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Directorate

Ontario Region A CONTENT ANALYSIS OF NEWSPAPER

ARTICLES ON THE

NIAGARA TOXICS ISSUE

by

Anne Sudar January, 1985 Direction générale des eaux intérieures

Region de l'Ontario



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A Content Analysis of Newspaper Articles on the Niagara Toxics Issue

TABLE OF CONTENTS

	Page
Introduction	1
Types of Events Covered in the News Media	ï
Problems with Environmental Reporting	2
Public Attitudes on the Niagara Toxics Issue	4
Relationship Between Public Attitudes and the Media	.5
Methodology	6
Results of Content Analysis	
A. Quantitative	8
B. Qualitative	8
Results of Analysis of Coverage of a single event, the release of	
of the Niagara River Toxics Committee report	22
Conclusions	25

A Content Analysis of Newspaper Articles on the Niagara Toxics Issue

INTRODUCTION:

This project was part of a larger effort to evaluate the socio-economic impacts of toxic substances in the Niagara River. It was essentially a follow-up to a survey conducted in June of 1983 (Sudar and Jones, 1983) which investigated attitudes of Canadians towards the Niagara toxics problem. Questions remained regarding the attitudes of Americans in the Niagara Region. Since regulations prohibit Environment Canada from conducting surveys across the border, an American newspaper, the Buffalo News, was monitored from June 1983 to June 1984 as a secondary source of information on public attitudes. Three Canadian newspapers were monitored simultaneously and then coverage of the toxics issue was compared both quantitatively and qualitatively.

As a result of comments on an earlier draft, coverage by the four newspapers of a single event, the release of the Niagara River Toxics Committee report, has also been analyzed.

The purpose of this project, then, was to find out what types of messages the newspapers in the Niagara region, on both sides of the border, were sending out to their readers on the Niagara River toxics and related issues.

Types of events covered in the news media

Events covered in newspapers can be divided into three main types: routine events; accidents; and scandals (Molotch and Lester, 1973). Routine events are defined as deliberately promoted occurrences. These are the most managed features of newsmaking and newspapers are usually dominated by this type of event.

Examples of routine events include elections, trials, the Pearse Commission Inquiry on Water, press conferences, and sports events.

Accidents, on the other hand, are unplanned occurrences which are promoted by a party other than the agent who inadvertently caused the occurrence. Accidents are embarrassing. An accident occurs when those who were parties to an occurrence never intended the occurrence to become a public event. Hooker Chemical never intended for the chemicals buried in Love Canal and their other dumps to leak out.

Scandals are defined as deliberate occurrences which are promoted by a party different from the occurrence's agent. The scandal is sort of a mixed case in this typology. Scandal-type stories usually result when secret or confidential information about a person or agency is "leaked" by an informer. Like the routine event, but unlike the accident, a scandal is planned. It is not planned by the central party involved, however, but by an informer, usually some sort of insider. Like accidents, scandals can be embarrassing because they provide insight into normally protected structures and activities. Scandals require "leakers" or "informants" and thus are contingent upon some dispute or disagreement among persons who are supposed to operate in harmony. The scandal can only emerge when some insider is angry or when some insurgent manages to be placed inside; and it can only occur if the media is willing to be a party to the exposure.

Problems with environmental reporting

Environmental reporting has been called the "Journalism of Uncertainty" by Phillip J. Tichenor, Professor of Journalism and Mass Communications at the University of Minnesota. This title is very apt because environmental information often is uncertain. Scientists and experts do not have all the answers on toxics, especially how they affect human health, and they may often disagree on how to clean up toxic wastes.

Environmental reporting is different from other journalistic areas such as business or politics. In particular, it is more complex: based on scientific and technical information, yet also involving financial, political, and social considerations. Often reporters do not have enough time to cover a story properly. They try to seek "truth" with a two-handed approach, balancing information "on the one hand" with information "on the other hand". A big problem for general assignment reporters covering environmental stories is lack of background and information sources.

Several constraints are imposed by the world of journalism (Friedman, 1983). These are discussed below.

