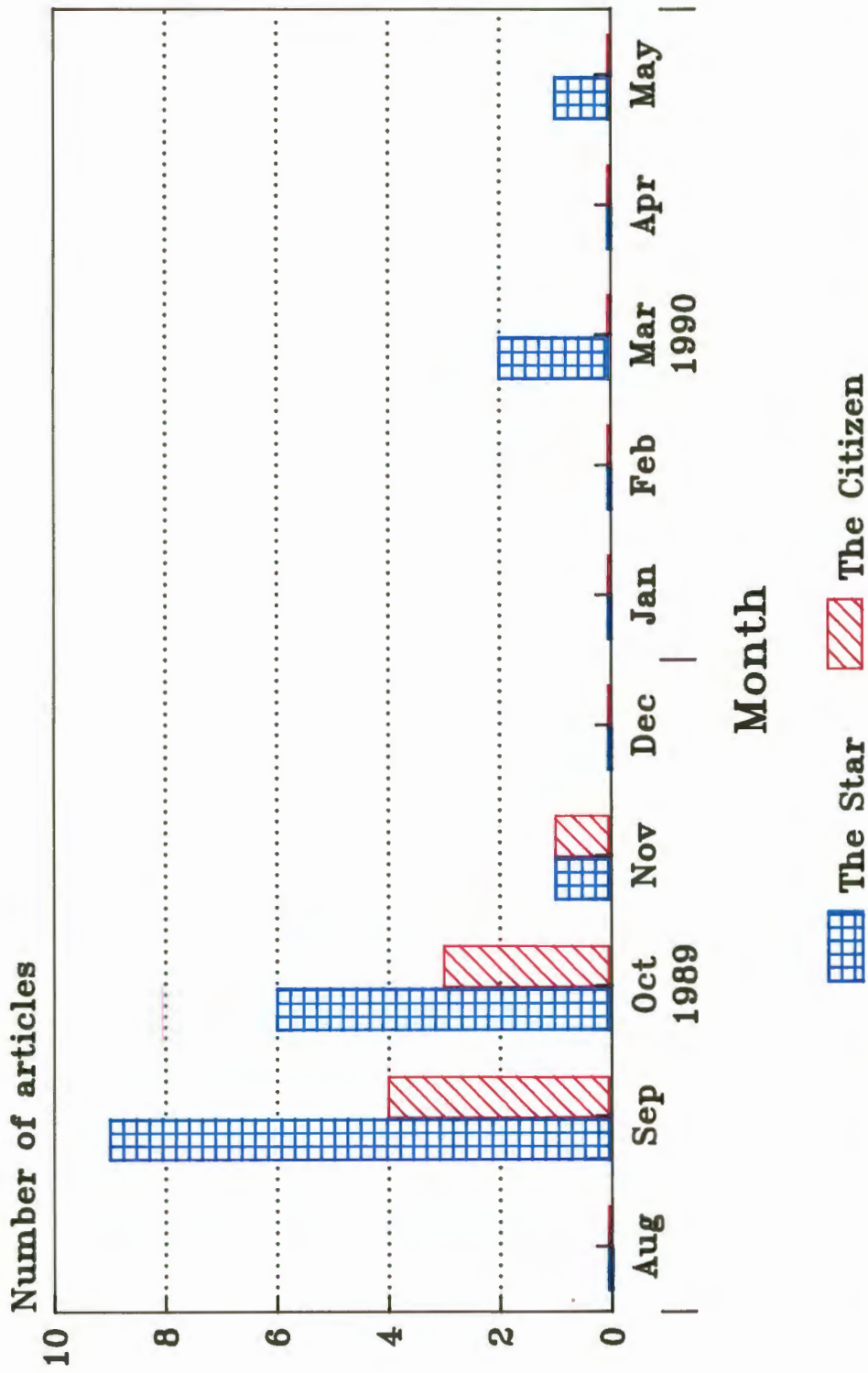


Figure 6 : Monthly coverage of the Sappi effluent spill in The Star and The Citizen

Table 3 : Sappi effluent spill : Thematic category ranking

Rank	Sub-Categories	STAR %	Rank	Sub-Categories	Citizen %
1	Danger	31.1	1	Fact	34.3
2	Fact	26.9	2	Danger	28.6
3	Argument	22.7	3	Action	24.8
4	Action	15.4	4	Argument	16.2
5	Legal	9.8	5	Legal	15.2
6	Context	8.7	6	Justification	2.9
7	Justification	3.1	7	Context	1.9
8	Calls	3.1	8	Calls	0.9
9	Misc.	2.4	9	Misc.	0.0
10	Econ/Env	1.7	10	Econ/Env	0.0
11	Responsibility	0.3	11	Responsibility	0.0
12	Timing	0.0	12	Timing	0.0
Categories			Categories		
1	Event	66.7	1	Event	64.8
2	Response	35.6	2	Response	34.3
3	Remedy	20.5	3	Remedy	25.7

Note: The practice of double-coding produces percentage totals in excess of 100 percent.

The emphasis upon the event probably results from the treatment of the issue in both newspapers as hard news. The fact that the effluent spill *per se* was a discrete event with a distinct beginning and end conforms with the newspaper time scale (the **frequency** news value). It is also relatively uncomplicated, and therefore easy for the reporters to understand and communicate (the **unambiguity** news value).

The next highest scoring - the Response category - reflects the coverage of the controversy surrounding the spill, in terms of the negative reactions of Lowveld residents and conservation officials. The legal consequences, in terms of the threatened and actual prosecution of Sappi, also contributed.

The Remedy category has the lowest score because of the uncertainty regarding the extent and long-term effects of the damage, and the lack of any clear method for restoring the water quality of the river in the short term. The Remedial category thus appears to have achieved the lowest score because it does not comply with the newspapers' time-scale (the **frequency** news value), and remedial activity or discussion therefore has a lower news value than Event or Response.

The steps taken by Sappi in appointing a Committee of Enquiry (the Hey Committee) constituted a partial remedy, inasmuch as the Committee's mandate was mainly to establish the extent of the damage and the best means of redressing it,

including recommendations for the establishment of a Sappi system to prevent further spills. Coverage of the activities of the Hey Committee contributed substantially to the remedial scores.

The low Remedy score possibly relates to the high scoring of the sub-categories of Fact and Danger - if a remedy was easily available, the spill would probably have been perceived to be much less threatening. The Fact and Danger sub-categories also scored highly because of the hard news nature of the issue - clear factual details could be determined - and because the element of danger (to both the water organisms and human water supply) constituted the central news angle (the **negative happening** news value). The Danger sub-category also scored highly because of the large number of dead fish, which constituted very visible evidence of the magnitude of the damage, and provided the **threshold** news value.

The element of Argument received greater emphasis in The Star (22.7%) than The Citizen (16.2%) because The Star gave much more space to the controversy between the residents and Sappi (see section 5.2.2.3 for source use). The Citizen placed more emphasis on the remedial Action taken (24.8%, almost as much as the 28.6% emphasis on Danger) as opposed to The Star's 15.4% coverage of remedial Action, almost half of its 31.1% emphasis on Danger.

The Star thus focussed more on the controversial elements of the story, and found these of significant news value, while The Citizen's approach focussed as much on the resolution of the issue as on the controversy, thus serving a reassuring function for its readers. This in turn suggests that The Star is not afraid of challenging the *status quo* approach to environmental transgression (leaving it up to the relevant authorities to take appropriate legal action), while The Citizen prefers to maintain it.

The controversy surrounding the effluent spill contributed to the **meaningfulness** news value, since audiences understand and relate to controversy of any kind. In addition, the Eastern Transvaal Lowveld is a popular tourism area of significant natural beauty, which many of the readers of both The Star and The Citizen are likely to have visited, and who would therefore appreciate the reason for the negative reaction of locals and officials.

Although the Legal sub-category (in the Response category) was ranked fifth by both newspapers, The Citizen dealt with it in more detail, with a scoring of 15.2%, while The Star's was 9.8%. The Legal sub-category related to the official legal response, in terms of Sappi's transgression of the Water Act. The Citizen's emphasis on the legal implications of the spill, along with its emphasis on official remedial Action, suggests that The Citizen focussed more on the official reaction to the issue. It also supports the earlier suggestion that The Citizen's coverage served to reassure its readers. This is discussed further in the qualitative analysis in section 5.3.

The lesser Legal coverage by The Star relates to the newspaper's greater emphasis on Argument - The Star portrayed the issue more as a transgression of the common law rights of the local residents to a clean environment. This underscores the earlier suggestion that The Star is prepared to challenge the *status quo* approach to environmental transgression, and suggests that The Star is biased in favour of the environment.

The Star scored more highly in the Context sub-category (8.7%) than The Citizen (1.9%), mainly in terms of background detail regarding Sappi's favourable history of effluent control. This represents an attempt by The Star to present a balanced account of the issue. The Citizen tended to present a largely factual account of event information with very little background detail, which suggests a less thorough and more disinterested approach to coverage. This is also reflected in the negligible scores for the remainder of the sub-categories.

The Star had a higher percentage of paragraphs allocated to the Miscellaneous category (2.4%), while The Citizen had none. This is because The Star reports made a number of references to Sappi's air pollution, which was not the issue under analysis, nor a cause or consequence of the spill. These references suggest that The Star used the effluent spill as a news peg for a more broad-based attack on Sappi.

The low score for Responsibility in an issue where Sappi is clearly the transgressor, is a result of the press' treatment of Sappi's responsibility as part of the hard news facts of the event (the identifiable person news value). This approach was also followed in the analysis, to enable clearer coding of how the press treated Sappi's culpability.

The status of Sappi as a high-profile company known to the public means that the elite person news value may also be operating.

### 5.2.2.3 Source use

The Star and The Citizen's use of source groups in covering the Sappi effluent spill is presented in Table 4.

Table 4 : Sappi effluent spill : source frequencies

Sources	Star (n=155)		Citizen (n=67)	
	No.*	%	No.*	%
Govt (GN)	16	10.3	3	4.5
Govt (GC)	29	18.7	38	56.7
Experts	9	5.8	8	11.9
Cnsrvnsts	18	11.6	1	1.5
Industry	39	25.2	17	25.4
Public	44	28.4	0	0
Total	155	100	67	100

n = Total number of paragraphs attributed to sources.

\* = Number of paragraphs attributed to that source

Key: Govt (GN) = Government (non-conservation)  
Govt (GC) = Government (conservation)  
Cnsrvnsts = Conservationists (interest groups)

The most striking differences occur in the official government source use, those of conservationists (interest groups) and the public. The Citizen leans heavily on official government sources (a total of 61.2% of its source attribution), suggesting that the newspaper considers these sources as having the greatest credibility. The Star has focussed upon the viewpoints of conservation interest groups and the local residents - the Public source category - (a total of 40% of its source attribution).

The difference in emphases suggests a more liberal approach to reporting by The Star, since members of the public are not often considered credible sources. The Star appears to support the stance taken by the residents, which is antagonistic to Sappi and in favour of a clean environment. (This element is discussed further in the qualitative analysis in section 7.3). This supports the earlier indications that The Star is prepared to challenge the *status quo* approach to environmental transgressions, since the response of locals is given precedence over that of officials, even though the latter also objected to the spill. Conversely, The Citizen focusses heavily on the

official response, which it clearly considers more credible, and ignores that of the local residents completely.

Both newspapers gave a similar amount of coverage to Sappi's viewpoint (Industry). The greater number of source allocations in The Star (88 more than The Citizen) was seen as a function of the greater coverage given to the issue by The Star, and no clear significance attributed to it.

### 5.2.3 Global warming

#### 5.2.3.1 *Number and size of articles*

These are detailed in Table 5. The Star carried eighteen articles, between 11 February 1989 and 18 May 1990 inclusive. The Citizen published twenty-four reports, between 31 August 1988 and 26 May 1990 inclusive. At first glance this suggests that the issue has a slightly higher position on The Citizen's agenda than The Star's. However, the global nature of the issue and the activity surrounding it, most of which occurred overseas, meant that both newspapers relied heavily on international news agency reports. The amount of articles could thus also signify the extent of dependence on agency news as opposed to direct coverage.

Three of the articles recorded for The Star were editorials, which carry greater weight as an indicator of importance than other articles. No editorials were noted for The Citizen. This suggests that The Star was more concerned about the issue than The Citizen.

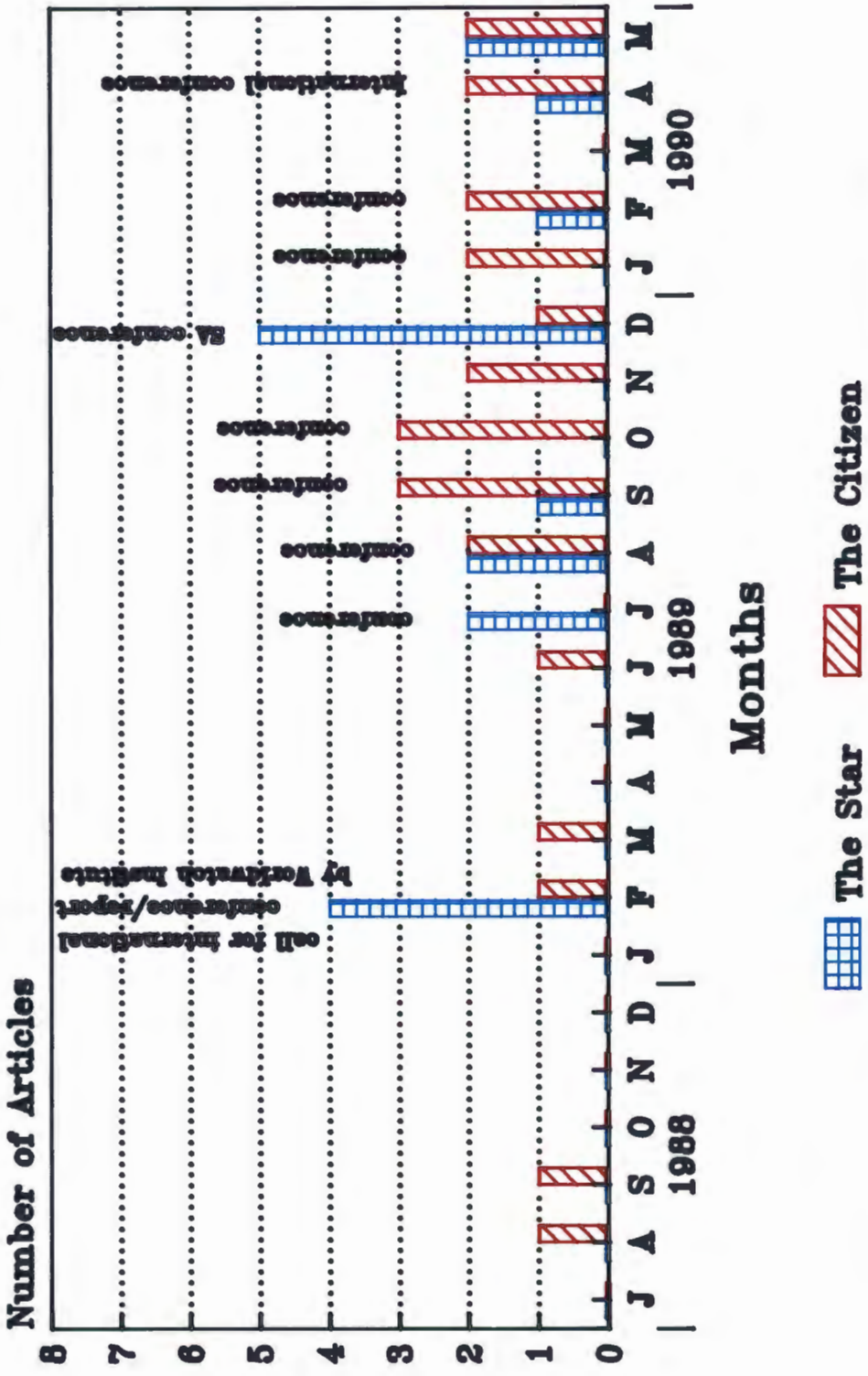
Eleven of The Star's articles (61%) were less than 50 column centimetres (col. cm.), as opposed to 22 of The Citizen's (92%). This suggests that the vast majority of The Citizen's articles were straight news reports. Seven of The Star's reports (39%) were longer, with three articles greater than 100 col. cm. The Citizen had two articles between 75 and 99 col. cm. long, with none recorded over 100 col. cm. The Star thus appears to have devoted a greater amount of space to feature articles, which tend to be more in-depth and signify a greater level of interest in the issue. The comparison of article sizes therefore suggests that although The Citizen carried six more articles than The Star, The Star devoted more space, and hence displayed a greater level of interest in the issue.

Table 5 : Global warming : number and size of articles

	STAR	CITIZEN
ARTICLE NO.	SIZE Col cm	SIZE Col cm
1	111	8
2	153	12
3	63	41
4	36	28
5	85	18
6	49	24
7	22	34
8	37	19
9	44	30
10	33	85
11	14	30
12	56	14
13	48	18
14	106	98
15	48	21
16	42	10
17	8	19
18	95	24
19		42
20		33
21		36
22		15
23		4
24		18
Total	1050	681
Min	8	4
Max	153	98
ARTICLE SIZE	No.*	No.*
1 - 24 col cm	3	14
25 - 49 col cm	8	8
50 - 74 col cm	2	0
75 - 99 col cm	2	2
100+ col cm	3	0
* Number of articles within that size range		

Figure 7 illustrates the development of the issue over the coverage period in both newspapers.

