

An Evaluation of the 'War on Drugs' Based Upon a Content
Analysis of the *New York Times* Before and After President George
Bush's 1989 Anti-Drug Speech

by

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I. INTRODUCTION.

A. Background.

The worldwide use of chemical substances^a to alter perception embodies deep historical roots as well as extensive current practice. Through the centuries up to the present day, a variety of natural substances have been consumed therapeutically or to rise above the commonness of everyday life (Emboden, 1988). Native American tribes still drink hallucinogenic ayahuasca (Amazon), chew coca leaves (Peru), and eat psychoactive *Psilocybe* mushrooms (Mexico) (Emboden, 1988). Burma and India grow poppies for opium (Smart, Glenn, and Awni, 1988). People of the Middle East, Africa, and India have been using marijuana longer than people of the United States have been using tobacco and alcohol. Indigenous peoples throughout the world have used mind-altering substances according to traditional ceremonial or cultural contexts (Emboden, 1988). Today, however, and aside from medicinal purposes, people are using drugs^b for hedonistic purposes, solely to get "high."

Therein lies the crucial difference--and the problem--with modern mind-altering substance abuse. Because of the growth of a huge consumer market, illicit drugs have become an export, a cash crop for many countries. In March 1990, the *New York Times* quoted a State Department report saying that from 1985 to 1989 world production of opium increased 187 percent, coca 43 percent, and marijuana 502 percent (Sciolino, 1990).

The United States provides a hungry marketplace. "High school students, college students, and young adults in the United States today use illicit drugs to a greater extent than young people in any other industrialized nation in the world." (Fraser and Kohlert,

1988). By their mid-twenties, 75 to 80 percent of young adults in the United States have tried an illicit drug (Fraser and Kohlert, 1988). Twenty million Americans age 18 to 25 have tried cocaine, and 250,000 use it daily (Wilson, 1990). An estimated 100,000 cocaine babies [babies born addicted to cocaine as a result of maternal use during pregnancy] are born each year (Fessler, 1990). Between 1976 and 1986, cocaine abuse is credited with a fifteen-fold increase in hospital emergency room visits, admissions to treatment programs, and deaths (Gawin and Ellinwood, 1988). Six million Americans use marijuana daily, and eighteen million use it once each month (Pollin, 1987). One in twenty high school seniors and adults aged 19 to 27 smoke marijuana daily (Fraser and Kohlert, 1988). Since the mid-1970s, the number of heroin addicts, 500,000, has remained steady (Pollin, 1987,) although that figure is expected to increase with the current availability of cheap, high-quality heroin (Sciolino, 1990). The estimated total number of hard-core^c addicts varies from 862,000 to four million, depending on the source (Associated Press, 1990).

Maintaining drug abuse habits results in enormous expense to the United States. Americans spend an estimated \$27 to \$110 billion per year for illegal drugs, money that supports approximately 38 percent of organized crime's total business (Fraser and Kohlert, 1988). In 1986, state and local governments spent \$5 billion on anti-drug enforcement, and in 1988, they spent a minimum of \$2 billion to incarcerate drug offenders (Nadelmann, 1989). The federal government proposes to spend \$10.6 billion in fiscal 1990-1991 on anti-drug measures (Fessler, 1990), 71 percent for enforcement of anti-drug legislation, 29 percent for education, treatment, and research. Although difficult to accurately measure, the wasted

potential of the nation's drug addicts is staggering.

A 1986 poll by the National Institute of Drug Abuse showed that 73 percent of American adults believe one of the most serious problems facing the country is illegal drug abuse,^d and yet it has become a routine element of recreational behavior (Pollin, 1987).

Researchers have many speculations but no solid answers for the widespread abuse of illicit drugs. The intense euphoria and sense of well-being (at least initially) experienced by the consumption of cocaine or crack certainly attracts users. In experimental studies, cocaine is the one drug that animals will faithfully choose instead of food and water, all the way to the point of death (Pollin, 1987). The diminishing cost of some drugs, notably crack and increasingly heroin, makes usage available to many more people. Children of parents who are chemically dependent (including alcohol) are four or five times more likely to have a similar problem than children of families with little or no substance abuse (Fraser and Kohlert, 1988). Peer pressure has been singled out as the most prominent factor inducing adolescents to start and continue using illegal drugs (Oetting and Beauvais, 1987). Overall, however, the reasons for drug abuse are not well understood because of the multifaceted interactions of physiological, psychological, social, and cultural forces that can affect each person differently. Furthermore, drug abuse involves the brain and the rest of the central nervous system, a poorly understood bodily system (Pollin, 1987).