1. Hard news peg - examples - press conference, press releases, speeches.

In environmental reporting, the need for a news peg creates an emphasis on covering fast-breaking disasters such as oil spills, staged events such as protest marches and lawsuits, and announcements of "newsworthy" people such as politicians. Another problem with the hard news peg is that it plays up drama. The media prefers controversy, heroes and villains, the continuing big story. As a result of this, environmental coverage in the media is quite conflict-oriented. Interest groups, whether they are environmentalists, industrial trade groups, or government agencies, have a great deal of influence over what gets published about environmental issues. Many newspaper editors prefer to publish material that has been released by a government agency because, if an official or agency has said it, it has some credibility, in their This can present problems if reporters rely totally on opinion. government handouts, rather than doing their own research (reading documents, holding interviews, etc.).

2. Deadlines.

- There is usually not enough time to investigate all ramifications of the story or to find sources. This leads to many single-source stories and a lack of investigative and interpretive reporting.

3. Editors and Advertisers.

- Editors decide which stories get assigned and which ones get into print. Reporters often write stories which they think the editors will like, even to the extent of slanting a story to oversell the danger, for example.
- Editors also write the headlines, which sometimes don't clearly reflect the content of the story.
- Also, editors are reluctant to attack their advertisers and community boosters unless the evidence is firm and well-documented.

4. Lack of sources.

- Many reporters do not know where to go for information and objective evaluations.

5. Crisis reporting.

- This works against writing stories that need long gestation times for investigation.

Public Attitudes on the Niagara River Toxics Issue

The results of a spring 1984 survey (Milbrath 1984) show that there is strong support for protection and clean up of the Great Lakes among people living on both Canadian and U.S. sides of the Niagara River. There was, however, a wide divergence of opinion in response to the survey question, "Do you believe your drinking water is unhealthy or safe? Americans were more likely to rate their water as safe (27%) than Canadians (16%).

Another interesting result of the survey was the response to a trade-off question (clean water and higher taxes vs. dirtier water and lower taxes). People didn't simply lean toward higher taxes in order to have clean water; they strongly made the point by selecting the most extreme category. Responses to another question showed that people are strongly in favour of paying higher taxes in order to clean up toxic dumps.

An earlier Canadian survey (Sudar and Jones, 1983) had similar results. This survey found deep, broad-based concern about water pollution problems. Most of the Canadian respondents (60%) believed that drinking water from the Niagara River and Lake Ontario was a health hazard at the time of the survey, June 1983. This survey also found evidence of strong public support for stricter controls on industry and stricter laws on dumping which would stop pollution at the source.

Relationship between public attitudes and the media

The Sudar and Jones survey also found that newspapers and magazines were the major source of information on water quality in the Niagara River for 55 percent of the respondents. Television and radio were the major sources for another 31%, followed by personal observation and use (7%), citizen groups (3%), and talking to other people (2%). The importance of the mass media is to be expected in this situation because most of the toxic chemicals in the Niagara River cannot be observed by people with their ordinary senses. The contaminants are in such small amounts that highly sophisticated scientific equipment is needed to detect and measure them. Therefore, most people experience the toxic issue second or third hand, through the media outlined above, with newspapers being the dominant type.

There definitely is a relationship between public attitudes and the media, but it resembles a chicken-egg situation. Does the media merely reflect what people think or does it affect what they think? Which came first, public concern about environmental issues, or media attention to environmental issues? There is disagreement regarding these questions in the literature.

A study of the role of the Canadian mass media in collecting, transforming, and communicating environmental information from 1960 to 1972, and the effects of mass communication on public attitudes and behaviour (Parlour and Schnatzow, 1978) concluded that the mass media have played a major role in catalyzing and maintaining public concern for environmental issues. Parlour and Schnatzow believe that the media do not merely reflect public concern, but actively create public awareness and concern for environmental issues.

Other researchers (Bowman and Fuchs, 1981) view the media as a reflection of public concern over environmental issues.

And still others, (Schnelle et. al., 1980), emphasize the potential importance of the newspaper medium as an effective behaviour change agent. Their study showed lower amounts of litter in a community during a newspaper anti-litter campaign.