# Global Warming



**Figure 7 : Monthly coverage of global warming in The Star and The Citizen**

### 5.2.3.2 Thematic categories

The results of the global warming content analysis (thematic categories) for The Star and The Citizen are given in Table 6.

Table 6 : Global warming : thematic category scores

Category	Sub-category	Star (n=277)		Citizen (n=224)	
		No.*	%	No.*	%
Event	Fact	29	10.5	39	17.4
	Context	30	10.8	21	9.4
	Danger	73	26.4	61	27.2
	Total	132	47.7	121	54
Response	Argument	17	6.1	28	12.5
	Justification	0	0	0	0
	Legal	1	0.4	1	0.4
	Total	18	6.5	29	12.9
Remedy	Calls	34	12.3	15	6.7
	Action	85	30.7	77	34.4
	Responsibility	11	4	16	7.1
	Timing	17	6.1	6	2.7
	Econ/Env	15	5.4	22	9.8
	Total	162	58.5	136	60.7
Miscellaneous		32	11.6	12	5.4
	Grand Total	344		298	

n = Total number of paragraphs scored.

\* = Number of codings allocated to that sub-category.

Note: The practice of double-coding results in figures greater than 100 percent. The grand total reflects the number of codings, which is more than the number of paragraphs.

These results are rearranged to illustrate the comparative ranking of categories and sub-categories for each newspaper, and provided in Table 7.

The ranking shows similar scoring percentiles between both The Star and The Citizen for the primary categories, with Remedy scoring the highest (58.5% and 60.7% of coverage respectively), then Event (47.7% and 54.0% respectively) and finally Response (6.5% and 12.9% respectively).

Table 7 : Global warming : thematic category ranking

Rank	Sub-Categories	STAR %	Rank	Sub-Categories	CITIZEN %
1	Action	30.7	1	Action	34.4
2	Danger	26.4	2	Danger	27.2
3	Calls	12.3	3	Fact	17.4
4	Misc.	11.6	4	Argument	12.5
5	Context	10.8	5	Econ/Env	9.8
6	Fact	10.5	6	Context	9.4
7	Argument	6.1	7	Responsibility	7.1
8	Timing	6.1	8	Calls	6.7
9	Econ/Env	5.4	9	Misc.	5.4
10	Responsibility	4.0	10	Timing	2.7
11	Legal	0.4	11	Legal	0.4
12	Justification	0.0	12	Justification	0.0
	Categories			Categories	
1	Remedy	58.5	1	Remedy	60.7
2	Event	47.7	2	Event	54.0
3	Response	6.5	3	Response	12.9

Note: The practice of double-coding produces percentage totals in excess of 100 percent.

The emphasis on the Remedy category arises from the nature of the 'event', which unlike the Sappi issue is not a discrete and geographically isolated occurrence. Rather, the issue of global warming is played out in terms of the actions and responses of experts and politicians debating both its actual and potential existence, the anticipated effects, and ways of forestalling the phenomenon. This usually took place at high-level conferences, which provided news pegs for the stories, as they constituted a form of 'event'. (As mentioned in section 4.6.1.2.3, the Remedy category is conceptually a form of response, but treated as a different category for the sake of analysis.)

The Event scores are next highest mainly because of the emphasis in the reports on the element of danger, the identification of the causes of the warming ('greenhouse' gases), and the contextual detail required to describe the warming process and effects.

The Response category scored very low relative to the other two, largely because of the absence of a single identifiable transgressor and hence the inapplicability of legal controls.

The highest scoring sub-category for both The Star and The Citizen was that of remedial Action (30.7% and 34.4% respectively). This usually consisted of coverage of conferences aimed at discussion of possible remedies and reports on research aimed at finding remedies. The high score of this sub-category is indicative of the event-orientation of the newspapers (the frequency news value), and serves to balance the emphasis on the Danger sub-category (see below). The presence at these conferences of high-ranking officials from a broad spectrum of nations suggests that the elite persons and elite nations news values are also operating.

The sub-category of Danger received the second highest scoring in both newspapers (26.4% for The Star and 27.2% for The Citizen). The dangers of global warming (the negative happening news value) were a central aspect of the newsworthiness of the issue, since many of the immediate effects were related to impacts on weather systems, and this is a news angle that readers will relate to (the meaningfulness news value).

The emphasis on the tangible effects of the phenomenon arises from the inherent intangibility of the issue, and helps to make the issue more meaningful for readers. The element of danger is represented as the motivating factor for the activity regarding the issue, and also provides the justification for writing the articles. Thus the element of danger provides one of the main news values for coverage.

The score ranking for the remainder of the sub-categories in the different newspapers differs markedly. While The Citizen gives more factual information regarding the issue itself (17.4% as opposed to The Star's 10.5%), The Star emphasises calls for remedial measures (12.3%, almost double The Citizen's 6.7%).

The Citizen focuses more on the Argument sub-category - the controversial aspects of the issue (12.5%) - than The Star (6.1%). The controversy centres around two main elements: the responsibility of different countries for reducing greenhouse gas emissions, and disputes about the reality of the global warming phenomenon. The Citizen's focus on the controversial elements parallels its greater focus on the Economic sub-category (9.8% as opposed to The Star's 5.4%), since the reduction or elimination of greenhouse gas emissions imposes a heavy economic burden, and disputes arose between First and Third World countries regarding joint responsibility for that burden.

This latter instance is likely to be linked with the sub-category Responsibility (for effecting a remedy), which was scored more highly in The Citizen (7.1%) than The Star (4.0%). The greater emphasis by The Citizen on these sub-categories (Argument, Responsibility and Economic) suggests a more thorough coverage of the issue by The Citizen than by The Star. However, The Star has a greater emphasis on Calls for remedial measures (see above). These rankings suggest that both newspapers consider the issue to be important, and to have significant news value.

Both newspapers give a similar amount of contextual information (10.8% in The Star and 9.4% in The Citizen). These figures arise from the scientific nature of the issue, which requires clarification for the lay reader.

As in the Sappi issue, The Star's score in the Miscellaneous category (11.6%) is higher than The Citizen's (5.4%). This is attributable to The Star's use of feature articles, which contained two forms of 'miscellaneous' material. Firstly, the reports were at times introduced with descriptive but unrelated historical detail. Secondly, discussion of the global and widespread effects of global warming provided a news peg for discussion of threats to other ecological systems, such as water pollution and soil erosion, which do not form part of this study. While this approach lends itself qualitatively to a more holistic environmental coverage, the information is not part of the categorial structure for the quantitative content analysis.

Similarly, the Miscellaneous scores for The Citizen were provided in instances where reporters had used comments about global warming by leading personages as news pegs for unrelated material. These usually took the form of straight news reports. This practice suggests a reliance on the elite persons news value in these instances.

The greatest similarity in coverage between the two newspapers occurred with the global warming issue. This may indicate a more cautious approach to coverage in the face of scientific uncertainty regarding the phenomenon.

### 5.2.3.3 Source use

Source distribution is indicated in Table 8. The articles in both newspapers show a heavy reliance on official and scientific sources. This is probably because of the complex scientific nature of the issue, which requires clarification by experts, and the economic and global implications of effecting a remedy, which demands attention by government decision-makers.

Table 8 : Global warming : source use

Sources	STAR (n=153)		CITIZEN (n=105)	
	No.*	%	No.*	%
Govt (GN)	32	20.9	16	15.2
Govt (GC)	27	17.6	26	24.8
Experts	86	56.2	48	45.7
Cnsrvnsts	6	3.9	9	8.6
Industry	2	1.3	2	1.9
Public	0	0	4	3.8
Total	153	99.9	105	100

n = Total number of paragraphs attributed to sources.

\* = Number of paragraphs attributed to that source.

Key: Govt (GN) = Government (non-conservation)  
Govt (GC) = Government (conservation)  
Cnsrvnsts = Conservationists (interest groups)

## 5.2.4 Atmospheric ozone depletion

### 5.2.4.1 Number and size of articles

These are presented in Table 9. Twenty ozone articles were recorded for The Star (between 6 August 1988 and 12 May 1990 inclusive), and twenty-three for The Citizen (between 26 July 1988 and 9 May 1990 inclusive), suggesting that the issue features roughly the same on each newspaper's agenda. As in the coverage of global warming, most of the articles were sourced from international news agencies, for the same reasons, and this raises the same uncertainty whether differences in the amount of coverage could result from differences in news agency reliance.

Table 9 : Atmospheric ozone depletion : number and size of articles

ARTICLE NO.	STAR	CITIZEN
	SIZE Col cm	SIZE Col cm
1	113	27
2	64	15
3	20	30
4	26	20
5	7	11
6	23	21
7	38	18
8	50	36
9	59	63
10	32	28
11	23	48
12	90	27
13	15	38
14	19	35
15	16	28
16	35	26
17	23	12
18	4	25
19	16	43
20	67	24
21		21
22		24
23		53
Total	740	673
Min	4	11
Max	113	63
ARTICLE SIZE	No.*	No.*
1 - 24 col cm	10	9
25 - 49 col cm	4	12
50 - 74 col cm	4	2
75 - 99 col cm	1	0
100+ col cm	1	0

\* Number of articles within that size range

The Star carried two editorials on the issue during the study period, while The Citizen carried none. This suggests a greater concern for the issue by The Star editors than The Citizen's.

Fourteen of The Star's reports (70%) and 21 of The Citizen's (91%) were less than 50 column centimetres (col. cm.), suggesting a reliance by both newspapers on straight news items. The Star showed a greater tendency to cover the issue in longer, feature-style stories, however. The longest article was 113 col. cm., compared to The Citizen's, which was 63 col. cm. This suggests a greater interest in, and commitment to, the issue by The Star than The Citizen.

Figure 8 illustrates the development of the issue over the coverage period in both newspapers.

# Atmospheric Ozone Depletion

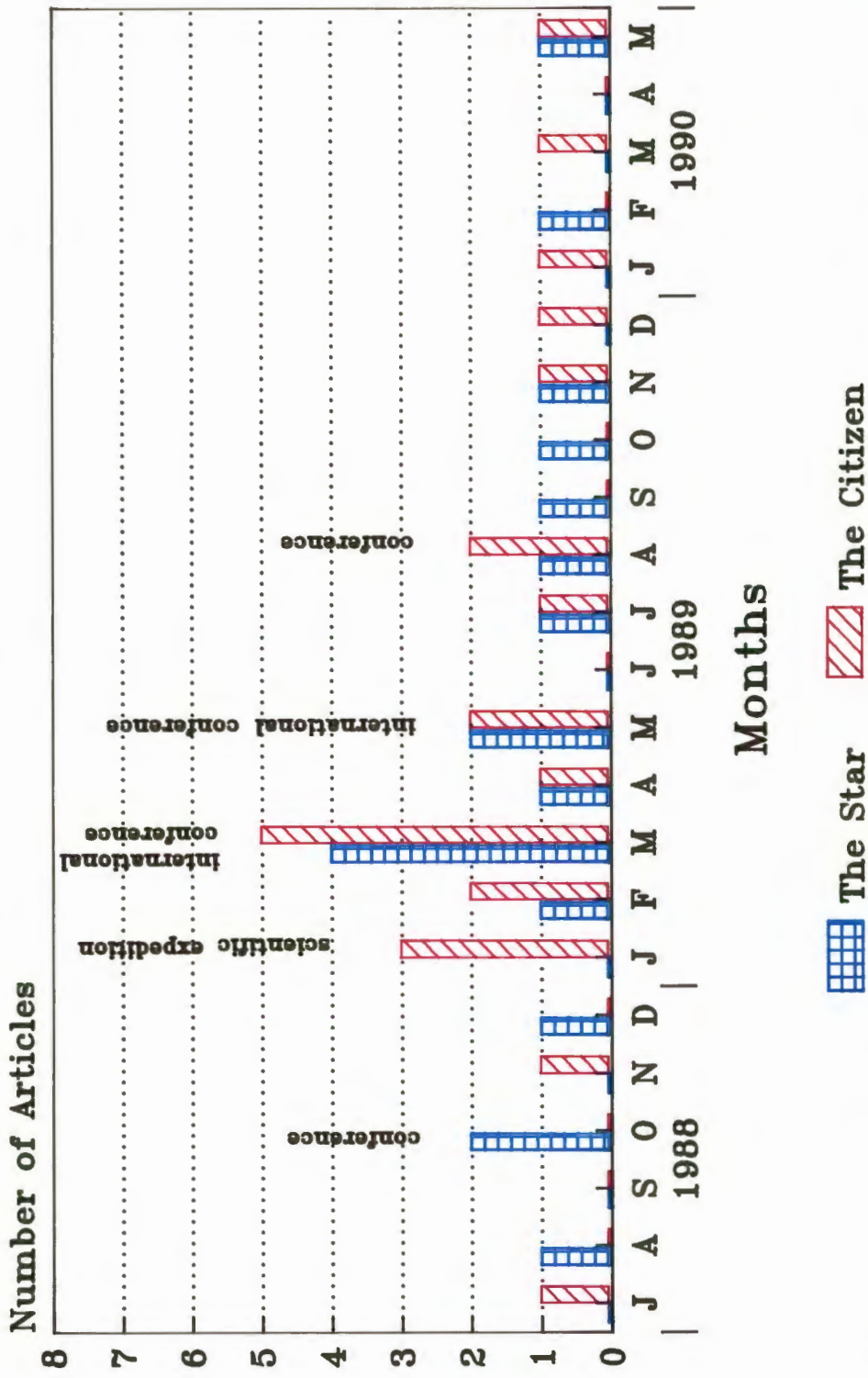


Figure 8 : Monthly coverage of atmospheric ozone depletion in The Star and The Citizen

### 5.2.4.2 Thematic categories

The results of the ozone depletion content analysis (thematic categories) for The Star and The Citizen are represented in Table 10.

Table 10 : Atmospheric ozone depletion : thematic category scores

Category	Sub-category	STAR (n=223)		CITIZEN (n=216)	
		No.	%	No.	%
Event	Fact	42	18.8	45	20.8
	Context	32	14.3	53	24.5
	Danger	38	17	41	19
	Total	112	50.1	139	64.3
Response	Argument	12	5.4	6	2.8
	Justification	0	0	0	0
	Legal	0	0	3	1.4
	Total	12	5.4	9	4.2
Remedy	Calls	17	7.6	14	6.5
	Action	95	42.6	76	35.2
	Responsibility	5	2.2	8	3.7
	Timing	19	7.6	14	6.5
	Econ/Env	17	7.6	5	2.3
	Total	153	67.6	117	54.2
Miscellaneous		12	5.4	1	0.5
	Grand Total	289		266	

n = Total number of paragraphs scored.

\* = Number of codings allocated to the sub-category.

Note: The practice of double-coding results in figures greater than 100 percent. The grand total reflects the number of codings, which is more than the number of paragraphs.

These results are rearranged to illustrate the comparative ranking of categories and sub-categories for each newspaper, and provided in Table 11.

The categorial ranking for the ozone depletion issue does not correspond for both newspapers as it did for the Sappi and global warming issues. The Star places the greatest thematic emphasis on the Remedy category (67.6%), while The Citizen emphasises the Event category (64.3%). The Star carries the Event category second (50.1%), and The Citizen has the Remedy category second (54.2%).

Table 11 : Atmospheric ozone depletion : thematic category ranking

Rank	Sub-categories	STAR %	Rank	Sub-categories	CITIZEN %
1	Action	42.6	1	Action	35.2
2	Fact	18.8	2	Context	24.5
3	Danger	17.0	3	Fact	20.8
4	Context	14.3	4	Danger	19.0
5	Timing	8.5	5	Calls	6.5
6	Calls	7.6	6	Timing	6.5
7	Econ/Env	7.6	7	Responsibility	3.7
8	Argument	5.4	8	Argument	2.8
9	Misc	5.4	9	Econ/Env	2.3
10	Responsibility	2.2	10	Legal	1.4
11	Justification	0.0	11	Misc.	0.5
12	Legal	0.0	12	Justification	0.0
	Categories			Categories	
1	Remedy	67.6	1	Event	64.3
2	Event	50.1	2	Remedy	54.2
3	Response	5.4	3	Response	4.2

Note: The practice of double-coding produces percentage totals in excess of 100 percent.

A discussion of the differences between The Star and The Citizen in the Event and Remedy categories is best undertaken by assessing the sub-category score distribution.

Both newspapers focussed primarily on the remedial Action sub-category, though The Star (42.6%) more than The Citizen (35.2%). This primary focus occurred because, as in the global warming issue, much of the reported activity regarding ozone layer depletion took the form of international conferences aimed at finding solutions, which provided news pegs for stories (the elite persons and elite nations news values).

While the next three ranked sub-categories (Fact, Danger and Context) differ in their scoring order between the two newspapers, all three comprise the Event category. In both newspapers these four initial scores are substantially greater than the rest of the sub-categories.