B. The War on Drugs.

The United States has been actively fighting illegal drug use since 1914 with the passage of the Harrison Act, an effort to prevent physicians from distributing narcotics. Addiction remained a

problem, however, and in 1930 President Hoover named a Commissioner of Narcotics. Drug abuse slowed during and after World War II, but sprang back in the 1960s. Richard Nixon declared war on foreign supplies, mostly heroin from Turkey. As those supplies declined, new ones from Latin America began arriving. In 1982, Ronald Reagan decided it was time to stop the flow of drugs into the United States. His administration involved the Federal Bureau of Investigation in the drug battle and created thirteen interagency task forces toward the same end. One year later, then-vice-president George Bush was named head of the National Narcotics Border Interdiction System, which was supposed to coordinate the efforts of federal, state, and local agencies. In 1986, Congress passed the Anti-Drug Abuse Act, increasing federal drug fighting funds to \$3.9 billion, \$1.6 billion more than the previous fiscal year. Reagan signed the legislation into law and proclaimed a national crusade against drugs. The Reagan administration introduced the concept of zero tolerance plus compulsory drug-testing for federal workers. In addition, Nancy Reagan coined her "Just Say No" program. Yet between 1981 and 1986, the Reagan Administration reduced appropriations for narcotics treatment by 40 percent (Lamar, 1987). For fiscal year 1988, Reagan proposed a \$913 million cut in anti-drug spending. He believed the drug war should be fought with "moral rectitude and inspirational leadership" (*Time*, 1987).

President George Bush is traveling down the same road with a little more money in his pocket for essentially the same programs. Drug abuse was an important issue in his campaign; since taking office, he has made two anti-drug strategy announcements, Sept. 5, 1989, and Jan. 25, 1990. As mentioned above (Fessler, 1990), the president wants a 12 percent increase (to \$10.6 billion) in federal

spending next year. Criminal justice, international initiatives, interdiction efforts, and intelligence are slated for \$7.5 billion; treatment, education, and research \$3.1 billion (Fessler, 1990). The drug war continues because the American market still hungers for its "highs." Researchers, counselors, and educators generally agree that enforcement of anti-drug laws will not be enough, as Reagan's tenure has demonstrated.

C. The Press.^e

Between the public--with its needs, wants, and pocketbook--and the federal government sits the press. At the foundation of the U.S. Constitution and the First Amendment are two principles: 1) an informed public is essential to the functioning of a democracy, and 2) the job of informing the public does not belong to the government but to individuals outside the government.

The press does more in American society than act as watchdog and report the news. With the shrinking influence of the family, church, school, and political parties, the press extends further into personal lives. As the communication system that connects the individuals of society, the press promotes and reinforces values (Dennis, 1988). Media decide what issue, event, person, or angle gets coverage. That does not mean the media tell people what to think, said Everette E. Dennis, executive director of Gannett Center for Media Studies at Columbia University. But the media "... do tell us what to think about as they narrow and refine the focus of public discussion." (Dennis, 1988). The media can act as a catalyst to spur the public and policymakers on vital issues. [The media, in turn, may be affected by the public and society's institutions. See II. Survey of the Literature.]

The press is clearly an integral part of the social structure of democratic society, along with the public and the government. Equally clearly, substance abuse represents a threat to the integrity of society. This study seeks to assess the content of the media message to the public regarding substance abuse and the governmental efforts to eradicate it. The approach is twofold: 1) assess the number, length, and substance of *New York Times* articles about illegal drugs during the eight months preceding and the eight months^f following President George Bush's Sept. 5, 1989, announcement of his anti-drug plan, and 2) determine whether the two eight-month periods show any substantive differences. The hypothesis is that the President's actions and words do affect the media as displayed in content and frequency of newspaper articles. The *Times* was chosen for its prominence and reputation as one of the outstanding daily U.S. newspapers. Another national newspaper, the *Washington Post* for example, would have served equally well. Bush's September 1989 speech was chosen because it was the first anti-drug speech of his presidency and would allow eight months before and eight months after the speech to assess media effects, rather than only three months before and after his January 1990 speech.