<u>Methodology</u>

Most of the 1341 newspaper articles included in the analysis on which this paper is based were from four sources: The Toronto Globe and Mail, St. Catharines Standard, Buffalo News, and the Canadian Niagara Falls Review (Table 1). These newspapers were monitored continuously from June 1983 until June 1984. Other newspapers were monitored intermittently, the Hamilton Spectator, Toronto Star, Toronto Sun, and U.S. Niagara Falls Gazette. Some articles are also from earlier years, as far back as 1979.

Each article was coded based on its date, source, length in column-centimeters, topic, speaker, main message, and underlying theme or secondary message. This information was analyzed with the Statistical Package for the Social Sciences (SPSS). Frequency distributions and cross tabulations were run for all variables.

TABLE 1: Number of Articles by Newspaper

Newspaper	No. of Articles	% of Total
Globe & Mail	190	14%
St. Catharine's Standard	401	30%
Buffalo News	282	21%
Niagara Falls Review	331	25%
Hamilton Spectator	78	6%
Toronto Star	30	2%
Others	29	2%
TOTAL	1341	100%

Quantitative analysis was done only for the period June 1983-June 1984 and for the four papers mentioned above which were continuously monitored for this period. The qualitative analysis, however, includes the entire collection of 1341 articles.

Results of Content Analysis

Quantitative Analysis (June 1983-June 1984)

Figure 1 shows the amount of media coverage of the toxics issue over the period June 1983 to June 1984. Both the number of articles and the number of column-centimeters went up and down over the year. This graph only includes the four newspapers which were monitored continuously for that period. In June 1983 there were 105 articles on the toxics issue and in June 1984 there were only 59. There was a similar decline in the number of column-centimeters devoted to toxics from 1498 in June 1983 to 840 in June 1984.

The St. Catharines Standard contained the most articles on toxics, 288. The Buffalo News was a close second with 272, followed by the Niagara Falls Review (158) and the Globe and Mail (134). In terms of total column-centimeters, the Buffalo News ranked first with 9,485. The St. Catharines Standard contained 9,220, the Globe 4,685, and the Niagara Falls Review 4,652.

Qualitative Analysis

This part of the content analysis includes all 1341 articles which were collected. These articles were on the general topic of toxics and/or water quality, but many focussed on specific sub-topics such as Love Canal, concerns about toxics in drinking water, or Ontario Waste Management Corporation's search for a site for a new industrial waste treatment plant (see Table 2).

A cross-tabulation of topic by newspaper is shown in Table 3, and several differences are apparent. The Globe and Mail ran the highest percentage of articles of a general nature, 8.9% on the general topic of water quality and 38.9% on toxics in general. The St. Catharine's Standard contained a mix of articles very similar to that for the entire group. The topics of articles published by the Buffalo News, the only American newspaper monitored, were quite different from the three Canadian newspapers. The Buffalo News contained more articles on the Love Canal (20.6%), a situation where the primary victims were U.S. citizens, and fewer articles on drinking water contamination (1.1%) and SCA'S waste discharge pipline to the Niagara River (1.1%) where most of the negative impacts fall on Canadians.

examined in Another variable this study was the spokesperson of the article (Table 4). Half of the articles had governments as their main spokespersons. This reflects a high degree of reliance on government press releases and reports as information sources for articles. The breakdown by type and level of government was: Ontario provincial government, 15%; U.S. federal government, Canadian federal government, 9%; New York State government, 8%; and municipal governments, 7%. The general public or citizen's groups were the main messengers in 23% of the articles, scientists in 9%, and industrial representatives in 5%. The remaining 13% of the articles were either editorials or multi-source feature articles.

Table 4 also identifies the main spokesperson by newspaper for the four major newspapers, and again, there are significant differences. The Globe and Mail tended to print more editorials and multi-source feature articles than did the more local Niagara Falls and St. Catharines newspapers. Canadian newspapers quite naturally printed more articles quoting Canadian and provincial government officials, and the U.S. paper printed more articles quoting U.S. and state government officials.