The difference between the global warming and ozone depletion issues lies in the discovery of a 'hole' in the ozone layer over the Antarctic in 1982 (confirmed finally in 1984). This provides a tangible element to the issue, since the 'hole' can be visualised, using specialised technology. The concept of a 'hole' helps the lay person to envisage something material that is able to sustain visible damage, and makes it easier for journalists to communicate the significance of the issue.

The 'holing' of the ozone layer thus provides a core form of event, giving rise to extensive factual detail regarding fluctuations in the size of the 'hole' (contributing, to a limited extent, to the **unambiguity** news value). This may account for the high scoring of the Fact sub-category (18.8% for The Star and 20.8% for The Citizen). In addition, the cause of the damage (chlorofluorocarbon compounds) is identifiable and consists of a single group of chemical compounds. The cause is thus not as diffuse as that of global warming, with the multitude of 'greenhouse' gases.

The Danger sub-category is scored fairly highly (17% of The Star's coverage and 19% of The Citizen's) because it suggests the significance of the ozone 'hole' and the reason for the reported remedial activity, and because the potential harm to humans is fairly easily understood and communicable to readers. Coverage tends to focus on immediate human impacts, such as skin melanomas, while very little is reported on the more widespread and higher order impacts. This suggests that the issue is over-simplified in coverage. The Danger sub-category also provides a strong news angle for the stories (the **negative happening** news value).

The high scoring for the Context sub-category (14.3% for The Star and 24.5% for The Citizen) reflects the scientific nature of the issue, which calls for clarification in every article. The difference between the two newspapers results from The Citizen's emphasis on factual information surrounding the 'event'. As a sub-category of the Event category, Context is also the main contributor to the difference in ranking in the Remedy and Event categories between the two newspapers. Thus, while The Citizen's coverage of the issue appears to be focussed on discussion of what ozone degradation is, and fluctuations in the size of the ozone 'hole' - a neutral approach - The Star shows concern for the issue by emphasising remedial measures.

The sub-categories of Timing (time within which to effect a remedy) and Calls (for remedial action) are ranked fifth and sixth in both The Star and The Citizen. While their score values do not vary greatly between the two newspapers, and are not substantial, they are both sub-categories of Remedy, and their ranking reflects the representation in the articles of the urgent need for a solution.

Both newspapers stress the Response category least (5.4% and 4.2% respectively). The substantial difference between the Response category scores, and those of the Event and Remedy categories, reflects the fact that discussions aimed at remedial measures constituted the primary response to the issue by politicians and scientists,

while research into, and development of alternatives to chlorofluorocarbons (remedial Action) form the response by industrialists.

The three sub-categories of the Response category (Argument, Justification and Legal) received low scores for the following reasons: the world-wide use of chlorofluorocarbons (the cause of the damage) by a multitude of industries means that no individual organisation can be held responsible for their proliferation; likewise, no single industry would attempt to justify having used them, since until the discovery of the impact of the chemical compound on the ozone layer, chlorofluorocarbons were considered to be of great benefit to industry and the public (as producers and consumers of products using the compound); for the same reason, statutory legislation restricting chlorofluorocarbon use did not exist.

#### 5.2.4.3 *Source use*

The distribution of source frequency scores is presented in Table 12. The greatest difference between the newspapers is in the official Government (non-conservation) and Industry categories. The Star, while focussing on central government sources, has also emphasised the viewpoints of industrial and commercial representatives.

This is probably because while the global nature of the issue demands official remedial measures, the enactment of those measures lies in the hands of the manufacturers and marketers of chlorofluorocarbon substances and products. The latter group are best able to provide information regarding the rate of technical adaptation. The Citizen's reports rely more heavily on political sources, which relates to their greater focus upon factual information and suggests a more neutral stance.

These differences suggest that The Star, while highlighting the role of official sources in coordinating global consensus to reduce or eliminate chlorofluorocarbons, has also focussed on the practical means whereby this can be, and is being, effected by industry. In this way, The Star's coverage indicates a more in-depth approach to an environmental remedy, and suggests a greater concern for the issue. The Citizen's lesser focus on the industrial response in turn suggests a lower level of concern. The greater focus on official sources by The Citizen suggests that the status of these sources (the elite persons news value), and *their* concern, contributes to the news value of the issue for the newspaper.

Table 12 : Atmospheric ozone depletion : source use

Sources	STAR (n=98)		CITIZEN (n=116)	
	No.*	%	No.*	%
Govt (GN)	26	26.5	49	42.2
Govt (GC)	13	13.3	15	12.9
Experts	35	35.7	42	36.2
Cnsrvnsts	3	3.1	4	3.4
Industry	20	20.4	6	5.2
Public	1	1	0	0
Total	98	100	116	99.9

n = Total number of paragraphs attributed to sources.

\* = Number of paragraphs attributed to that source.

Key: Govt (GN) = Government (non-conservation)  
Govt (GC) = Government (conservation)  
Cnsrvnsts = Conservationists (interest groups)

### 5.2.5 Reliability test results

The method and results of the reliability coding are provided in Appendix E. The double coding results showed an 85% correlation. This falls within the generally accepted correlation minimum of .75 for a content analysis (Budd et al, 1969; D. Wigston, Department of Communication, UNISA, pers. comm.). The reliability of the quantitative content analysis results is therefore believed to have been established.

### 5.2.6 Summary : quantitative results

#### 5.2.6.1 Main points

The mean score rankings for all three issues together was excluded, for the following reason: the comparison of one essentially hard news issue (the Sappi effluent spill), which is contained in both space and time, with two 'softer' issues which are global and ongoing (ozone depletion and global warming), means that to collapse the results of all three may result in over-simplification and some distortion.

Instead, this section summarises the main points to emerge from the quantitative content analysis. Section 5.1.6.2 lists the main news values that appear to have operated for both newspapers during coverage.

The combined results for all three issues (thematic categories) in both newspapers is given in Table 13.

Correspondence analysis, a 'perceptual mapping' multivariate technique (Greenacre, 1984) is used to graphically display patterns in the results. The advantage of the Perceptual Map is that it shows the 'best fit' position of each of the categories and sub-categories, without making any assumptions about the data.

The percentages on the axes of the Perceptual Maps indicate the intensity of any vector by giving the proportional influence of each axis, and the sum of the percentages shows what proportion of the data is explained when compressed into a two-dimensional graph (Preston, 1989). The maps illustrate how the approach taken by both newspapers in covering the Sappi issue (hard news) differs perceptively from those taken in covering the other two issues ('softer' news).

The element of danger was of primary news value for all three issues studied. In the Sappi issue it revolved around the damage already done, while coverage of the ozone and global warming issues stressed potential danger.

The controversy surrounding the Sappi spill proved highly newsworthy for both newspapers. While The Star focussed heavily on the irate reaction of the local residents, however, The Citizen stressed the official (legal) response, and remedial actions taken. This is also clearly reflected in their use of sources.

The Star's more controversial approach suggests a stance strongly in favour of the environment, and more sensational treatment of the issue. The Citizen's approach served a reassuring function for readers and mitigated the emotional impact of the spill. Local residents were excluded as sources. This suggests a more neutral approach to coverage, and a lesser interest in the environment.

In covering the global warming and ozone depletion issues, both newspapers focussed on remedial activities, mainly in the form of national and international conferences. The presence of senior politicians and officials at these conferences, and the reliance on these as sources by both newspapers, suggests that this contributed to the newsworthiness of the issues. The conferences provided news pegs for these issues. Coverage of remedial activities also served a reassuring function for readers, which balanced the emphasis on the danger theme.

Table 13 : Combined thematic category scores for all three issues

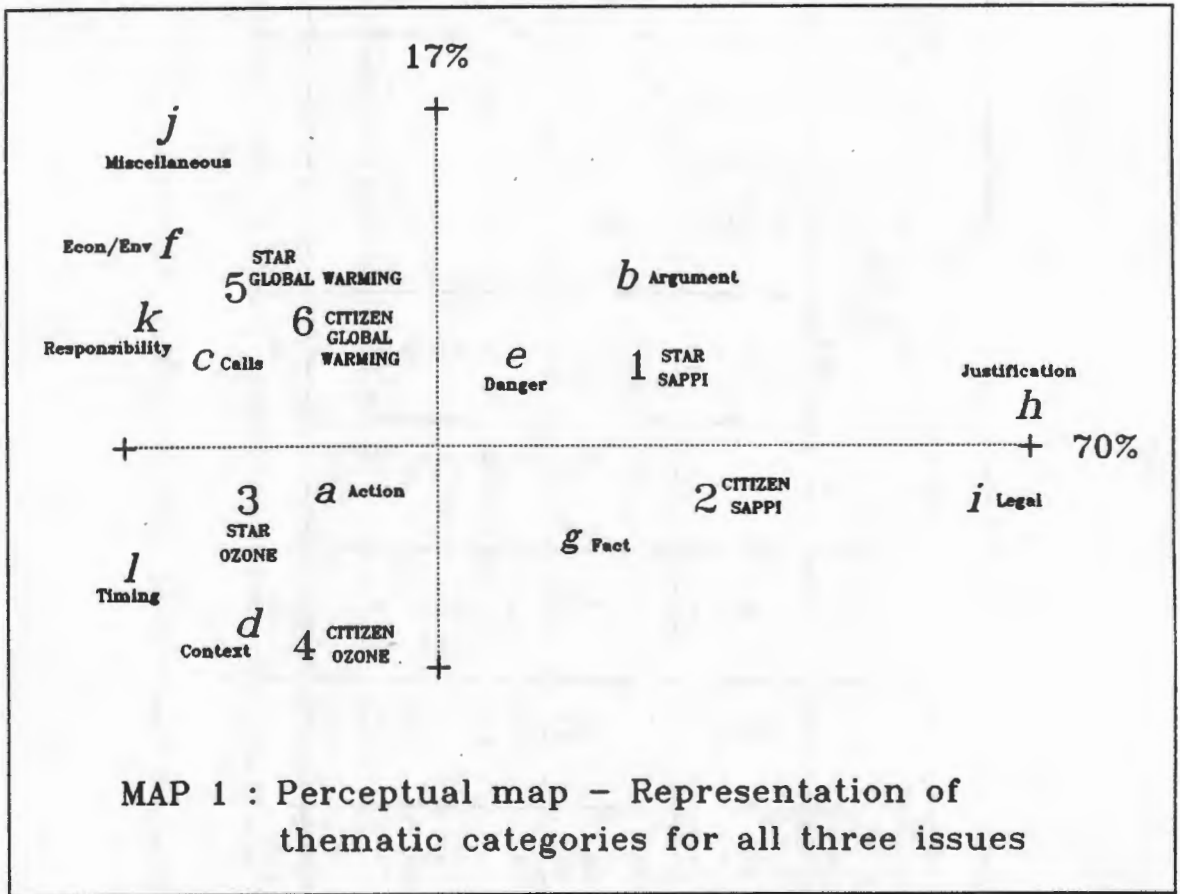
Category	Sub-category	THE STAR (n=786)						THE CITIZEN (n=545)					
		Ozone (n=223)		Global Warming (n=277)		SAPPI (n=286)		Ozone (n=216)		Global Warming (n=224)		SAPPI (n=105)	
		No.*	%	No.*	%	No.*	%	No.*	%	No.*	%	No.*	%
Event	Fact	42	18.8	29	10.5	77	26.9	45	20.8	39	17.4	36	34.3
	Context	32	14.3	30	10.8	25	8.7	53	24.5	21	9.4	2	1.9
	Danger	38	17	73	26.4	89	31.1	41	19	61	27.2	30	28.6
	Total	112	50.1	132	47.7	191	66.7	139	64.3	121	54	68	64.8
Response	Argument	12	5.4	17	6.1	65	22.7	6	2.8	28	12.5	17	16.2
	Justification	0	0	0	0	9	3.1	0	0	0	0	3	2.9
	Legal	0	0	1	0.4	28	9.8	3	1.4	1	0.4	16	15.2
	Total	12	5.4	18	6.5	102	35.6	9	4.2	29	12.9	36	34.3
Remedy	Calls	17	7.6	34	12.3	9	3.1	14	6.5	15	6.7	1	0.9
	Action	95	42.6	85	30.7	44	15.4	76	35.2	77	34.4	26	24.8
	Responsibility	5	2.2	11	4	1	0.3	8	3.7	16	7.1	0	0
	Timing	19	7.6	17	6.1	0	0	14	6.5	6	2.7	0	0
	Econ/Env	17	7.6	15	5.4	5	1.7	5	2.3	22	9.8	0	0
	Total	153	67.6	162	58.5	59	20.5	117	54.2	136	60.7	27	25.7
Miscellaneous		12	5.4	32	11.6	7	2.4	1	0.5	12	5.4	0	0
Grand Total		289		344		359		266		298		131	

n = Total number of paragraphs scored.

\* = Number of codings allocated to that sub-category.

Note: The practice of double-coding results in figures greater than 100 percent. The grand total reflects the number of codings, which is more than the number of paragraphs.

Map 1 illustrates the relative positions of the thematic sub-categories for all three issues.



Note how the Sappi coverage by both The Star and The Citizen are placed well to the right-hand side of Map 1 (numbers 1 and 2), illustrating how *Justification*, *Legal*, *Argument*, *Fact* and *Danger* were more to the fore here than in the coverage of the global warming or ozone issues. A more minor correlation is between the ozone issue (numbers 3 and 4) and *Action*, *Timing*, *Context*, and *Fact* on the one hand, and the global warming issue (numbers 5 and 6) and *Responsibility*, *Calls*, *Economics/Environment*, *Argument* and *Miscellaneous* on the other. This applies to both newspapers. Thus, the map illustrates that the similarities between the two newspapers with respect to these twelve aspects outweigh the differences between them. Both newspapers show a similar reliance on the same news values in covering these issues.

The Citizen focussed more on the factual and contextual information relating to the ozone 'hole', which suggests a neutral stance. The Star gave more attention to remedial measures, indicating a greater concern for the resolution of the issue. This was borne out by the newspapers' source use (illustrated in Map 2).

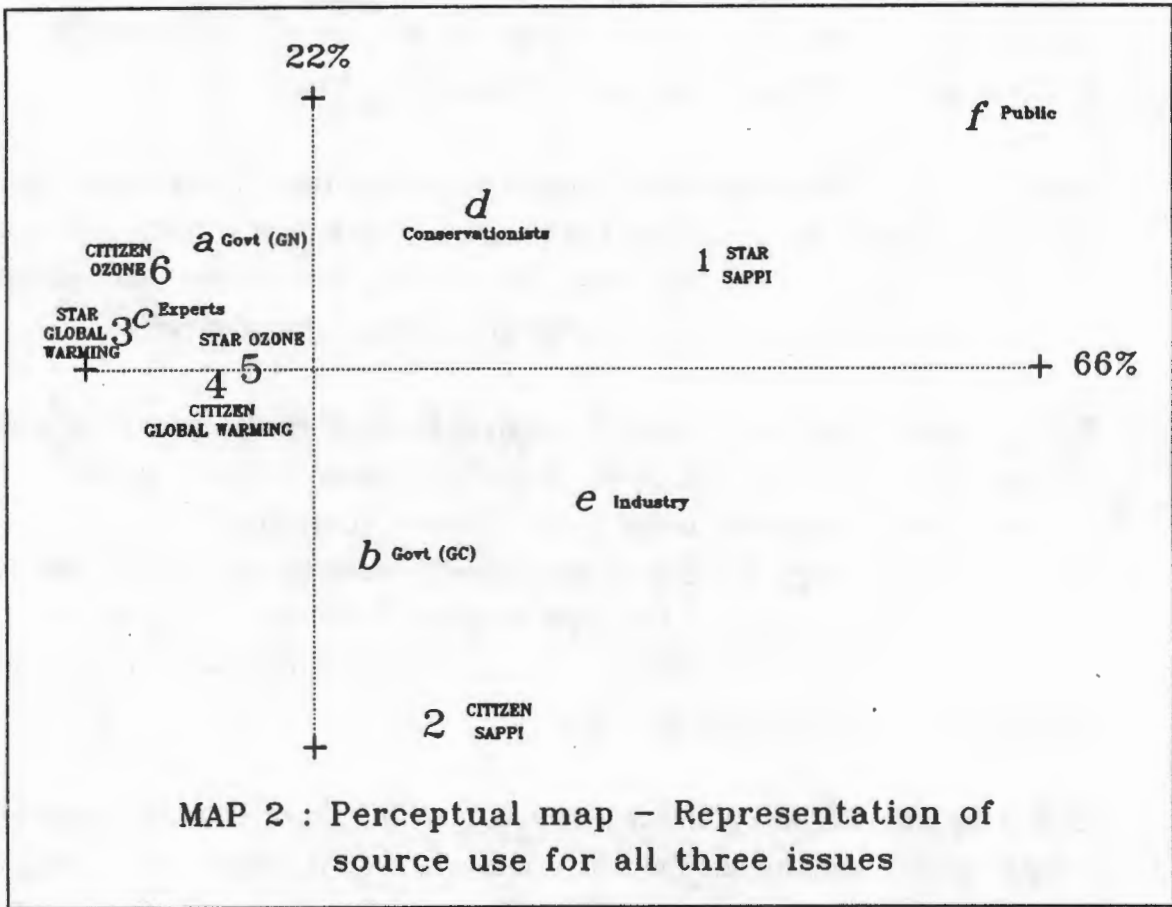
Both newspapers carried a substantial amount of orientational information (the Context sub-category) in the global warming and ozone issues, to explain scientific phenomena and natural processes to readers. This serves to increase the reader's understanding and so increase meaningfulness and diminish the ambiguity of the event.