II. SURVEY OF THE LITERATURE

As far back as 1922, Walter Lippmann contended that because the human environment had become so complex, people needed means other than personal experience for information about their environment (Lippmann, 1922). Today, mass media connect people to every street corner of their neighborhood, city, state, country, and planet. To what extent the mass media affect public opinion, or set the public agenda, has been a research topic of great interest in many countries for at least the past two decades (Anokwa and Salwen, 1988).

Agenda-setting is the media's capability of influencing the public's priorities by guiding the public to the more important issues (Cook, Tyler, Goetz, Gordon, Protes, Leff, and Molotch, 1983). The agenda-setting hypothesis states that "... the issue priorities of the mass media will subsequently become the issue priorities of the media audience. The hypothesis further states that the audience will give the same relative weight of importance to each issue that the media give." (Atwater, Salwen, and Anderson, 1985).

Determining precisely what the media are saying, what the public holds as its beliefs, and what possible connection exists between the public and the media, if any, has presented a thorny research problem to agenda-setting researchers. Most agenda-setting research uses content analyses to ascertain pertinent media issues (the media agenda), and opinion surveys to determine the issues important to the public (the public agenda) (Winter and Eyal, 1981). Content analyses and opinion surveys, however, are only as good as the categories are appropriate and the testers accurate (Berelson, 1952). Furthermore, in drawing a correlation between two events

(content and opinion), the problem lies in being wary of the unseen variables that could be affecting the public agenda (Cook, et al, 1983; Protes, Leff, Brooks, and Gordon, 1985). A causal relationship between what appears in the media and what surveys assess as public opinion cannot be assumed (Cook, et al, 1983). Despite the necessity to analyze all agenda-setting research in the light of these precautions, much valuable work has been done and deserves careful attention.

In the seminal study by McCombs and Shaw (1972), a high correlation was found between the media content and public opinion. That study sought and found a connection between what voters said were key issues of the 1968 presidential campaign and what was actually reported by the mass media--newspapers, news magazines, and television news broadcasts. The agenda-setting function of the media was not proved by their study, the authors said, but mass media influence was the most plausible explanation based upon the high correlation between their voter opinion interview survey and their media content analysis.

Since then, and after a great deal more research, the concept of the media setting the public agenda has found qualified merit in many studies (e.g., Entman, 1989; Wanta, Stephenson, Turk, McCombs, 1989; Anokwa and Salwen, 1988; Salwen, 1988; Behr and Iyengar, 1985; Weaver, 1982; Winter and Eyal, 1981; Watt and van den Berg, 1981).

Agenda-setting limitations explored by these researchers and others delineate circumstances by which the media have been found to affect public opinion. Zucker (1978) and Shaw and Slater (1988) found that on issues "obtruding" in the public's life, such as high unemployment in the reader's town, the media had little influence on public opinion. But with issues less obtrusive in the public's life,

such as national air quality standards, the media's agenda became the public's.

The public's length of exposure (time) and number of exposures (frequency) to media issues also affect their opinions (e.g., Zucker, 1978; Protess, Cook, Curtin, Gordon, Leff, McCombs, and Miller, 1987; Salwen, 1988). Optimal exposure periods have been found for different issues. On environmental issues, Salwen (1988) found that eight to ten weeks of media articles produced the greatest correlation with public knowledge. On civil rights issues, Winter and Eyal (1981) found four to six weeks to be optimal. On the other hand, investigative stories about recurring issues, such as rape, showed low impact on public opinion (Protess, et al, 1987). Regarding medical stories, Culbertson and Stempel (1984) found little evidence for any agenda-setting effect. As the public accumulates knowledge about an issue over time, the effect of subsequent articles can diminish (Saltiel and Woelfel, 1975).

World events (Behr and Iyengar, 1985), what the president says (Wanta, Stephenson, Turk and McCombs, 1989), style of news stories (Protess, et al, 1987), and the public's "pre-existing sensitivities" (Ebring, Goldenberg, and Miller, 1980) influence the extent to which the public agenda may become the media agenda. Regarding the president, Wanta et al (1989) found that sometimes the president sets the media agenda and sometimes vice versa.