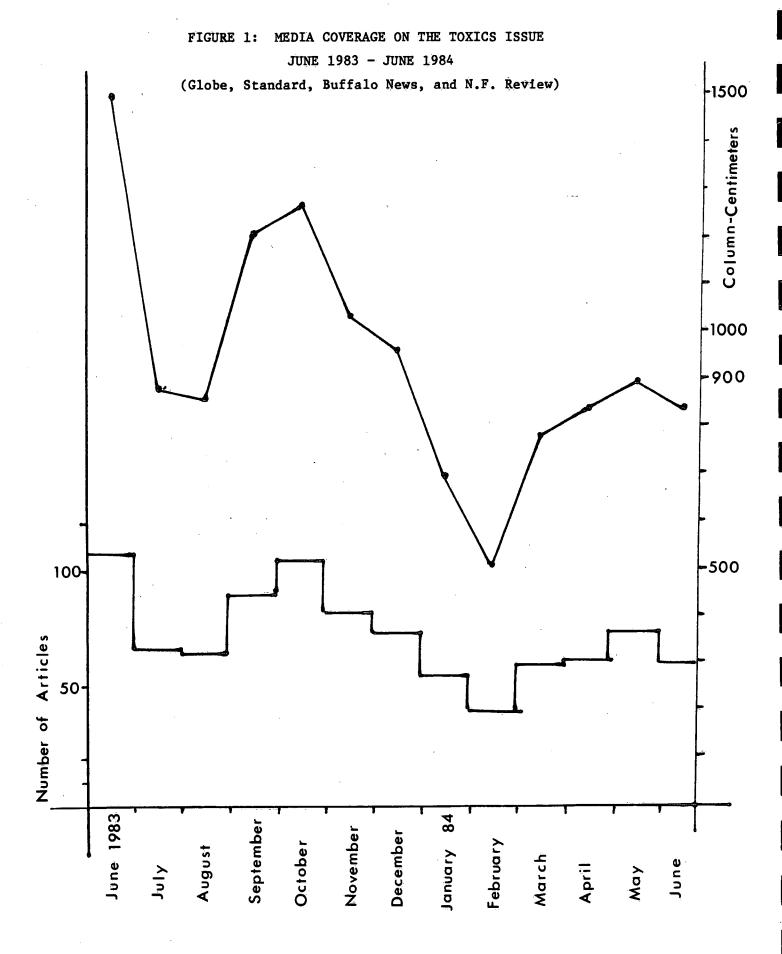


TABLE 2: Topic of Articles

Topic	Frequency	%
General water quality	62	5%
Niagara River toxics in general	324	24%
Love Canal	130	10%
Hyde Park dump	41	3%
S area dump	96	7%
Drinking water contamination	103	8%
Toxics in other parts of Great Lakes and elsewhere	310	23%
Ontario Waste Management Corporation's		
search for a new toxic waste facility	147	11%
Toxics in fish	30	2%
SCA - Waste discharge pipline to		
the Niagara River	98	7%

TABLE 3: Topic of Article by Newspaper

% OF ARTICLES GLOBE & **BUFFALO** TOTAL STAN-N.F. NEWS REVIEW ARTICLES TOPIC MAIL DARD 8.9 3.5 6.4 0.9 5 General Water Quality Niagara River Toxics in 20.4 28.7 34.1 24 **General** 10.5 5.3 10.0 20.6 3.9 10 Love Canal 3 3.2 3.7 2.1 3.0 Hyde Park dump 7.4 8.7 8.9 5.7 S-Area dump Drinking Water 13.7 7.2 1.4 7.9 Toxics in General 38.9 19.7 29.1 9.4 23 Ontario Waste Management Corporation's search for a new toxic 7.4 16.0 1.1 15.1 11 waste facility 3.7 2.2 0.7 2.4 2 Toxics in Fish SCA - Waste Discharge Pipline 1.1 17.5 8.5 1.1 to Niagara River

TABLE 4: Main Spokesperson of Article by Newspaper

	% OF ARTICLES				
	GLOBE &	STAN-	BUFFALO	N.F.	ALL
MAIN SPOKESPERSON	MAIL	DARD	NEWS	REVIEW	NEWSPAPERS
Journalist (Multi-Source)	18.9	8.0	16.0	10.0	13
Provincial Government	17.4	19.2	2.1	16.6	15
Municipal Government	4.7	6.7	3.2	10.0	7
Industry	5.8	5.5	4.3	4.8	. 5
State Government	2.1	3.0	27.3	2.4	8
General Public,		·			
Citizen Groups	16.8	27.4	7.1	37.5	23
U.S. Government	7.9	8.5	29.1	4.2	11
Scientists	11.6	9.7	8.2	6.3	9
Canadian Government	14.7	12.0	2.8	8.2	9
All Governments	46.8	48.4	64.5	41.4	50