Four of the sub-categories consistently received lower scores. These are Economics, Timing, Legal aspects (more prominent in the Sappi issue) and Responsibility. These sub-categories are linked in a complex and interrelated relationship. The relationship in the global warming and ozone issues - where these scores were lowest - revolved around the uncertainties and difficulties inherent in reorganising the existing and developing industrial structure of First and Third World countries so as to significantly reduce or eliminate noxious emissions.

One of the biggest factors in this reorganisation is cost, which relates to responsibility for effecting the remedy, and the time within which these remedies can be effected. Legal considerations received very little coverage in the ozone and global warming issues because of the inadequacy of legislation, particularly international law, and the cost of enforcement. In the Sappi issue however, legal ramifications were straightforward and easily reported, and thus received greater coverage.

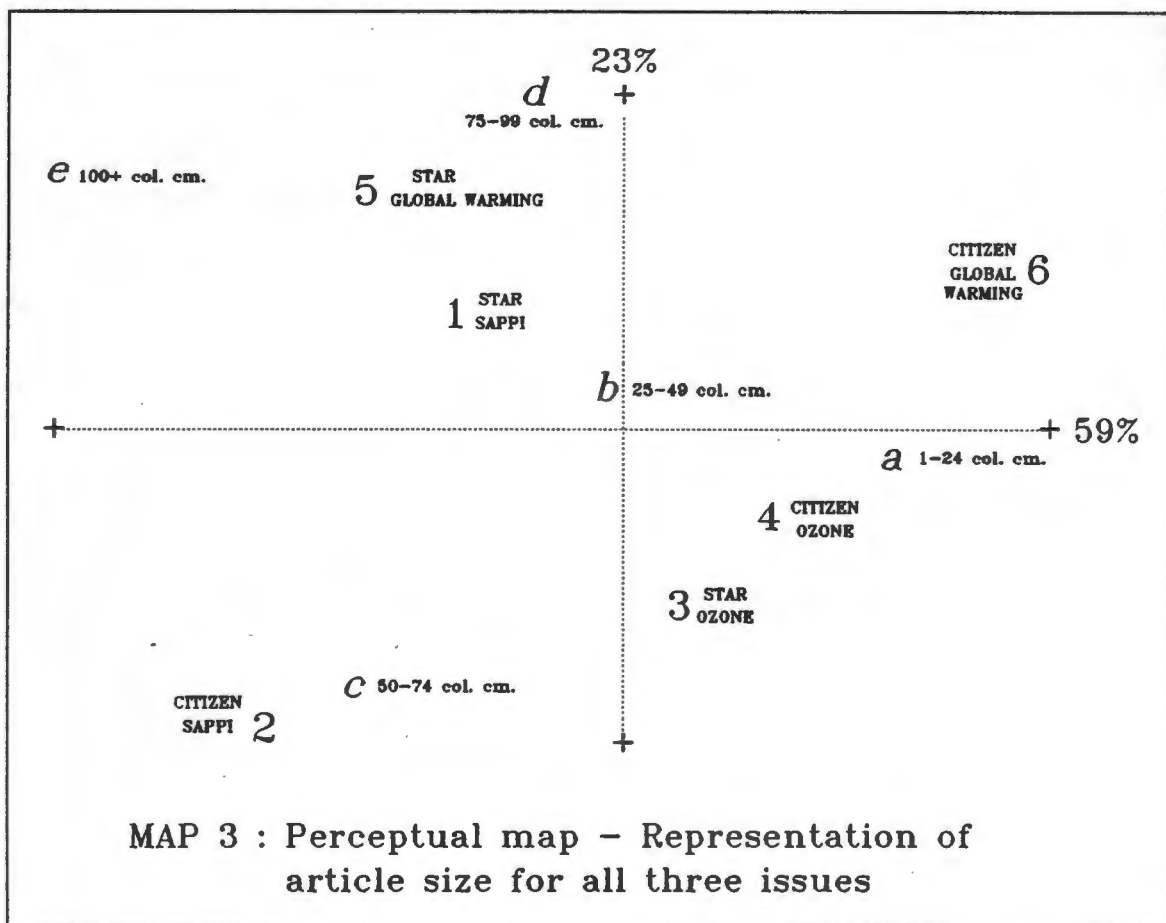
The central importance of these aspects when discussing solutions, particularly to global issues, makes their absence conspicuous, and suggests that the complexity of the atmospheric issues may have been simplified by both newspapers.

The greatest similarity in coverage between the two newspapers occurred with the global warming issue. This suggests a more cautious approach to coverage in the face of scientific uncertainty regarding the phenomenon.



Map 2 shows a strong difference in source use for the Sappi issue compared to the other two issues. A correlation occurs between The Star (number 1) and *Conservationists* and the *Public* on the one hand, and The Citizen (number 2) and *Government (GC : conservation)* and *Industry* on the other. This illustrates the preference by each newspaper for these sources, which conforms with the different approaches taken to coverage. The emphasis by both newspapers on *Government (GN : non-conservation)* and *Experts* in covering the ozone and global warming issues is indicated on the left-hand side of the map (numbers 3, 4, 5 and 6).

Although The Citizen published a greater number of articles for the global warming and ozone issues, The Star's articles tended to be longer. This suggests that The Star attributed a greater level of importance to these issues. The Star's coverage of the Sappi issue was far in excess of The Citizen's. These differences are clearly illustrated in Map 3.



Map 3 shows that the most coverage (in terms of the length of articles) was provided by The Star in covering the global warming and Sappi issues (numbers 1 and 5). The coverage of the ozone issue in both newspapers (numbers 3 and 4), along with The Citizen's coverage of global warming (number 6), showed a correlation, illustrating a predominance of shorter articles.

In all three issues, The Star's approach appeared to elicit a stronger bias in favour of the environment, while The Citizen's coverage tended to be more neutral. The Star carried editorials for each of these issues, while The Citizen did not, which supports this suggestion. Both newspapers clearly found the issues newsworthy however, and similar news values appeared to be operating in coverage by both newspapers.

### 5.2.6.2 *News values*

A number of the news values identified by Galtung and Ruge (1965) (described in section 2.6) appear to have operated in the coverage of environmental issues.

Galtung and Ruge (1965) identified these news values on the basis of coverage of general news. This suggests that for environmental issues to receive coverage, they would have to meet similar journalistic news value criteria as other categories of news. For this conclusion to be fully substantiated, however, it would be necessary to conduct a comparative content analysis of environmental issues and other issues covered by newspapers.

The three environmental issues in this study were selected because they had displayed the greatest 'peaks' in coverage during the study period, and were therefore presumed to be newsworthy. Environmental issues that are covered only occasionally or not at all may not have fitted in with existing journalistic criteria for newsworthiness, one of the strongest factors of which is compliance with existing news values. This would conform to Galtung and Ruge's (1965) 'exclusion hypothesis' (an event which is low on all factors will not become news).

The news values identified in the quantitative content analysis are listed below. They are not arranged in any order of importance.

#### **SAPPI**

*Frequency:* the spill occurred within the 24-hour time framework within which the newspapers operate, and thus conformed with the press' event-orientation.

*Unambiguity:* the effluent spill into the river was easy to understand and to communicate to readers.

*Threshold:* although the prosecuting court said that several smaller spills had occurred in the previous years, no record of them being covered was evident. The large numbers of visible dead fish however, constituted a 'threshold' of significance and contributed greatly to the newsworthiness of the issue.

*Elite person:* Sappi is a well-known and high profile company.

*Identifiable Person:* at no point in coverage was there any dispute or uncertainty as to the identity of the transgressor, and this made the issue easier to report, the relevant sources easier to identify, and contributed to the unambiguity of the issue.

*Negative Happening:* the very visible effects and consequences of the damage, in terms of the dead fish and the reactive measures of local officials in cutting off the water supply to towns provided useful indicators of the magnitude of the 'negativity' of the event.

*Consonance:* water pollution has received coverage in the press in the past, both sea pollution (for example the Exxon Valdez Alaskan oil spill of 1989) and river pollution, and the issue thus had an existing framework for coverage.

*Unexpectedness:* within this existing framework, the magnitude of the effects of the spill contributed to the unexpectedness of the event and made it more newsworthy.

*Meaningfulness:* the Eastern Transvaal Lowveld is a popular tourism area, well-known for its natural beauty. Any impact on the natural environment would therefore be of interest to readers outside the area as well as residents.

## GLOBAL WARMING

*Elite nations:* most of the activity surrounding the issue, in terms of calls for remedial measures and conferences, was undertaken on an international level by representatives of elite First World countries such as Britain and the United States.

*Elite people:* the representatives of these countries usually held senior positions in governments, either the heads of government (such as President Bush), or senior environmental government officials. Senior scientific representatives often provided credibility to discussions on the extent of global warming and research that should, or was being done.

*Consonance:* discussion in the media and among the general public over changes in weather patterns is an established topic. Before the global warming issue became heavily publicised, this revolved around discussion of the possibility of a new ice age. Public awareness of visible air pollution also makes it easier for reporters to describe 'greenhouse' gases as the causes of global warming.

*Negative Happening:* global warming also carries far more strident overtones of danger than the ice-age debate, even in the face of some scientific uncertainty, or perhaps because of it.

*Meaningfulness:* since global warming would affect all nations, readers are more likely to identify with it, and this contributes to the newsworthiness of the issue.

*Frequency:* while the global warming phenomenon *per se* is too diffuse and uncertain to comply with the frequency news value, the conferences debating the issue provided determinate 'events' which complied with the event-orientation of the press.

## OZONE DEPLETION

*Elite people:* the same applies as for global warming.

*Elite nations:* the same applies as for global warming.

*Consonance:* the issue of industrial air pollution is widely understood by the public, in the sense that air can be and is polluted, and existing air pollution is both visible and at times can be smelled. Public awareness of this provides a broad framework for coverage of ozone layer depletion, which is represented as an extreme consequence of air pollution.

*Unexpectedness:* the fact that chemicals present in such innocuous items as aerosol sprays and furniture foam should be able to affect the ozone layer several kilometres above the earth provides a surprise element that adds to newsworthiness. With the passage of time however, this value is probably less operative today than when the ozone 'hole' was first discovered.

*Negative Happening:* the global nature of the ozone issue means that the threat to it entails a threat to all people worldwide, and the issue thus has a magnitude of danger which makes it significant to everyone.

*Meaningfulness:* the global threat to all people means that readers will relate to it on a personal level, rather than viewing it as an issue relevant to another area or country. Readers have a vested interest in receiving information about the issue.

*Frequency:* the same applies as for global warming.

*Unambiguity:* the concept of a 'hole' helps to concretise what is otherwise an intangible issue not easily understood by the lay reader. Coverage of the development of the 'hole', and its implications for human health, helped to disperse much of the ambiguity surrounding the issue.

### 5.3 QUALITATIVE CONTENT ANALYSIS

#### 5.3.1 Introduction

Qualitative content analysis relies on a cumulative interpretation of the articles (Finn, 1978). The articles are therefore not considered whole and finite units of meaning in themselves, but are linked with others to assess the nature of themes and editorial bias as they/it develops throughout coverage of the issue.

The reasons for selecting the Sappi issue for qualitative analysis were given in section 4.5.3.

The primary aim of the qualitative analysis was to assess the existence and extent of editorial bias toward or against the viewpoints of the main actors in the Sappi issue. Indicators of editorial bias are given in section 4.7.2. A secondary aim was to consider ways in which the structure of the reports may have enhanced or diminished any of the themes identified in the quantitative analysis, to provide further information regarding news values.

#### 5.3.2 Background

In the early hours of Saturday morning, 23 September 1989, industrial effluent consisting largely of soap skimmings overflowed from a holding dam at the Sappi-Kraft paper mill on the Ngodwana river near Nelspruit in the Eastern Transvaal. The effluent entered the river and rapidly spread into the Elands and Crocodile rivers, killing large quantities of fish and other aquatic fauna. Nelspruit town council closed off the pipes drawing water from the Crocodile river on Sunday evening, leaving the townspeople to rely on water from the local dam for twenty-four hours. The pipes were re-opened on Monday evening, 25 September 1989.

Sappi acted swiftly to stem the spill, opening the sluices of the Ngodwana dam upstream of the spill to dilute the effluent, and contacting local Department of Water Affairs representatives. The first news report in The Star appeared on Tuesday, 26 September 1989, and was followed the next morning, 27 September 1989, by The Citizen.

The Star carried nineteen different articles in total, from 26 September 1989 to 21 May 1990, while The Citizen carried eight articles, from 27 September 1989 to 22 November 1989. The Star covered the issue in one editorial, The Citizen did not devote any editorial space to it. These preliminary factors suggest that The Star attributed a greater degree of newsworthiness to the issue than did The Citizen.

### 5.3.3 Detailed analysis

The focus in coverage of the Sappi issue in The Star and The Citizen newspapers developed around five overlapping thematic phases : the visible damage caused by the initial spill; the negative reaction of residents and officials; speculation and experimentation regarding the extent of the effects of the spill; the legal repercussions against Sappi; and the activities and progress of the Hey Committee (who investigated the spill).

The newspapers differed in the order and extent to which they explored these themes, but the coverage generally progressed along the above lines. The distribution of coverage of these general themes in The Star and The Citizen is illustrated in Figures 9 and 10 respectively. Source use cannot easily be separated from thematic development, and will therefore be discussed in conjunction with it.

The story broke as headline news in The Star on Tuesday 26 September 1989, three days after the spill. On the following day, The Citizen published the issue as the headline story, while The Star ran two news articles and an editorial.