Some investigators have found little change in public awareness on particular issues but great change in policymakers' awareness (Cook, et al, 1983). Others found neither the public nor policymakers affected but that the press's agenda was (Protess, Leff, Brooks, and Gordon, 1985). Inter-media studies have demonstrated that most media tend to cover the same major issues.

Although the precise parameters are not well understood, and may never be because of the number and complexity of the unknowns, the phenomenon of the media's agenda having at least limited influence on public opinion finds justification in these studies. When the public has been found to be thinking about the same issues presented in the media, researchers tentatively have concluded that the media agenda caused the public agenda, subject to the above-mentioned limitations. The media are, as Lippmann suggested, the public's connection to the world. This study does not assess the dependent variable in most agenda-setting investigations--impact on public opinion, policymakers, or their decisions; the assumption is made that some influence exists. The relevance of this content analysis of illegal drug articles lies in knowing on what the media are focusing because of the possible effect on the public or factors affecting the public.

III. METHODOLOGY^g

Content analysis was chosen for its appropriateness as a systematic, objective, and quantitative method for determining change in a body of literature, in this case, newspaper articles about illegal drugs (Kerlinger, 1964).

Categories of analysis were chosen in two ways. Most categories were based on the work of a previous media study, analyzing the drug war content of national television and newspaper outlets (*Media Monitor*, 1989). Additional categories were determined during the pretest procedure.

A. Pretest procedure.

The pretest procedure provided an estimation of the appropriateness of the categories and of the number of days yielding a minimum of one drug story. Newspapers were assessed during two periods: 10 consecutive days in the eight months preceding Sept. 5, 1989, and 10 consecutive days in the eight months afterward. The starting dates for each of the two periods were chosen arbitrarily. The number, length, and location in the newspaper of illegal drug stories was counted along with additional factors such as type of drug, geographical area, and type of story, policy or health, for example (see Figure 1., Appendix 3). Additional categories were added as needed, resulting in the categories used for the main study (see Figure 2., Appendix 4). Newspaper headlines (Barranco and Shyles, 1988), subheads, text dividers, and excerpted quotes were scanned for the appearance of key words.^h News stories and editorials in the front, metro, sports, science, and week-in-review sections were used from every day of the week. All stories considered were regular newspaper articles ("hard" news written in

the pyramidal style or features) or editorials. No cartoons, classified ads, advice columns, letters, photographs or captions, book reviews, home, travel, business, arts & leisure, weekend, living, or neighborhood sections (of the *Sunday Times*) were used. No legal drug stories were included.

The number of days out of ten with a minimum of one drug story was used to estimate the sample size (Kalton, 1983). Each of the two periods met the one-story minimum requirement on nine days out of ten, for a rate of 90 percent. As a conservative measure, the simple random sample size was calculated on the basis of an 85 percent story rate with a 95 percent confidence interval, plus or minus a 6 percent potential sampling error.ⁱ Eighty-seven newspapers from each of the two eight-month periods (total 174 newspapers) were included.

B. Main Study.

Specific newspapers were chosen by systematic sampling (Kalton, 1983). The numbers 1 to 242 (representing each day of the eight-month periods) were consecutively assigned to each day of the periods, which were Jan. 7, 1989, through Sept. 5, 1989, and Sept. 6, 1989, through May 5, 1990. A random number between 1 and 242 was generated using a computer program. The random number corresponding to a particular day was used as the starting point for a period. This procedure was repeated for the second period. For each period, the sample quota was fulfilled by reading every second newspaper. Each of the periods was treated as a circle: number one followed number 242, i.e., Jan. 7, 1989, followed Sept. 5, 1989, for the pre-speech period, and Sept. 6, 1989, followed May 5, 1990, for the post-speech period.