DIFFERENCES ARE SIGNIFICANT AT 0.05

Canadian newspapers, especially the smaller, Niagara Falls Review, printed more messages from the general public and citizens groups.

The Buffalo News tended to rely on governments as sources of information (64.5%) more than did Canadian newspapers (46.8, 49.4, and 41.4%). The Buffalo News also contained very few articles with the general public as messengers (7.1%).

The newspaper articles were coded according to their main message, and the results of this appear in Table 5. The messages were grouped into the three basic types described earlier, routine events, accidents, and scandals.

The most common messages were announcements of pollution regulations or enforcement, cleanup programs and political activities on the toxics issue (15.4%) and reports of hearings, litigation, etc., on toxics (15.1%). Other messages, in descending order of frequency, were: activities of citizens groups; toxic waste dumps are leaking; industrial waste is entering the Niagara River and/or Great Lakes; scientific research on toxics; debate over the location of Ontario's new toxic waste facility; conflicting government reports or scandals; government or industry official gives assurance of safety; other routine events; toxics are in people; toxics are everywhere; and fish or wildlife are contaminated with toxics or have cancer.

When these messages are broken down by newspaper source, as in Table 6, several significant differences emerge. The Buffalo News printed more articles announcing pollution regulations or enforcement, cleanup programs and political activities (31.9%) than did the Canadian newspapers (Globe - 12%, Standard - 15% and N.F. Review - 6.9%). The Buffalo News also contained more messages about conflicting government reports and the EPA scandal (14.5% versus 5.3, 4.7, and 2.4%).

TABLE 5: Main Message of Article

			NUMBER OF	% OF
			ARTICLES	TOTAL
A.	Me	essages about routine events		
	-	Debate over the location of Ontario's new		
		toxic waste disposal facility.	107	8.0
	-	Activities of citizens groups on toxics issue.	132	9.8
	-	Government or industry official gives assurance		
		of safety.	76	5.7
		Reports of hearings, litigation, etc. on toxics.	202	15.1
	-	Scientific research on toxics.	115	8.6
	_	Announcement of pollution regulations or		
		enforcement, cleanup programs, political activities		
		on toxics issue.	206	15.4
	-	Other routine events	51	3.8
Ė.	Me	ssages about accidents		
	=	Industrial waste is entering the Niagara River		
		or Great Lakes	128	9.5
	_	Fish or wildlife are contaminated with toxics or		•
		have cancer.	31	2.3
		Want in the second of the seco	· ,	
	-	Toxics are everywhere in society.	38	2.8
	-	Improper waste disposal and consequent water		
		contamination - dumps are leaking.	129	9.6
	-	Toxics are in people, impacts of toxics on people.	44	3.3
c.	M.	agazar abaut aras 1-1-		
.	<u>me</u>	ssages about scandals Conflicting government reports, leaked 'secret'	82	6 1
		reports, corrupt officials	04	6.1

TABLE 6: Main Message of Article by Newspaper

		GLOBE & MAIL	% OF STAN- DARD	ARTICLES BUFFALO NEWS	N.F. REVIEW
1.	Industrial Waste is entering the Niagara River or Great Lakes.	3.7	7.5	3.2	21.5
2.	Fish or wildlife are contaminated with toxics or have cancer.	2.6	2.0	1.4	3,3
3.	Debate over the location of Ontario's new toxic waste disposal facility.	6.8	10.2	1.8	10.6
4.	Toxics are everywhere in our society.	3.7	1.2	2.5	1.8
5.	Improper toxic waste disposal and consequent water contamination - dumps are leaking.	12.6	9.7	13.8	3.9
6.	Activities of citizens groups on toxics issue.	5.3	11.2	1.4	18.7
7.	Toxics are in people; impacts of toxics on people.	5.8	2.7	2.5	2.7
8.	Government reports industry official assurances of safety.	gives 7.4	6.2	2.5	6.3
9.	Reports of hearings, litigation, etc., on toxics.	13.7	16.5	14.2	16.6
10.	Scientific research on toxics.	12.1	8.7	8.5	3.6
11.	Announcement of pollution regulations or enforcement, cleanup programs, political activities on toxics issue.		15.0	31.9	6.9
12.	Conflicting government reports, leake 'secret' reports, corrupt officials.		4.7	14.5	2.4
13.	Other.	8.9	4.2	1.8	1.5