# Sappi Effluent Spill : Thematic development in The Star's coverage

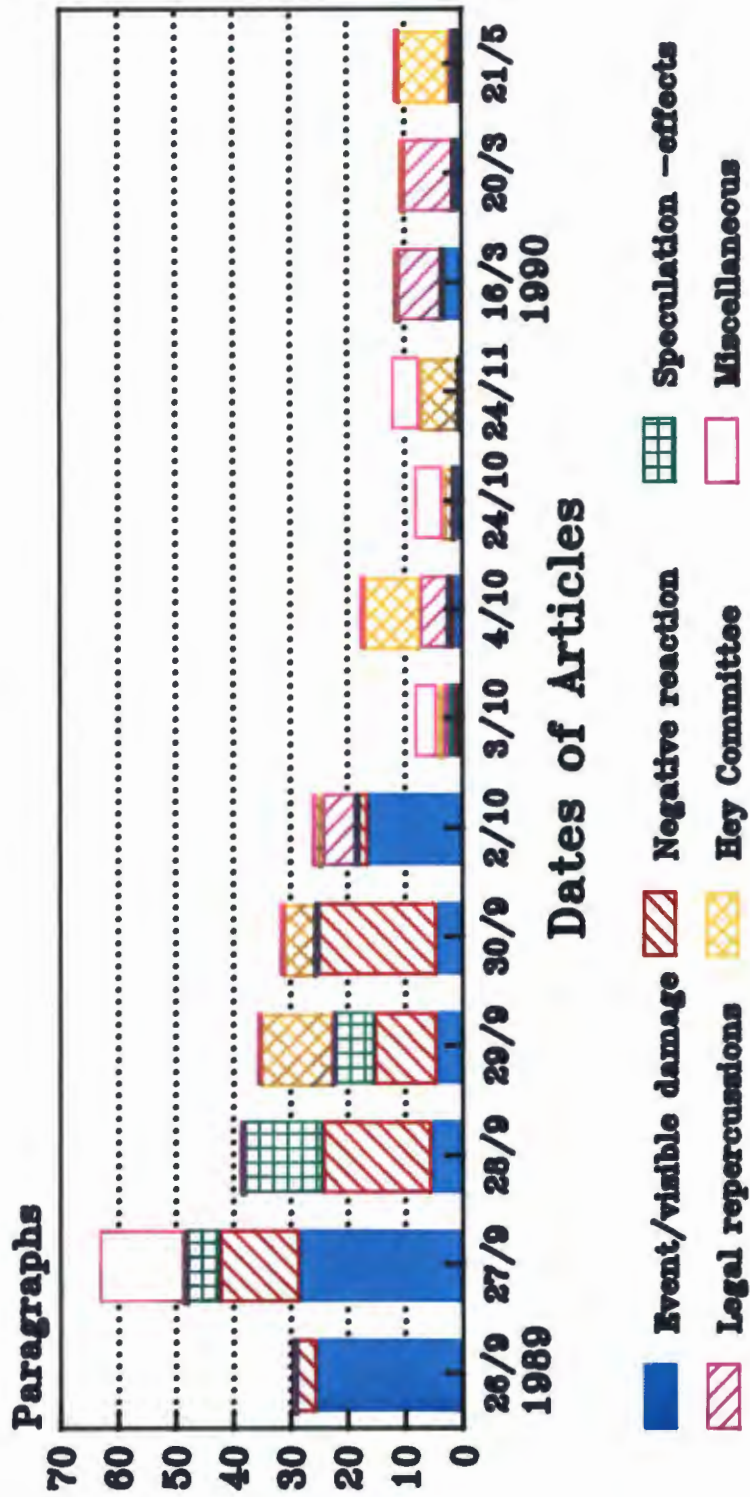


Figure 9

# Sappi Effluent Spill :

## Thematic development in

### The Citizen's coverage

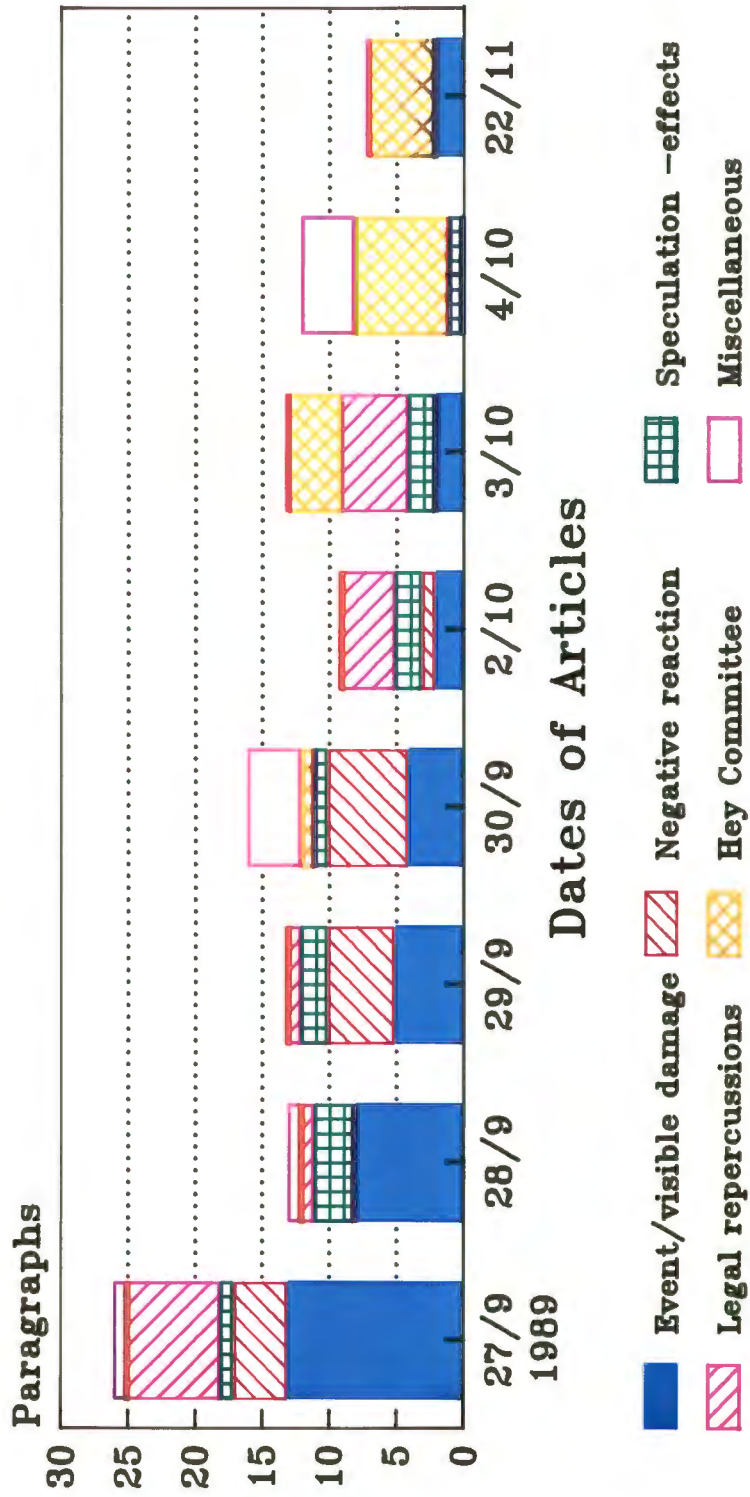
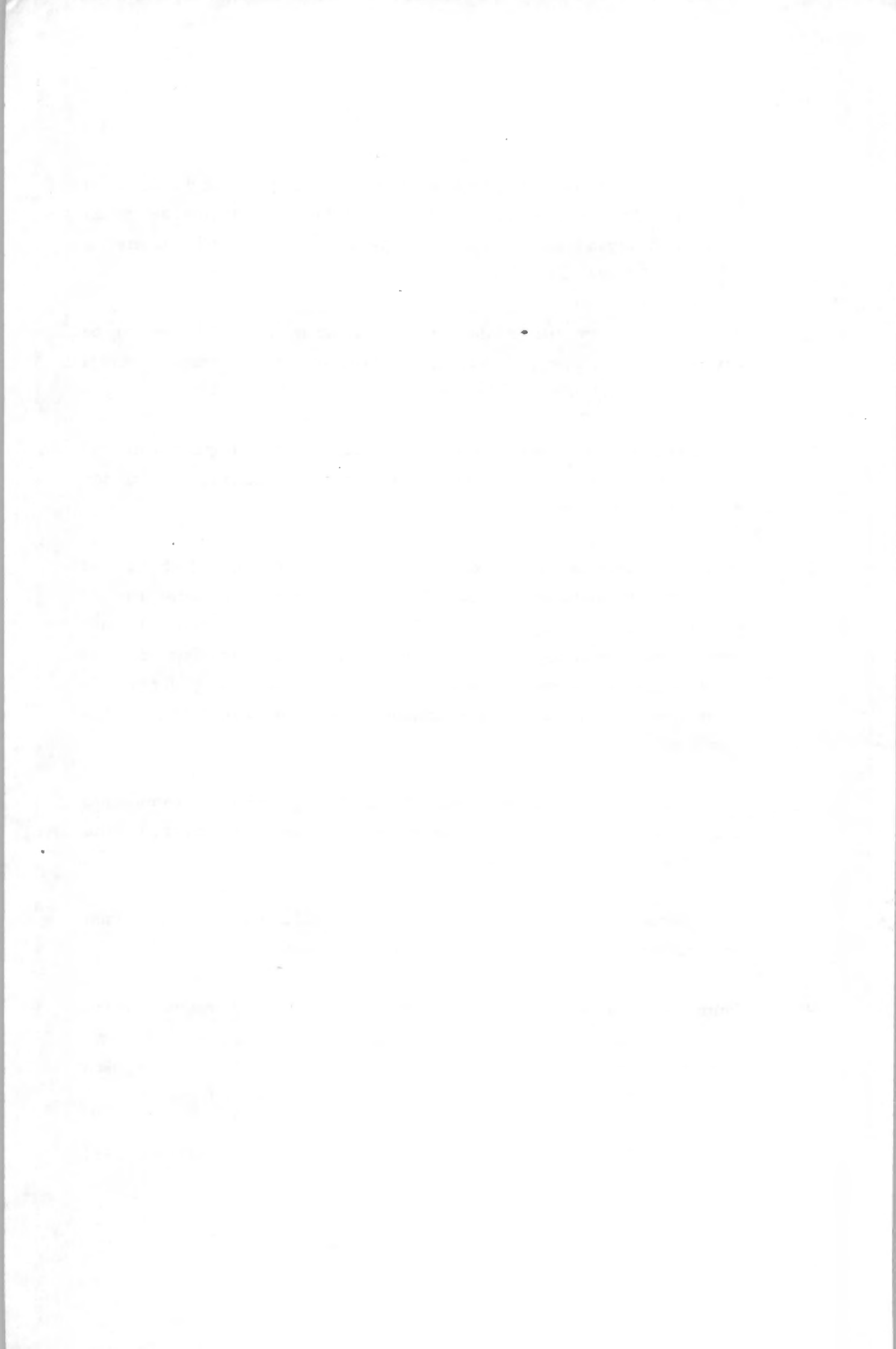


Figure 10



- vii) the material should be accompanied by a brief description of the identity of the submitting individual or organisation. In the latter case, some description of the organisation's function and activities should be provided, unless it is a well-known organisation.
4. Approach an individual in the news organisation who is known to be environmentally-oriented and to contribute to environmental coverage. If there is no such individual, approach the news editor or editor.
5. If possible, refer to coverage of a similar issue and link the material to it to encourage the newspaper to see it in terms of continuity with an issue(s) already defined as newsworthy.
6. Be aware of times of the year when some issues that are usually higher on the agenda are less prominent, for example when Parliament is in recession (What journalists call the 'silly season'). When other forms of news are low, environmental issues may have a greater chance of coverage. In addition, capitalise on those times when environmental news is receiving good coverage, for example if a newspaper is campaigning on environmental issues, and submit information at that time.
7. It may be useful for an individual to initially approach an environmental organisation that may support his or her argument, and to submit the material under the auspices of that organisation.
8. The material should not be seen as furthering the aims of a commercial organisation, or it may be viewed as an attempt to gain free advertising.
9. Journalists are unlikely to be accommodating to individuals or organisations that have wasted their time in the past, and this should be borne in mind. Conversely, if previous interaction with these has proved fruitful, the journalist is more likely to give time to what they submit, and credibility can be built up in this way.
10. If the material is simply expressing an opinion, the Letters page should be addressed.

## **SUGGESTED GUIDELINES FOR INTERACTION WITH THE PRESS**

The following guidelines for promoting environmental issues through the press were suggested by media personnel, and are presented here as a practical application of the findings of this study.

1. Select the newspaper(s) who distribute to the area where the issue takes place. If the relevant area is very localised, focus initially on small local newspapers, such as those distributed by Caxton Press, which are always looking for news in their areas. National newspapers occasionally pick up and develop stories that first appear in smaller newspapers. If the issue has relevance for the wider audience of a national or regional newspaper, approach those newspapers as well.
2. Identify those newspapers that have an environmental reporter or have showed an interest in environmental coverage in the past.
3. Be aware of the vast amount of material that journalists process daily, and present the information briefly and concisely, so as to make the least demands on the journalists' time. The following aspects should be considered :
  - i) the material should state clearly and concisely what is happening, or what the issue is about;
  - ii) the significance of the issue should be clearly given, and to whom it is significant;
  - iii) all relevant facts in support of the issue should be given, particularly if an individual or organisation is negatively portrayed in the issue;
  - iv) if possible, the facts should be supported by people of standing in the community, who can be quoted as credible sources by the newspaper. Alternatively, if information is supported by prestigious journals or publications, mention this;
  - v) any maps, diagrams or photographs necessary to clarify, support and/or enhance the issue should accompany written material;
  - vi) material presented in the form of a report by an organisation or research report should be accompanied by a short note indicating the page(s) which convey the crux of the report, and the relevant section(s) highlighted;

SUGGESTED GUIDELINES FOR INTERACTION WITH THE PRESS

1. Be prepared for the possibility of being interviewed at any time.

2. Know your own facts and figures.

3. Be honest and straightforward.

**APPENDIX F**  
**SUGGESTED GUIDELINES FOR INTERACTION**  
**WITH THE PRESS**

4. Do not speculate or guess.

5. Do not give out confidential information.

6. Do not make promises you cannot keep.

7. Do not get into arguments.

8. Do not be afraid to say "I don't know."

9. Do not be afraid to say "I will get back to you."

10. Do not be afraid to say "I will refer you to someone who can help you."

11. Do not be afraid to say "I will get back to you as soon as I can."

12. Do not be afraid to say "I will get back to you as soon as I can."

13. Do not be afraid to say "I will get back to you as soon as I can."

14. Do not be afraid to say "I will get back to you as soon as I can."

15. Do not be afraid to say "I will get back to you as soon as I can."

16. Do not be afraid to say "I will get back to you as soon as I can."

17. Do not be afraid to say "I will get back to you as soon as I can."

18. Do not be afraid to say "I will get back to you as soon as I can."

19. Do not be afraid to say "I will get back to you as soon as I can."

20. Do not be afraid to say "I will get back to you as soon as I can."

## RELIABILITY TEST RESULTS

Two coders scored the study articles independently of each other, using the same categorical and sub-categorical structure. The tests were conducted on the entire study sample, because of the relatively small size of the sample. Both coders are Journalism and Media Studies graduates.

The results were calculated on the basis of the differences between the scores of the first and second coders. The process of double-coding some paragraphs meant that where only one score of two differed for the same paragraph, a difference of 0.5 was entered. Where both scores differed, or there was only one score for the paragraph, and it differed, a difference of 1.0 was entered. These differences were added together and converted to percentages of the total scored paragraphs for each issue. The mean percentage for the scoring of all three issues was subtracted from 100.0 and this figure taken to be the overall correlation percentage. The results for the thematic categories are as follows:

Newspaper	Issue	No. of different scores	Difference	Correlation
			%	%
Star (n=286)	Sappi	39	13.64	86.4
Citizen (n=105)	Sappi	10.5	10.0	90.0
Star (n=223)	Ozone	35	15.7	84.3
Citizen (n=216)	Ozone	32.5	15.05	84.95
Star (n=277)	Global warming	40.5	14.62	85.38
Citizen (n=224)	Global warming	41.5	18.53	81.47
Total (n=331)		199.0	87.54	512.5
Mean		33.2	14.59	85.41

The difference mean of 14.59 percent indicates a coder correlation of 85.41 percent.

Sources were coded on the basis of a single criterion: that the paragraph was clearly attributed to a source, in the form of direct or indirect quotes, or information directly attributed to a source. Since the newspaper reports relied on clear identification of the source type (indicating which organisation or group the source represented), attribution was clearly indicated in each instance. This resulted in a 100 percent correlation for source categories between the two codes.

## APPENDIX E

### ESTABLISHMENT OF RELIABILITY

Item	Reliability
1	0.95
2	0.92
3	0.90
4	0.88
5	0.85
6	0.82
7	0.80
8	0.78
9	0.75
10	0.72
11	0.70
12	0.68
13	0.65
14	0.62
15	0.60
16	0.58
17	0.55
18	0.52
19	0.50
20	0.48
21	0.45
22	0.42
23	0.40
24	0.38
25	0.35
26	0.32
27	0.30
28	0.28
29	0.25
30	0.22
31	0.20
32	0.18
33	0.15
34	0.12
35	0.10
36	0.08
37	0.05
38	0.02
39	0.00
40	0.00

Sources	THE STAR						THE CITIZEN									
	SAPPI (n=155)		Ozone (n=98)		Global Warming (n=153)		Total (n=406)		SAPPI (n=67)		Ozone (n=116)		Global Warming (n=105)		Total (n=288)	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Govt (GN)	16	10.3	26	26.5	32	20.9	74	18.2	3	4.5	49	42.2	16	15.2	68	23.6
Govt (GC)	29	18.7	13	13.3	27	17.6	69	17.0	38	56.7	15	12.9	26	24.8	79	27.4
Experts	9	5.8	35	35.7	86	56.2	130	32.0	8	11.9	42	36.2	48	45.7	98	34.0
CNSRVNSTS	18	11.6	3	3.1	6	3.9	27	6.7	1	1.5	4	3.5	9	8.6	14	4.9
Industry	39	25.2	20	20.4	2	1.3	61	15.0	17	25.4	6	5.2	2	1.9	25	8.7
Public	44	28.4	1	1	0	0	45	11.1	0	0	0	0	4	3.8	4	1.4
Total	155	100	98	100	153	99.9	406	100	67	100	116	100	105	100	288	100

**APPENDIX D**

**SOURCE PERCENTAGE SCORES FOR ALL THREE  
ISSUES IN THE STAR AND THE CITIZEN**

## C.1

ARTICLE NO.	SAPPI		Ozone		Global Warming	
	Star	Citizen	Star	Citizen	Star	Citizen
	Col cm	Col cm	Col cm	Col cm	Col cm	Col cm
1	119	113	113	27	111	8
2	130	59	64	15	153	12
3	76	49	20	30	63	41
4	69	49	26	20	36	28
5	35	49	7	11	85	18
6	60	59	23	21	49	24
7	96	64	38	18	22	34
8	28	18	50	36	37	19
9	127		59	63	44	30
10	24		32	28	33	85
11	54		23	48	14	30
12	17		90	27	56	14
13	17		15	38	48	18
14	18		19	35	106	98
15	15		16	28	48	21
16	27		35	26	42	10
17	27		23	12	8	19
18	35		4	25	95	24
19	32		16	43		42
20			67	24		33
21				21		36
22				24		15
23				53		4
24						18
Total	1006	460	740	673	1050	681
Minimum	15	18	4	11	8	4
Maximum	130	113	113	63	153	98
ARTICLE SIZE	No.*	No.*	No.*	No.*	No.*	No.*
1 - 24 col cm	5	1	10	9	3	14
25 - 49 col cm	6	3	4	12	8	8
50 - 74 col cm	3	3	4	2	2	0
75 - 99 col cm	2	0	1	0	2	2
100+ col cm	3	1	1	0	3	0
* = No. of articles within that size range						

**APPENDIX C**

**NUMBER AND SIZES OF ARTICLES FOR ALL THREE  
ISSUES IN THE STAR AND THE CITIZEN**

### B.3

- Are news pegs for environmental issues difficult to find?
- How did your organisation find out about the Sappi spill initially?
- Why did the spill receive such prominent coverage?
- Does the Star/Citizen campaign on environmental issues?
- Why did the residential viewpoint receive strong/poor coverage in the Star/Citizen?
- If an environmental interest group wanted to co-operate with the press in such a way as to facilitate coverage of environmental issues, what would be the best way to go about it?
- What aspects of an environmental issue determine whether it is newsworthy or not?
- Are audience demands the central criterion for deciding what is newsworthy, or does the newspaper determine this autonomously?
- How do environmental stories fare in competition with other stories?
- Does environmental news tend to be defined as 'soft' news?
- Is environmental news generally used as a filler when other news is low?

#### **Sappi-Kraft Limited**

- What were the actual circumstances of the spill?
- How did the media find out about the spill?
- Do you think that, on the whole, Sappi's point of view was fairly presented in the press?
- How does the effluent control system at the mill operate?
- Did the media deal directly with Sappi in covering the issue?
- Was there any newspaper that you feel presented the issue in a balanced fashion?

#### **Lowveld resident**

- How did the press find out about the spill?
- How did the residents find out about the spill?
- You were quoted in press reports as being responsible for drawing up the petition. Is that correct?
- Do you think the petition was successful?
- Do you think the residents' viewpoints were sufficiently represented in press coverage?
- How did residents feel about Sappi before the spill?

## BASIC LIST OF INTERVIEW QUESTIONS

This list does not constitute all the questions asked. The unstructured approach to interviewing resulted in many questions being asked that arose from comments made by interviewees. However, the list does represent those basic questions on which the interviews were grounded.

### Press organisations

- How long have you been with the Star/Citizen/Sapa?
- How long have you been with the organisation in your present capacity?
- How do you perceive the role of your organisation?
- How would you define your responsibilities?
- Who writes the editorials for the Star/Citizen?
- Would you agree that environmental issues have received more coverage in the past few years?
- Why do you think the environment has become more newsworthy - what triggered it?
- Would you agree that the South African public has responded more to this 'wave' of environmental interest than to the first 'wave' in the early 1970's?
- Why do you think that is?
- Do you think the current interest in environmental issues is a passing 'fad'?
- Do you anticipate increased coverage in the Star/Citizen/Sapa in future?
- Where do environmental issues feature on the Star/Citizen/Sapa's agenda?
- What is The Star/Citizen/Sapa's policy on environmental coverage?
- What is about the ozone/global warming/Sappi issues that made them newsworthy?
- Could you define newsworthiness in general?
- What intra- or extra-organisational factors contribute to or detract from newsworthiness?
- Do you foresee a specialist field of environmental journalism developing in South Africa?
- Do you think that journalists regularly covering environmental issues should receive some form of environmental training?
- Would the Star/Citizen consciously take a stand against an environmental transgressor?
- What does the Star/Citizen stand to gain or lose from doing so?

## LIST OF INTERVIEWEES

### **The Star**

- Mr Harvey Tyson : Ex-Editor-in-chief  
Mr James Clarke : Assistant editor and environmental journalist  
Ms Paula Fray : General reporter (Head office reporter on the Sappi issue)  
Mr Clyde Johnson : Lowveld bureau reporter (Lowveld reporter on the Sappi issue)

### **The Citizen**

- Mr Poen de Villiers : News editor  
Ms Marguerite Moody : Ex-general reporter (reported on the Sappi issue)  
Mr Martin McGhee : General reporter

### **South African Press Association**

- Mr Edwin Linington : Editor

### **Sappi-Kraft Limited**

- Mr Barry Melrose : General Manager

### **Lowveld residents**

- Mr Johan de Waal : Responsible for drawing up and presenting petition from residents to Sappi-Kraft Ltd.

APPENDIX B

**APPENDIX B**  
**LISTS OF INTERVIEWEES AND**  
**INTERVIEW QUESTIONS**

**SECONDARY LIST**  
**ISSUES THAT EVINCED DISTINCT PEAKS IN COVERAGE**

1. Global warming
2. Litter
3. Deforestation (Amazon)
4. Atmospheric ozone depletion
5. Power generation - nuclear power
6. Dune mining - St Lucia
7. Toxic waste
8. Sea pollution - oil spills; plastic pollution
9. Sappi-Kraft paper mill effluent spill
10. Robberg Marina
11. PWV 3 highway
12. The proposed Knysna highway
13. Air pollution of the Eastern Transvaal Highveld
14. Lead in petrol

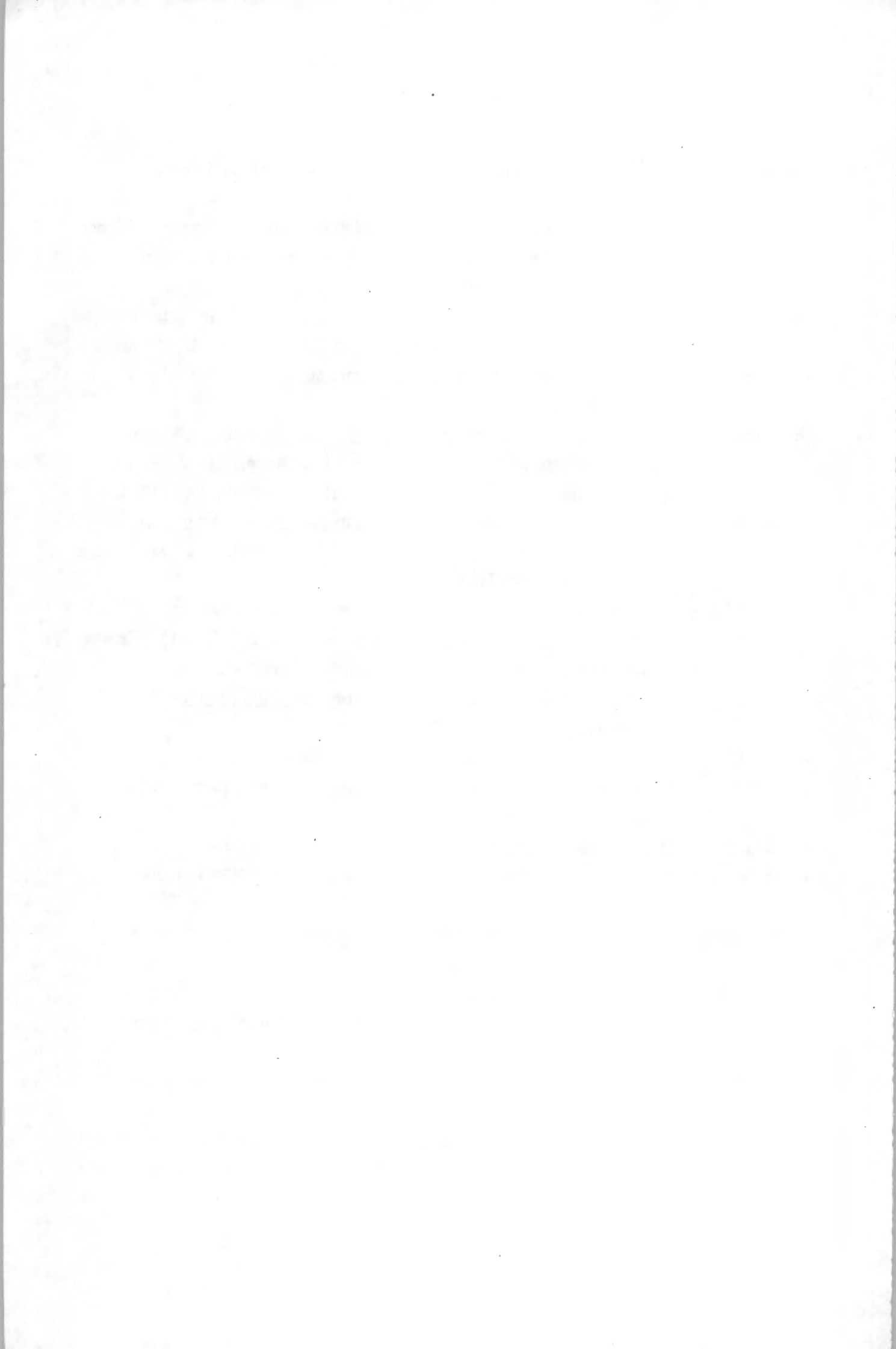
Not all of these showed strong peaks in coverage in both newspapers. Some issues, such as lead in petrol and the Robberg Marina, were reported in one of the newspapers but not the other.

24. Hunting - morality debate
25. Poaching
26. Air pollution of the Eastern Transvaal Highveld
27. Estuary degradation / conservation
28. Conservation efforts on Table Mountain
29. Toxic waste
30. Environmental protest meetings
31. Urban development
32. Degradation / conservation of False Bay
33. Climate change - general
34. Lead in petrol
35. Hiking trails
36. Overfishing:
  - calamari in Plettenberg Bay
  - general
37. Robberg Marina development
38. Nature / wildlife reserve changes
39. Cape fur seal culling
40. Pesticides
41. Environmental impact of homeland development
42. Elephant conservation
43. PWV 3 Highway (includes South Rd extension)

**PRIMARY LIST OF ISSUES COVERED****MAY 1985 - MAY 1990**

1. Overpopulation
2. Global warming
3. 'Green' consumerism
4. Deforestation:
  - the Amazon
  - local and general
5. Kaolin mining in the Cape
6. Atmospheric ozone depletion
7. Acid rain
8. Solid waste:
  - litter
  - disposal methods
9. Water pollution:
  - fresh water (Sappi-Kraft effluent spill)
  - sea water (oil spills; plastic pollution)
10. Political activities relating to environment
11. Threatened black rhino extinction
12. Soil degradation / erosion
13. Threats to the fynbos biome
14. Recycling
15. Alien encroachment:
  - vegetation
  - animals, insects and birds
16. Dune mining in St Lucia
17. Habitat change - general
18. The proposed Knysna highway
19. Use of drift nets
20. Power generation
  - dangers of fossil fuels
  - dangers of nuclear power
21. Environmental economic considerations
22. Coastal zone development / impacts
23. Degradation / conservation of the Cape Flats

**APPENDIX A**  
**PRIMARY AND SECONDARY LIST OF ISSUES**  
**COVERED MAY 1985 - MAY 1990**



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### **The role of the committed individual(s)**

The presence in the newspaper organisation of a key individual committed to environmental coverage is important. That individual is able to motivate for increased coverage, and to attempt to determine the significance of environmental trends. He or she is in a better position to point out newsworthy aspects of environmental issues to editorial staff.

Such an individual is also more likely to be open to motivation by environmentalists for coverage on different issues, or suggestions as to how an issue should be covered, and can act as a conduit for these suggestions to senior editorial staff.

## **7.3 RECOMMENDATIONS FOR FURTHER STUDY**

A comparative analysis of environmental issues (treated as a single category of news) and other news categories may cast additional light on the results of this study, by helping to locate the exact position of environment on the press agenda in relation to other issues.

This study focussed upon the press as communicators of environmental material. A natural corollary of this study would be an assessment of where the environment is positioned on the agenda of the readers of The Star and The Citizen, and whether reader perceptions of environmental coverage show a similar emphasis upon the news values highlighted by these newspapers.

An analysis of the extent to which environmental issues are related to other issues (that is, show integration) in coverage may be useful in encouraging the press to adopt a more holistic approach to environmental reporting.

An attitude survey of journalists and editors regarding environmental coverage would cast more light upon prevailing perceptions of the environment, and the perceived need for environmental coverage.

increases the number of pages in the newspaper. The greater amount of space is available, the wider the range of news categories that can be covered. Environmental issues tend to be lower on a newspaper's agenda than other issues and are more likely to receive treatment if more space is available.

#### **International economic trends**

The pressure on industry overseas to curtail environmentally damaging activities, and to produce more environmentally acceptable products, impacts on South African subsidiaries of international companies. The importing and development of more environmentally acceptable products in South Africa means that the South African public needs to be conditioned to buy those products, which gives rise to increased advertising with an environmental slant. This may encourage newspapers to increase their environmental coverage in order to attract those advertisers.

#### **The amount and type of other news**

Environmental news competes less successfully for space if there is a substantial amount of news that is higher on the newspaper agenda. Coverage of the socio-political developments taking place in South Africa at this time have tended to reduce coverage of environmental issues.

#### **'Competitive bind'**

Newspapers to some extent are influenced in their definition of what is newsworthy by what is published in other newspapers. The increased coverage of environmental issues in newspapers overseas has encouraged newspapers in South Africa to follow suit.

#### **Public awareness of environmental issues**

The lack of environmental education among the general public makes it more difficult and more risky for newspapers to cover environmental issues that are complex and outside the realm of the average person's daily experience. To attempt to enhance the public's environmental awareness requires long-term campaigning on the newspaper's part, which in turn demands the outlay of resources which the newspaper may or may not have.

coverage of issues with relatively few facets, few interrelations between the facets, and fitting into an existing journalistic mental framework, so that the significance of the issue can be communicated unambiguously. This reduces uncertainty about the accuracy of the interpretation and makes journalists less vulnerable to criticism. The structure of news articles in terms of prioritising information, and the constraints on space, also contribute to the tendency to simplify issues.

#### **Availability of accredited sources**

The scientific nature of many environmental issues lends credibility to scientists as one of the types of sources used. Many of these are employed in large bureaucratic organisations, and may have to get permission to speak to the press. Journalists may also have to work through official channels to find sources with the authority to speak to them, and this is time-consuming, which may act as a deterrent. Government sources are more accessible, and their interpretation may receive more coverage as a result.

In addition, the tendency for specialisation among scientific experts may make it difficult for journalists to find sources who are able to provide an overview interpretation of an environmental issue. Having found such individuals, they are more likely to continue referring to them, which reduces the scope for alternative perspectives.

The responsibility for environmental control in government tends to be distributed among a range of departments (Department of Environmental Affairs; Department of Water Affairs; Department of Health and Welfare, and others), and this presents the same difficulty for journalists.

However, environmental interest groups that acquire visibility through controversial activities are more accessible and are beginning to receive coverage because of their actions - which provide discrete 'events' - and because of their availability as sources.

#### **The health of the national economy**

A healthy national economy means that companies are able to provide more money for advertising, which boosts the newspaper's financial status and therefore

newspaper to provide in-depth analysis of issues in feature stories. This format is more favourable for environmental coverage. A newspaper that defines its role in terms of purely transmitting news (such as The Citizen) may tend to minimise feature stories and focus on a wider range of news stories. This does, however, also depend on the resources available to the newspaper.

#### **Resources of the newspaper**

A newspaper that is well-grounded economically with plentiful resources is more able to cover issues first hand, rather than relying on agency news, and to cover a wider range of issues. It is also able to allocate journalists to a wider range of 'beats', and to cover issues in greater depth. It is more flexible in confronting the range of daily constraints that arise in news reporting. A newspaper with fewer resources is forced to make more compromises, and to rely more heavily on agency news.

#### **Area of distribution**

A newspaper is oriented towards its audience. Issues that take place in its area of distribution are likely to be more relevant to its readers. The newspaper is therefore more likely to cover an issue, and in greater depth, that occurs in that area.

#### **The 'hardness' of news**

The more that a news item can be presented as a short-term, discrete event, with clear facts that are easily substantiated (that is, hard news), the more likely it is to be covered, particularly if it is defined as part of one of the categories of news already on the newspaper agenda. This is one reason why, in environmental reporting, the press gives the most coverage to environmental disasters. Likewise, this approach works against the coverage of long-term developments, which characterise issues such as soil erosion and other forms of gradual environmental degradation.

#### **Complexity of the issue**

Most environmental issues are complex in their ramifications and implications, and do not lend themselves to the journalistic need for simplicity. This need relies on

inform the public, and motivate them into action. For this reason it considers the newspaper as both a news medium and a forum for debate, and so carries a mix of news reports and more in-depth feature stories. This format is likely to prove more suitable for environmental coverage, which because of its complexity requires a greater level of investigative reporting than some other types of news. The Star's newspaper format suggests one reason why The Star's reports on the study issues tended to be longer than those of The Citizen.

Investigative reporting requires more time than general reporting, and means that a reporter must be freed to pursue that subject. Only newspapers that have plentiful resources (particularly journalistic staff) are able firstly, to assign a reporter to a specific news 'beat', and secondly to allow that reporter the time in which to investigate issues fully. In-depth environmental coverage may thus be a luxury some newspapers are unable to afford.

## 7.2 FACTORS OF INFLUENCE

The results of this study suggest that the following factors operate in influencing the coverage of environmental news in the two South African newspapers studied. It is suggested that all of the factors apply to both newspapers, though perhaps in different ways and to varying degrees at different times. For this reason the factors are not weighted or arranged in order of importance. It is not suggested that this list is definitive or complete.

### **Newspaper perception of its role**

The role the newspaper perceives itself as fulfilling in society, and the way in which it chooses to fulfil it, influences the range and position of subjects on the news agenda. The different perceptions of The Star and The Citizen in this regard were described in section 7.1.

### **Editorial policy**

Editorial policy is the means of fulfilling the newspaper's perceived social role, and dictates the newspaper's stance on social issues (including environmental issues) as well as the structure of the newspaper. A newspaper that sees itself as a forum for debate as well as a transmitter of news (such as The Star) will tend to structure the

environmental news is likely to compete more successfully for space against other news. For this reason, it appears that environmental news is higher on The Star's agenda at the present time than The Citizen's, though it is newsworthy for both newspapers.