SIGNIFICANT AT 0.05

The Niagara Falls Review devoted more articles to reports of industrial waste entering the Niagara River (21.5%) than did the other newspapers (Globe - 3.7, Standard - 7.5, and Buffalo News - 3.2%). The Niagara Falls Review also printed more articles on the activities of citizens groups than did the other papers.

The Globe and Mail contained more messages about toxics in people (5.8% vs. 2.7, 2.5 and 2.7%) and, more messages about scientific research on toxics (12.1% vs. 8.7, 8.5 and 3.6%).

The St. Catharines Standard contained a mix of messages very close to the entire data set.

In Table 7, the main messages of the articles have been grouped into the three basic types, routines, accidents, and scandals, and then broken down by newspapers. The St. Catharines Standard contained the highest percentage of routines, 71.8%, while the Buffalo News contained the lowest 62.1%. The Niagara Falls Review contained the most accidents 33.2%; and the Buffalo News contained the most scandals, 14.5%.

In the course of reading all of the articles, it became evident that in addition to the main message, which was usually conveyed in either the headline or the first paragraph of the article, there was also a secondary message or underlying theme. These underlying themes also formed part of the content analysis and are listed in Table 8. The predominant underlying theme was that governments are monitoring toxics, regulating industry, and in general, taking care of the problem as evident in 28% of the articles. Other underlying themes, in descending order of frequency, were: governments are not doing enough about toxics - 17%; toxics are hurting people or constitute a threat to human health - 13.5%; citizen power or people have the right to decide what risks they want to accept - 8.9%; uncertainty, especially regarding health effects - 8.3%; mistrust of government officials - 7.8%; disagreements and reversals of position by government agencies - 6.1%; and people don't want toxic waste or the Not-in-my-Backyard Syndrome - 5.8%.

TABLE 7: Type of Event by Newspaper

	% OF ARTICLES				
	GLOBE & STAN- BUFFALO N		N.F.	.F.	
	MAIL	DARD	NEWS	REVIEW	TOTAL
Routines	66.3	71.8	62.1	64.0	66.4
Accidents	28.4	23.2	23.4	33.2	27.5
Scandals	5.3	4.7	14.5	2.4	6.1

DIFFERENCES ARE STATISTICALLY SIGNIFICANT AT 0.05

TABLE 8: Underlying Theme of Article

		NUMBER OF ARTICLES	% OF TOTAL
1.	Toxics are hurting people or constitute a threat to human health.	181	13.5
2.	Governments are monitoring toxics, regulating industry, in general, taking care of the problem.	376	28.0
3.	People don't want toxic waste The Not-in-my-Backyard Syndrome.	78	5.8
٠.	Governments are not doing enough about toxics.	228	17.0
5.	Disagreements and reversals of position by government agencies.	82	6.1
٠,	Uncertainty, especially regarding health effects.	111	8.3
•	Citizen power or people have the right to decide what risks they want to accept.	120	8.9
3.	Mistrust of government officials.	105	7.8
	Other	60	4.5
гот	AL	1341	100.0