A tendency by the press to over-simplify the full implications and ramifications of environmental issues was suggested by the study results. This probably occurs under the (intra-organisational) constraints of space and time, and the convention of the inverted pyramid report structure. However, the interviews revealed that the ability to discard 'superfluous' information and reduce an issue to its core components is considered part of the journalistic skill. It is also considered necessary in order to clarify communication to the reader. For this reason, formal environmental training was not considered necessary for environmental journalists, since this deductive skill could be used when dealing with environmental material as well.

This approach suggests that journalists are not fully conversant with the integrated nature of environmental considerations. Journalists may select from, and structure, the information received to conform to their pre-existing conceptual models of the environment. Since, according to the interviews, most journalists still regard environmental news as part of the wildlife and nature conservation news category (rather than the reverse), the complex inter-relationships with wider aspects of social existence are likely to be ignored, or receive only passing mention. This in turn means that the public remain uninformed (by newspapers) about the integrated nature of the environment.

The organisational structure of newspapers may to some extent also mitigate against a more holistic environmental coverage. The primary role of the gatekeeper means that even if journalists write articles which are more indicative of wider environmental effects, news editors and sub-editors may fail to appreciate the need for this approach, and may edit reports accordingly.

The way in which the newspaper defines its role in society, and the resources at its disposal to fulfil that function, dictate the structure of the newspaper. The Citizen sees its role as being to inform the public, and thus has a policy of providing the widest range of local and international news. As a result, the newspaper carries mostly short news reports, with very few feature articles. The Star sets out to

It is uncertain whether the same approach would have been adopted were this not the case.

In contrast, The Citizen stated that they had virtually ignored the residential perspective because they do not have a news bureau in the Lowveld, and had relied on official sources because these were more accessible. However, in the light of The Citizen's heavy emphasis on official sources in coverage of the ozone depletion and global warming issues, it appears that the newspaper generally finds these sources more credible. This suggests a more conservative approach to environmental coverage than The Star.

The press approach to source use may have consequences for environmental coverage. Newspapers that are more conservative in their reporting, and rely more heavily on accredited sources, will tend to interpret environmental issues according to those sources. However, the opinions of official sources (government representatives) reflect those of the bureaucratic organisations they work for, and are constrained by the policies and dictates of those organisations. This means that a more limited perspective of environmental redress is transmitted to readers, which underscores the earlier suggestion that the public may not perceive any need for individual action.

The results showed that The Star has a long-standing editorial bias in favour of environmental coverage, and a history of campaigning for environmental protection. This occurs in the context of a general editorial policy of 'championing the weak rather than the strong'. For The Star, therefore, editorial bias acts as a distinct 'factor of influence' in determining coverage. The Citizen displayed a neutral stance. Interviews revealed that The Citizen's editors did not consider environmental issues newsworthy (with the possible exception of wildlife issues) until 1988. Their coverage during the study period arose in response to growing public, commercial and industrial interest (an extra-organisational factor), and is expected to continue on that basis.

This suggests that environmental coverage will continue even if editors have no specific bias in favour of it, and that the environment has a more secure position on the newspaper agenda than in the past. Favourable editorial bias is thus no longer essential to get environmental issues onto the press agenda, but may still affect the type, amount and detail of environmental reporting. If that bias is present,

The fact that many environmental issues occur over a much longer time-span than that which conforms to newspaper deadlines, means that these issues (such as soil erosion, or urban deterioration) are likely to be neglected by the press. Environmental disasters, which are discrete, short-term events are more likely to be covered. It can be argued that coverage of natural disasters has the effect of keeping environmental issues on the press, and thus the public, agenda. The lack of frequent events of this nature, however, means that the position on the press agenda could remain low until such events occur.

The heavy focus on the more negative and sensational aspects of environmental issues may provide a negative image of the environment for readers. This could create the impression that environmental issues should only be considered important when they pose a threat to human existence or interests. In addition, once that specific danger is past, the issue could be seen as being resolved, and higher order impacts (often more long-term) ignored.

The emphasis on the controversial aspects of environmental issues also has implications for the public's perception of the environment. In the three issues studied, and particularly the Sappi effluent spill issue, responsibility for polluting the environment was allotted to industrialists. While industries are the primary polluters, depicting them as solely responsible for remedying the situation may lead the public to ignore individual responsibility for a clean environment. An approach such as The Citizen's, which focussed heavily on official (government) response to the issues (enforcing legal restrictions on industrial pollution), may in turn lead readers to assume that environmental problems should be addressed at that level. This may result in public passivity regarding environmental degradation.

Logistical factors were found to play a distinct role in coverage. Both newspapers relied largely on international news agency reports for coverage of the atmospheric issues, because most of the 'events' (conferences and research efforts) took place overseas. In coverage of the Sappi effluent spill, The Star focussed on the viewpoints of Lowveld residents partly because the newspaper has a news bureau in the area. Local residents were the most accessible sources for the bureau reporter, and his long-standing relationship with them to some extent dictated the need to preserve that source relationship by focussing on their reaction. In this instance, however, this approach was approved by the editorial gatekeepers of The Star because the residents' stance was closely aligned with that of the newspaper.

## CHAPTER 7

### CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 SYNTHESIS OF RESULTS

This study set out to identify media-related factors that may play a role in increasing or inhibiting press publication of environmental issues in South Africa. This was done by assessing news values (quantitative content analysis), editorial bias (qualitative content analysis), and intra- and extra-organisational constraints (literature review and interviews) operating in the coverage of three selected environmental issues by The Star and The Citizen newspapers.

The qualitative content analysis and interview findings supported those of the quantitative content analysis, in terms of the news values operating during coverage (listed in section 5.2.6.2), and the editorial bias evinced by each newspaper. What was revealed by these results, and their implications for environmental coverage, are discussed in this section.

The thematic emphases on four of the sub-categories in the quantitative analysis, Fact, Danger, Argument and Remedial Action, indicate that the main news values contributing to the newsworthiness of the issues were those of 'negative happening', 'meaningfulness', 'frequency' and 'elite persons/nations' (in Galtung and Ruge's (1965) terminology). This was confirmed in the interviews. These results are indicative of two clear tendencies in environmental press coverage : event-orientation and sensationalism.

The event-orientation by both newspapers was illustrated in their reliance on 'news pegs' to create a news angle for the reports, which in turn was related to a clear preference for the 'hard news' aspects of the issues covered. The use of news pegs means that news acquires an episodic character : issues surface and disappear just as quickly, only to resurface again when a new event takes place. This means that rather than portraying environmental issues in a holistic manner, that is, as operating in and affecting almost every area of human life, the environment is represented as affecting limited and disparate categories of our existence, those areas where events occur to identify issues.

## 6.5 CONCLUSION

Clearly a number of intra- and extra-organisational factors operate in the coverage of environmental news. Despite The Star's orientation towards environmental coverage and The Citizen's lack of any particular environmental orientation, the coverage of environmental issues appears to be governed ultimately by the same range of pressures that other news is. Any indications of bias in newspaper coverage should therefore be assessed in the context of these often conflicting pressures.

A number of suggestions were given during the interviews for approaches that could be used by environmentalists to enhance coverage of an issue(s) in the press. These are given in Appendix F.

prompt newspapers to give more space to environmental issues in general, to encourage advertising.

#### 6.4.2 Industrial pressure

One form of pressure against publishing on environmental issues is encountered when powerful organisations that identify themselves as acting in South Africa's interests, accuse newspapers of attacking South African interests when the newspapers attack them. For example, Eskom in the past has accused The Star of not acting in South Africa's best interests when the newspaper attacked them for their air pollution (H. Tyson).

#### 6.4.3 Audience considerations

One of the stronger forms of pressure in favour of publishing environmental material comes from pressure groups, such as teachers who require material in a form they can use for their schoolchildren, or environmental interest groups.

Mr McGhee (The Citizen) made the point that the lack of environmental education among the public also acts to inhibit coverage, since the average person cannot see the relevance or implications of an issue for their own lives. Likewise, he notes that most journalists are similarly uninformed and thus would have difficulty communicating the implications.

None of the news organisations felt that any formal environmental training was necessary for journalists to cover environmental issues (J. Clarke; H. Tyson; P. de Villiers; E. Linington; P. Fray). The reason was given that the journalist has to simplify information for the general public to understand, and that the journalist's role was therefore to make expert sources communicate their information in layman's terms.

Mr Clarke conceded that some scientific training would assist in helping journalists to know what avenues to pursue in questioning sources, which might otherwise not have been discussed, but said that this was an ideal. Mr Tyson felt that 'good scientists make bad journalists' because of their specialist focus, which is contrary to the generalist journalistic approach.

Star campaigns regularly on a range of issues, including environmental, The Citizen does not, and this is directly attributed to a shortage of resources (P. De Villiers).

The perception of environmental topics as 'soft news' means that it raises the question of how much space a newspaper can afford to allocate to environmental issues.

#### 6.3.8 'Competitive bind'

The Citizen found out about the Sappi effluent spill by reading the story in The Star and carried it with the same prominence (front page headline news). Mr De Villiers made the point that all newspapers scan rival newspapers daily for stories. This practice was also noted by Riddle and Strelitz (1989), and Rock (1981). Mr Clarke, however, said that other newspapers were reluctant to follow The Star's lead when it began the CARE campaign in 1971, because they didn't want to be seen to be 'climbing on a bandwagon'. This suggests that competitive bind may operate more strongly in the long term with overseas media than with other South African newspapers.

### 6.4 EXTERNAL CONSIDERATIONS

#### 6.4.1 Economic constraints

The newspaper's economic welfare relies upon that of the society it serves, through its reliance on advertising (J. Clarke).

Companies reduce their advertising budget during times of economic strain, and this directly affects newspapers, with the result that the newspaper prints fewer pages. The less space is available, the greater the emphasis on issues at the top of the agenda, and environmental news does not compete successfully.

Mr Clarke made the prediction that environmental news will increase under pressure from advertisers. He suggests that this will come about because overseas companies with local subsidiaries are putting pressure on them to find more 'environmentally-friendly' alternatives. Imported products are also likely to become more environmentally acceptable. The public will need to be conditioned to buy those products, which means more advertising to promote them. This may in turn

about environmental issues. Mr De Waal and Mr Johnson attributed it to the location of a Star news bureau in the Lowveld.

Mr Johnson, The Star Lowveld bureau reporter, has resided in the area for twenty years, and is known to the local people. His forte is human interest stories, and this directly influenced his approach to the issue. Mr Johnson saw the issue as having the dual advantage of being both a hard news and human interest story, and therefore doubly newsworthy. Residents also proved more accessible sources because, according to him, Sappi were not at first inclined to speak to him. As he said, he interviewed people 'most likely to give the best story'. He made the point that 'contact work' is the most important aspect of his job, and these sources were likely to provide more stories in the future. It was thus in his interests to present their viewpoint as fully as possible.

The Citizen's lack of coverage of the residential viewpoint was attributed by Mr De Villiers and Ms Moody (who reported on the story) to a shortage of journalists. All reporters were busy on several stories at the same time and could not be freed to visit the area and interview residents. They therefore focussed on official sources, many of whom were based in the Witwatersrand area. Ms Moody mentioned however, that most official sources were interviewed over the telephone. Telephone calls to residents were not made.

### 6.3.7 Newspaper resources

Mr De Villiers made the point that a shortage of economic resources has an inevitable impact on newspaper content, usually by limiting the scope and depth of reporting. One of the most significant aspects of this is a shortage of reporters.

The fewer journalists on the staff, the less time is available for pursuing stories, and a much greater reliance is made on news agency material (H. Tyson). The quality of journalists, in terms of amount of experience, is also important.

The Citizen is a much smaller organisation than The Star, with fewer resources, and this has direct implications for environmental reporting. Most of The Citizen's reporters are junior reporters, straight from university or college (P. De Villiers), while The Star has both junior and experienced reporters on its staff. The ability to campaign on an issue depends on the resources available (H. Tyson). While The

#### 6.3.4 Role of the key employee

Mr Clarke said that the presence of a newsperson committed to environmental coverage by the newspaper can contribute significantly to coverage, since that person is likely to be more aware of the significance of environmental issues. This contribution takes the form of motivating to cover individual stories, or being alert to longer-term trends which can be covered in more in-depth articles.

This is facilitated by being assigned to an environmental beat, a position which Mr Clarke and one other reporter hold at The Star. Mr De Villiers of The Citizen also made this point, suggesting that if The Citizen had a specialist environmental reporter, coverage would be greater. The Citizen has very few specialist beats however, partly because of an ongoing shortage of staff and because of the newspaper's policy to cover the widest possible range of news. The majority of The Citizen reporters are therefore utilised as general reporters.

#### 6.3.5 Story competition

Environmental stories compete with others for publication, like all news (P. De Villiers; J. Clarke; H. Tyson). Mr Clarke and Mr Tyson gave this as a reason for the environment featuring much lower on the agenda during 1990 than in previous years, due to coverage of the political and social changes taking place in South Africa.

#### 6.3.6 Sources

The availability and credibility of sources for environmental articles influences coverage. Mr McGhee (The Citizen) said that experts in large bureaucratic organisations, though credible, were difficult sources in terms of availability, since it was necessary to work through a number of levels of official channels to secure permission for these sources to talk to the press. This presents problems in terms of time, always a severe reporting constraint. Mr Clarke and Mr Linington both referred to the need for source credibility as an influential factor in coverage.

The Star's focus upon local residents as a source in coverage of the Sappi issue was attributed by Mr Tyson to The Star's policy of 'championing the weak'. He also said that the local residents approached The Star because of its reputation for caring

The position of Mr Clarke as both assistant editor and environmental reporter for the Star may have had an influence on The Star's editorials that covered the study issues. The attitudes expressed in the editorials represent a consensus of opinion by three senior editors each day, including Mr Clarke, although the editor-in-chief has the final authority. Mr Clarke is thus in a good position to promote the inclusion of environmental topics in daily editorials.

Citizen reporters expressed the opinion that the editors of the newspaper do not favour environmental coverage. However, they did not suggest that they are biased against it, rather that they do not consider it as newsworthy as other issues.

### 6.3.3 News values

Certain news values were repeatedly emphasised in the interviews. The central criterion was that the issue should be relevant to readers (H. Tyson; P. de Villiers; E. Linington; C. Johnson). Any issue with an element of danger or controversy was also considered very newsworthy (P. de Villiers; E. Linington; C. Johnson). The newsworthiness of all three environmental study issues was described by interviewees in terms of the element of damage and potential danger. Mr Linington also referred to Sappi's culpability as a newsworthy element in that issue.

While Mr Clarke and Mr De Villiers said that the involvement of an 'elite person' was not a guarantee of publication, others disagreed (H. Tyson; E. Linington). The presence of politicians and leading industrialists was seen to contribute significantly to newsworthiness.

Mr McGhee, a general reporter for The Citizen, made the point that any issue that provided good visual material, in terms of photographs, was more likely to receive coverage. He suggested that this was one reason why wildlife issues such as elephant culling (the image of a baby elephant trying to move its dead mother) or seal culling (the appeal of large, mournful eyes) received good coverage. He felt that photographic material of this nature is likely to evoke an emotional response in readers, and contributes greatly to newsworthiness.

The opinions of the interviewees supports the results of the quantitative analysis with regard to the primary news values operating during coverage.

the in-depth analysis of issues as the role of other media, such as magazines. Mr De Villiers also gave this as a reason for not campaigning actively on issues.

The focus on straight news has implications for environmental coverage, as environmental issues do not often take the form of hard news, with the exception of natural disasters, and frequently require explanation and discussion.

Mr Clarke of The Star saw the role of newspapers as being to inform about what is happening and why, and to motivate the public into action. The Star sees itself as a forum for debate, which it considers the most efficient means of serving the needs of a multi-faceted community, and favours a blend of hard news and feature stories. This structure is more suitable for environmental coverage. The Star also actively campaigns on issues, including the environment.

Sapa takes the same approach as The Citizen, concentrating on straight reporting (E. Linington).

### 6.3.2 Gatekeeper attitudes and values

The values and attitudes of gatekeepers, particularly the editor-in-chief, news editors and chief sub-editors contribute significantly towards the newsworthiness of environmental issues, in terms of covering the issue in the first place and the amount of space and prominence it is given (J. Clarke). Mr Clarke estimated that at least half of journalists consider the environment as 'soft news', because it is still considered to fall largely under the genre of conservation and wildlife.

The Star editors pursue the policy of 'championing the weak rather than the strong' in coverage of all issues (H. Tyson), and for this reason tend to side with environmentalists against developers. This attitude suggests a bias in favour of the environment.

The Star Lowveld bureau reporter, Mr C. Johnson, said that when the Sappi issue broke, he was directed by his news editor to use the issue as a news peg to focus on Sappi's air pollution. This aspect emerged in the qualitative analysis. The values of gatekeepers therefore also influence the angle of the reports.

- the maturing of a generation of children who have been exposed to an environmentally-literate school system and are now assuming positions in commerce and industry (J. Clarke)
- the discovery of the ozone hole in 1985, identification of the cause of it and the international reaction by politicians (J. Clarke)
- the increased number of accusations of abusing the environment, levelled at companies (H. Tyson)
- the activities of environmental groups overseas, picked up by groups here (H. Tyson)
- the increased newsworthiness of environmental issues in overseas media, which influenced South African media (H. Tyson).