TABLE 9: Underlying Theme (Secondary Message) of Article by Newspaper

		% OF ARTICLES				
		GLOBE & STAN		BUFFALO	N.F.	
		MAIL	DARD	NEWS	REVIEW	
1.	Toxics are hurting people or constitute a threat to human health.	17.9	10.0	10.6	15.4	
2.	Governments are monitoring toxics, regulating industry, in general, taking care of the problem.	22.6	27.9	42.6	20.8	
3.	People don't want toxic waste The Not- in-my-Backyard Syndrome.	2.6	7.5	1.8	8.2	
4.	Governments are not doing enough about toxics.	14.2	18.2	12.8	22.7	
5.	Disagreements and reversals of position by government agencies.	6.8	5.7	7.4	5.1	
6.	Uncertainty, especially regarding health effects.	16.3	6.7	5.7	4.5	
7.	Citizen power, people have the right to decide what risks they want to accept.	6.8	11.0	3.5	13.0	
8.	Mistrust of government officials.	7.9	8.0	11.3	5.4	
9.	Other.	4.7	5.0	4.3	4.8	

DIFFERENCES SIGNIFICANT AT 0.05

These underlying themes, broken down by newspaper, are shown in Table 9. Again, there are significant differences between newspapers, particularly between the American newspaper and the three Canadian newspapers. The major underlying theme of the Buffalo News toxic coverage was that governments are taking care of the problem. The Buffalo News also tended to have more on the mistrust of government officials and less about the Not-in-my-Backyard Syndrome, governments not doing enough, and citizen power.

The Globe and Mail was characterized by having the most articles on toxics hurting people and on uncertainty.

The Niagara Falls Review had the most articles on governments not doing enough and on citizen power.

Results of Analysis of Coverage of a single event, the release of the Niagara River Toxics Committee Report on November 27, 1984

The Niagara River Toxics Committee was composed of representatives of governments: four Environment Canada: Environmental Protection Agency; Ontario Ministry of the Environment; and the New York Department of Environmental Conservation. This committee spent 3 1/2 years investigating the sources and levels of toxics in the Niagara River water, fish and sediments, and issued its final report and recommendations on November 27th, 1984. Prior to that official release, a draft copy of the summary report found its way to the press on November 2nd, and a copy of a draft internal report titled, "A Layman's Guide to the Niagara River Toxics Committee Report" was unearthed and pulicized by the St. Catharines Standard on November 23rd.

Table 10 shows the amounts of coverage devoted to these two information leaks as well as initial coverage and follow-up of the release of the official report for the four newspapers monitored in this study. The Buffalo News paid relatively little attention to the leaks, while in the three Canadian newspapers together, the leaks generated slightly more coverage than did the official release column-centimeters vs 598). The Canadian press particularly enjoyed drawing comparisons between the official NRTC report and the unofficial "Layman's Guide".

All four newspapers contained the basic information, the conclusions and recommendations of the report. All four also published assurances by politicians and government officials that despite tonnes of chemicals entering the river daily, the water is still safe to drink.

The three Canadian newspapers made the point clear that 90% of the pollution comes from U.S. sources and that U.S. members of the committee had rejected two recommendations put forward by the Canadian members.

The Buffalo News placed emphasis on reactions to the report. The New York government formed a panel to set drinking water standards for toxics and pledged funding for more research on toxics in the sediments of the Buffalo River. EPA formed a work group to respond to the NRTC recommendations. The Buffalo Sewer Authority and the Amherst Sewage Treatment Plant protested being labeled as big polluters. Local residents held public meetings to discuss NRTC findings. The Canadian reaction, as described in these three Canadian Newspapers, consisted of the federal Minister of Environment expressing disappointment that the U.S. rejected two of the recommendations and arguments in the provincial between government and opposition members seriousness of the problem and the need for government action. The "Layman's Guide" appeared to serve as a catalyst for these debates.

Both the Globe and Mail and the Buffalo News regarded the waste dumps as more important than the point source discharges. The Buffalo News expressed disappointment with the NRTC's lack of assessment of the dumps' contribution of toxics to the river. The Globe went farther and called for removal and destruction of the material in the dumps.

The NRTC made the front page of the Standard three times and of the Niagara Falls Review four times, but not at all in the Globe or the Buffalo News. The Standard gave the most coverage to the report, 626 column-centimeters while the Buffalo News had 488, the Niagara Falls Review 438, and the Globe 173.

Table 10: Coverage of the Niagara River

Toxics Committee Report

November 1, 1984 - January 4, 1985

(measured in column-centimeters)

	Coverage of official re port when leaked	Coverage of official re port when released and after	Coverage of unofficial report when leaked	Total Coverage
Globe and Mail	50	90	. 33	173
Standard	178	263	185	626
Niagara Falls Review	133	245	60	438
Buffalo News	25	448	15	488
All 4 Newspapers	386	1046	293	1725

Summary and Conclusions

Newspapers on both sides of the Niagara River have been sending out a wide range of messages about the toxics issue. Indeed, taken as a whole, the message seems to be that the situation is out of control. The routine articles, which averaged 2/3 of the toxics coverage, generally conveyed messages about activities aimed at solving the problem - clean-up programs, research and monitoring enforcement and litigation. Yet the accident type articles reported continuation of the problem, industrial waste entering the Niagara River, leaking dumps, contamination in fish, wildlife, and people.

There were significant differences between all four newspapers monitored. Clearly, the information which people have to develop their perceptions and attitudes toward the Niagara River toxics issue will vary, depending on which newspaper they read.

The American newspaper, the Buffalo News had about the same amount of toxics coverage as did the St. Catharines Standard. The Niagara Falls Review and Toronto Globe and Mail had smaller amounts of coverage.

In qualitative terms, the Buffalo News stands out as quite different from the three Canadian newspapers. The Buffalo News printed more articles on Love Canal, where the primary victims were Americans, and fewer on drinking water contamination which would affect more Canadians than Americans.

The Buffalo News relied more on governments as a source of information and contained fewer articles with the general public as messengers than did the Canadian newspapers. The Buffalo News also tended to focus more on government action, with 31.9% of its articles announcing pollution regulations or enforcement, clean up programs, and political activities.

Canadian newspapers, on the other hand, focused more on government inaction, with all three containing significantly more articles with the underlying theme, "governments are not doing enough about toxics" than the Buffalo News. This was especially true with the local Niagara area newspapers the Niagara Falls Review and the St. Catharines Standard.

The Buffalo News also gave more coverage (42.6% vs 22.6, 27.9 and 20.8) on the underlying theme that governments are monitoring toxics, regulating industry, and in general, taking care of the problem.

Canadian newspapers placed more emphasis (13.0%, 11% and 6.8% vs 3.5%) on the underlying theme of citizen power, that people have the right to decide what risks they want to accept.

Perhaps the most important of these findings for Environment Canada is the Canadian newspapers' emphasis on government inaction as compared to the American newspapers' emphasis on government action with respect to the toxics problem. Canadian government officials should be encouraged to issue press releases on their toxics programs and promote their work through the news media as much as possible. When people don't hear about what the government is doing, they assume that nothing is being done.

REFERENCES

- Bowman, J.S. and T. Fuchs, 1981. Environmental Coverage in the Mass

 Media: A Longitudinal Study. International Journal of
 Environmental Studies, Vol. 18, pp. 11-22.
- Friedman, Sharon N., 1983. "Environmental Reporting: Problem CHild of the Media." Environment. Vol. 25, No. 10, p. 24-29.
- Milbrath, Lester W. A Survey Study of the Beliefs and Values that People Living on Each Side of the Niagara Frontier Hold about the Great Lakes. Environmental Studies Center, State University of New York, Buffalo. 1984.
- Molotch, H. and M. Lester, 1973. "Accidents, Scandals and Routines:

 Resources for Insurgent Methodology." The Insurgent Sociologist
 3, pp. 1-11.
- Parlour, J.W., and S. Schatzow, 1978. "The Mass Media and Public Concern for Environmental Problems in Canada, 1960-1972.

 International Journal of Environmental Studies. Vol. 13, pp. 9-17.
- Schnelle, J.F., M.P. McNees, M.M. Thomas, J.G. Gendrich, and G.P. Beagle, 1980. Prompting Behaviour Change in the Community, Use of Mass Media Techniques. Environment and Behaviour. Vol. 12, No. 2, pp. 157-166.
- Sudar, A and C. Jones, 1983. A Survey of Attitudes Towards Water Quality in Communities Along the Canadian Side of the Niagara River. Unpublished manuscript, Inland Waters Directorate, Ontario Region, Environment Canada, Burlington, Ontario.

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