Reasons suggested for the positive South African response are :

- the constant feeding of information on environmental issues and activities from overseas (H. Tyson)
- increased industrialisation (H. Tyson)
- greater population pressures (H. Tyson)
- the maturing of a generation of children with some environmental educational exposure (H. Tyson)
- increasing urbanisation (J. Clarke)
- the movement towards 'environment-friendly' products by commercial and industrial organisations (P. De Villiers)

## 6.3 INTERNAL CONSIDERATIONS

### 6.3.1 Editorial policy

Neither The Star nor The Citizen has an official policy regarding environmental coverage. It falls under the policy of each newspaper regarding news in general, which is largely dictated by editorial perception of the role of the newspaper in society.

Thus, The Citizen sets out to be the 'newsiest' newspaper (P. De Villiers), covering the broadest range of local and international topics from a straight news angle, and therefore tending to focus on hard news. The Citizen devotes very little space to features, since it perceives its role as a newspaper in terms of imparting news, and

## 6.2 THE POSITION OF ENVIRONMENT ON THE NEWSPAPER AGENDA

The Star and The Citizen have very different histories of reporting on environmental issues. The Star launched what it called its CARE campaign in 1971, a media campaign specifically oriented towards environmental coverage. The campaign is ongoing. The Citizen, according to its news editor, Mr P. de Villiers, disregarded the environmental movement until approximately two and a half years ago, when the Electricity Supply Commission (Eskom) assured them that it was taking threats to the global atmospheric system very seriously. This prompted them to reconsider their stance. The Citizen is, however, a much younger newspaper, established in 1976, while The Star was established towards the end of the last century, and direct comparisons on the basis of historical coverage are thus not applicable.

Mr J. Clarke, assistant editor and environmental reporter for The Star, estimated environmental issues at 'just over half-way' on The Star's agenda, while Mr De Villiers said that it depends on the newsworthiness of the individual issue, which can be very high or very low on The Citizen's agenda.

There was unanimous agreement among media interviewees that environmental issues have received substantially higher coverage in the past three years. The editor of Sapa, Mr E. Linington, felt that environmental issues were not higher on Sapa's agenda than before, but said that it was generally recognised in media circles that the environment was newsworthy. All media interviewees felt that environmental coverage would certainly continue. Mr De Villiers did not anticipate increased coverage in The Citizen in the foreseeable future, while Mr Clarke suggested that coverage would become less wildlife oriented, more penetrating, and broader in scope.

A number of reasons were suggested by interviewees for the increase in environmental coverage in the past three years. These were based largely on an upsurge in overseas awareness, which has influenced South Africans. The increase overseas was attributed to :

- the levelling out of population pressures in Europe and North America, which allows people to take stock of their future options (J. Clarke)
- the rise of co-action Communism, which recognised the importance of a healthy environment for agriculture (J. Clarke)

## CHAPTER 6

### INTERVIEW RESULTS

#### 6.1 INTRODUCTION

Interviews were conducted with reporters and editors of The Star and The Citizen, the editor of The South African Press Association (Sapa), the General Manager of Sappi-Kraft Limited and a representative of the Lowveld residents active in protesting the Sappi effluent spill. A list of names and interview questions is provided in Appendix B.

A total of ten people were interviewed, eight face-to-face and two telephonically. A significant constraint was encountered in the refusal of the editor of The Citizen, Mr M.A. Johnson, to be interviewed. The news editor, Mr P. De Villiers, is the next most senior person, and his opinions were therefore taken as representative of The Citizen's viewpoint.

It was considered necessary to interview the editor of Sapa because both newspapers subscribe to Sapa and used Sapa articles in covering the study issues. Sapa's approach to environmental coverage is thus a potential contributor to the newspapers' environmental coverage.

The aim of the interviews was to supplement the quantitative and qualitative results with some confirmation and explanation by media representatives of the conclusions drawn. It was felt that additional information regarding the operating constraints and editorial approaches of the two newspapers was necessary to contextualise the results.

An unstructured approach to interviewing was adopted. The use of this approach, in conjunction with the small size of the interview sample, meant that the information was treated as a series of personal communications rather than formal data. The information provided derives from statements by the interviewees.

newsworthy *per se*, while The Citizen would require a number of other factors of newsworthiness before printing the story. The Citizen would be more likely to focus on 'harder' environmental stories.

#### 5.4 PRELIMINARY CONCLUSIONS

The qualitative content analysis confirms the thematic emphases and indications of bias that emerged during the quantitative content analysis. The Star shows a clear pro-environmental stance, and this is evident both in the amount of coverage given to the Sappi effluent spill, and the structuring of the reports. At this point it appears that editorial bias may contribute significantly to environmental coverage in The Star.

The Citizen certainly found the Sappi spill newsworthy, but treated it strictly as a hard news item. Editorial stance appears to have been neutral, with no clear bias against environmental coverage evident. It may be argued that such a stance ultimately constitutes a bias against the environment, since coverage may suffer as a result. This argument suggests that *lack* of a favourable editorial bias may be a 'factor of influence' in environmental coverage. However, such a conclusion cannot be substantiated solely on the basis of the content analyses results of this study. This element would need to be considered in relation to the range of other factors that come into newspaper operation.

those that could appear in any hard news story - the prominence of the parties involved, the element of conflict and an identifiable transgressor.

#### 5.3.4 Summary

In summary, then, the following points may be noted :

- The Star focussed on the elements of conflict between residents and Sappi, depicting the issue mainly as a transgression of residents' common law rights to a healthy environment, with less attention paid to the implications of statutory law transgression. The Citizen saw the offence as an infringement of statutory law, and reinforced this with the viewpoints of official sources.
- The Star treated the element of danger more sensationally than The Citizen, and used this theme to undermine mitigatory comments by Sappi and State officials. The Citizen did the reverse, using mitigatory comments by accredited sources to reduce the emotional impact of the danger. It did not, however, attempt to reduce the culpability of Sappi.
- The Star, like the residents, appears to have held a pre-existing bias against industrial polluters in the area, and saw the Sappi spill as one more example of this ongoing pollution. The Citizen, like the official sources, saw the spill as a one-off hard news item, and made no attempt to relate it to other forms of pollution in the area.
- The Citizen focussed on the legal repercussions of the issue from the beginning of coverage and throughout, while The Star only considered this after some days had passed, and appeared to have little faith in State bodies to regulate pollution practices through the law. Early coverage in The Star consequently resembled a 'trial by media'.
- While both newspapers allotted space to the acting or affected parties in the issue, and thus presented an approximate balance in terms of space, each newspaper used devices of selection and positioning to promote a certain viewpoint of the issue.
- The Star, in terms of its theme and source usage, evinced a bias in favour of environmental issues, while The Citizen showed either an indifference to, or slight bias against them. This suggests that The Star would find environmental issues

The Citizen's attitude to Sappi thus also appears to have been negative, but only inasmuch as Sappi was the admitted transgressor in the issue, and thus deserving of condemnation. The Citizen appears to have provided fair and adequate coverage to Sappi's viewpoint and the company's attempts to rectify the situation, both in terms of positioning and choice of comments.

While The Star focussed on the lack of aquatic life in a shrill headline referring to the 'river of death', and the irate responses of local residents and environmentalists (both articles on 28 September 1989), The Citizen carried information from official sources reassuring readers that the affected rivers would make a full recovery ecologically, and that there would be an official investigation into the spill (28 September 1989). Thus The Star appeared to want to drive home the seriousness of the spill, while The Citizen attempted to balance out and mitigate the suggestion of long-term implications, indicating a lesser bias in favour of the environment than evinced by The Star.

Articles in both newspapers from 2 October 1989 onwards shifted the focus to the legal repercussions against Sappi and secondary effects of the spill. Again the different types of focus are evident in that The Citizen devoted more space to the legal aspects, while The Star focussed on the secondary effects, in this case the fact that 200 000 people in neighbouring homelands were left without water over the week-end following the spill, due to the contamination of the Crocodile river by rotting fish. The Citizen mentioned this in passing in one paragraph (3 October 1989).

The Citizen thus appears to have viewed the issue in terms of institutional opposition, while The Star seemed to focus on the human interest elements.

Both newspapers treated the issue as a hard news item. While The Citizen restricted its coverage to this however, The Star appears to have used the Sappi effluent spill as a 'news peg' on which to base a defense of the Eastern Transvaal environment in general, and an attack on the relevant authorities. At this stage therefore, The Star's treatment of the issue suggests a distinct bias in favour of the environment, while The Citizen's does not.

However, the analysis does not indicate that The Citizen is necessarily biased against environmental issues. The most that can be said is that it appears to be indifferent to them. The main elements of newsworthiness for The Citizen appear to have been

attitude toward Sappi was negative, but not excessively so. The newspaper presented Sappi's viewpoint with reasonable prominence and regularity.

Nonetheless, it occasionally reported comments far more directly harmful to Sappi than The Star's approach. One instance of this was a comment by the Sappi Group Managing Director, Mr Van As, in the Citizen lead article (27 September 1989) which quoted Mr Van As describing the incident as:

'a big storm in a small teacup'.

This comment was potentially very damaging for Sappi, suggesting clearly its lack of concern for the environmental degradation caused by the spill. The impact of the comment was largely mitigated however, by its position right at the end of the article. If The Citizen had a stronger bias against Sappi, it would probably have given the comment much more prominence.

In a Citizen article the following day (28 September 1989) a CSIR (Council for Scientific and Industrial Research) source, Dr Peter Ashton, was reported to have praised Sappi for their helpfulness in the CSIR's investigation of the water quality in the river. However he was also quoted as saying :

'Nobody needs bad public relations',

a potentially cynical remark suggesting that Sappi was insincere in its professed willingness to redress the effects of the spill. This comment was, however, immediately followed by more praise for Sappi's quick action once the spill was discovered, which mitigated the irony of Dr Ashton's remark. Neither of these comments was reported by The Star.

The Citizen also referred in more detail to previous Sappi chemical spills, an aspect unexplored by The Star, except for one brief reference to a previous spill. The Citizen accused Sappi of playing down the damage caused by the spill (29 September 1989), but did so as a prelude to reporting severe criticism by the Directorate of Nature Conservation. This article saw the harshest treatment of Sappi by The Citizen to that time, and it may have been because The Citizen was supporting the opinions of official sources who expressed themselves in these terms in the article.

by The Star, and was newsworthy both for this reason, and because of the seriousness of the current spill.

One interesting aspect of coverage was The Star's slowness in reporting the legal repercussions Sappi was likely to face. The Citizen covered these in some detail in its first and subsequent articles, but The Star only referred to them in a report on 29 September 1989, three days after the story broke, and then only in passing. One earlier reference, in The Star's editorial, suggested that The Star assumed that legal repercussions would not be forthcoming :

'Even supposing negligence is indicated, it is very doubtful the mill will be prosecuted. Factories are almost never brought to court for pollution offences'.

This preconception may provide a reason for the lack of attention to this consideration until two days later. These differing foci on the legal aspects support the earlier conclusion about the contrasting Star and Citizen perspectives of the spill.

Both The Star and The Citizen used a structural device to emphasise some source points of view and diminish others. When a Water Affairs official gave reassurances in the first Star article (26 September 1989) that the pollutant was satisfactorily diluted, her comment was undermined by an immediate reminder of the damage done. This juxtaposition of mitigatory comments with references to danger and damage occurred regularly throughout the articles in The Star, and suggests that while The Star was prepared to give a voice to all parties in the issue, the viewpoints of the residents were more consonant with The Star's own, and hence received more favourable coverage than those of Sappi or official sources.

Another form of this structure was the positioning of Sappi's (usually) defensive comments between paragraphs quoting sources condemning Sappi's actions, which had the effect of invalidating Sappi's explanations. This was done by The Star in several instances. The Citizen used the same device for the opposite effect : it placed statements of danger or damage between official or Sappi reassurances that the danger was not too great, and that full recovery was likely.

While The Citizen did not appear to share The Star's bias in favour of the local population, this does not necessarily suggest that it favoured Sappi. The Citizen's

to present the mill's point of view. Having presented the details of the spill according to Sappi, the reporter suddenly said :

'If the effluent spill was initially unnoticed (by Sappi), the smell accompanying the mill is not. Residents and visitors complain of the 'putrid' smell of sulphur throughout the area.'

and then continued with a discussion of the possible effects of the spill on the environment. This comment upon an unrelated issue was out of context and did not contribute anything to the coverage of the issue, other than to echo the sentiments expressed in the editorial.

In direct contrast to The Star's preoccupation with the residential viewpoint, The Citizen chose to ignore it altogether. Instead, the responses of conservation officials of the Department of Nature Conservation, the National Parks Board, and the Department of Water Affairs were emphasised (27 September 1989). The only non-governmental source mentioned (aside from Sappi) was and representative of the Lowveld branch of the Wildlife Society of Southern Africa, who was given a single paragraph to protest the spill. This was the only instance in The Citizen's entire coverage of the spill that a residential or conservationist group was allowed to express an opinion.

In a Citizen article on 30 September 1989, the headline read :

'Residents petition Sappi over spill'.

However, the bulk of the article (87%) described Sappi's meetings with farming and local government representatives and detail regarding the cause of the spillage. The Citizen appeared to find the viewpoint of the state bodies under whose jurisdiction the transgression falls the most valid. In this it indicated a reliance on accredited sources, which suggests that The Citizen identified more with the viewpoint of these sources than did The Star, which directly attacked them in its editorial of 27 September 1989.

At this point, therefore, it appears that The Citizen saw the spill as a one-off, hard news item, which was newsworthy because of the damage done and the negativity of the official response. The Star, on the other hand, appears to have seen the spill as just one more symptom of the increasing degradation of the entire Eastern Transvaal Lowveld region, and thus had a broader and more long-term perspective on the issue. This suggests that the issue fitted in with a pre-existing and pro-environmental stance

The above comments suggest that The Star utilised the effluent spill as a 'news peg' upon which to base an attack on industrial polluters in the area, and the relevant government authorities. This is further supported by The Star's use of sources in these early reports, which focussed upon the grievances of local residents.

On 26 September 1989, The Star reported the opinions of residents, a Sappi representative, and a scientific opinion, thus appearing to provide a balanced viewpoint. However, the selection and structuring of the quotes utilised suggests a bias against Sappi in favour of residents. Mr Melrose, the Sappi representative, is quoted as referring to the spill as 'an unfortunate minor spill of process liquid', a comment repeated in the editorial as evidence of the callousness of industry where the environment is concerned. The report undermined Mr Melrose's comment by following it immediately with a reminder of the damage done, saying that dead fish had been reported 'all the way to Alkmaar near Nelspruit'.

In addition, a resident was quoted as saying :

'Our entire river is dead and stinking. This is a conservation disaster, and heaven knows how, if ever, nature will repair the damage'.

Another resident said (28 September 1989):

'For years we have had to contend with smelly, dirty air from Ngodwana. Now they have gone and polluted our rivers. They destroy our natural vegetation and change our environment by planting gum and pine trees. These people make big profits. Surely the time has come for them to stop thinking in terms of money only'.

The residents clearly held a grudge against Sappi for far more than the current effluent spill, and their remarks served to depict the company as a self-seeking industrial polluter, an image echoed in The Star's editorial. Like The Star, the residents objected not only to the death of river life but also to the broader environmental impacts experienced over a longer period, notably the air pollution and bad smells emitted by the mill. Sappi was not given an opportunity to reply to these ancillary accusations. As a result the negative image of Sappi in The Star continued throughout the main coverage period.

The similarity in viewpoints between The Star and the residents was again illustrated in an anomalous interjection in a Star report of 27 September 1989, which purported

The Star and The Citizen both emphasised the elements of damage to river life in their opening stories, referring to 'tons' or 'thousands' of fish killed, amounts that were never substantiated by either newspaper. One notable difference was The Star's emphasis on the threat to Nelspruit's water supply - the sluices to the town from the Crocodile river were closed for 24 hours. While The Citizen mentioned this fact without undue emphasis, the threat was stressed in the subheadlines in The Star's lead stories of the 26 and 27 September 1989, which read as follows :

'Nelspruit's water pumps are shut'

and

'Pumps to Nelspruit re-opened'.

The water supply issue was reported in The Star in fairly emotional terms, with the town clerk of Nelspruit initially 'appealing' to residents to save water, and later saying that he was 'relieved that all hazards had been removed'. The water supply issue is also positioned in the first four to six paragraphs in both Star articles, indicating the importance The Star placed on this aspect of the story.

A possible explanation for this emphasis is given in The Star editorial of 27 September 1989, where the editor bemoans the degradation of the Eastern Transvaal environment in general, and says :

'The Department of Health takes no notice unless public health is palpably involved'.

This suggests that The Star may have emphasised the threat to the human water supply in order to attract the attention of official bodies to the issue. A threat to human life is also likely to be more newsworthy than a threat to river life.

The Star's editorial was important as it served as a direct indicator of the newspaper's stance on the issue. In it the editors deviated from the effluent spill itself to discussion of the variety of environmental problems in the eastern Highveld. These included air pollution, acid rain, and unpleasant smells, all attributed in the editorial to factories in the area. The Star condemned the laxity of pollution control authorities in prosecuting offenders, and referred to the 'poor, long-suffering Eastern Transvaal' as a 'victim' of the effluent spill.