Data were collected using the categorization instrument in

Figure 2 (Appendix 4). Headlines were scanned for one or more key words^h and the story closely read for overall content. Each story was classified into only one of the following seven major categories: 1. Violation of U.S. Drug Laws, 2. Violations in Foreign Countries, 3. Prosecution--U.S., 4. U.S. Policy, 5. Education, 6. Health, and 7. Leisure. All major categories contained the following 16 items:

story length	cocaine, crack
page and section	methamphetamine (speed, ice) marijuana (hashish)
local	PCP (phencyclidine, angel dust)
national	heroin (opium, methadone)
international	glue-sniffing LSD (acid)
editorial	steroid
regular news	drug (generic)

Story length, page, and section were noted for each article. Page and section were recorded by first appearance in the newspaper; continuation to another page was not included in page and section, although it was included for length. One choice was made from items local, national, or international. One choice was made from editorial or regular news. Because one article sometimes dealt with multiple drugs, every drug discussed was tallied.

Additionally, each category also contained two to eight descriptive items unique to that category. Again, multiple choices could be made from this list. For example, in U.S. Policy, both anti-drug legislation and financial costs might describe an article.

The number of articles in each major category from one period was added to yield a grand total of articles. The sixteen items were individually totaled across all categories. For example, in the period before Bush's anti-drug speech, all articles mentioning cocaine in each category were added to achieve a total number of articles with cocaine. The entire procedure was repeated for the second period. The percentage changes in the totals from the earlier period to the later were calculated. (See Table A., Appendix 1) Each category also was compared as above from the earlier to later period. (See Table B., Appendix 1).

The two periods were compared for relative number of stories (Graph A., Appendix 2) and relative number of inches (Graph B., Appendix 2), i.e., the percentage of all stories and all inches that each category occupied before and after the speech.

Regarding the item column inches: no account was made for changes in print size (editorials sometimes are printed in larger point size). The column size used was the newspaper standard of six columns across a page. If a story was written in three columns across a page, the measurement for three columns was doubled. Consequently, the measurement of length is considered to be approximate. The figures still provide a reasonable estimate given that most measurements were made on standard print and column sizes.

IV. RESULTS

The total number of articles (see Table A., Appendix 1) was 205 in the pre-speech period and 215 in the post-speech period, a modest increase of 5 percent. The total number of column inches increased by 18 percent from 2,923 to 3,458. The number of front page articles increased by 39 percent, and articles in the front section grew by 48 percent. Drug articles in the metro section expanded by 71 percent with first page metro section increasing by 11 percent. Other upturns included the number of articles appearing the Saturday and Sunday editions, by 8 percent, and in stories affecting the entire nation, by 23 percent. Virtually no change occurred in number of articles about the events in foreign countries.

Regarding frequency of mention for individual drugs, cocaine did not change at all from pre- to post-speech periods. Marijuana, heroin, and steroids were discussed about half as often after Bush's speech. Cocaine was the most frequently mentioned drug in both periods, steroids second, with heroin and marijuana coming in a distant third. Methamphetamines, LSD, and PCP were mentioned rarely in either period, twice at the most. Articles about illegal drugs in non-specific terms, without mention of type, increased in number by 17 percent. Post-speech hard news articles grew by 11 percent, but editorials were written half as often. Sections C and D did not have many articles to start with, five and eight respectively, and decreased to one and six, respectively. Stories about the New York City area decreased by 25 percent.

Editorials made up 11 percent of all articles in the first eight months and less than 6 percent in the second eight months.

The relative number of newspaper stories was nearly identical in each period (See Graph A., Appendix 2). For example, in the eight

months before Bush's anti-drug speech, 17 percent of all drug articles were about violations of drug laws in the United States; post-speech was 16 percent. The greatest difference was in health articles: 16 percent of the drug stories were about physical or mental health before Bush's speech; afterward, that number dropped to 10 percent. Regarding the policy matters of the government or any regulatory agency, the numbers were identical pre- and post-speech: 37 percent of the total.

Similarly, the relative number of inches for each category was nearly identical in each period (See Graph B., Appendix 2). Several categories differed by only 1 to 3 percentage points (Leisure, Education, Violation of U.S. Drug Laws, and U.S. Policy). The largest before-to-after difference was 5 percent in Prosecution, taking up 3 percent of all drug story space pre-speech and 8 percent post-speech.

Looking at the seven categories individually (see Table B., Appendix 1), two showed fewer but longer articles, Health and Violations of U.S. Drug Laws. Health had 35 percent fewer stories but 42 percent more inches after President Bush's speech. The number of Violations stories remained essentially the same (35 and 34) but increased in inches post-speech by 17 percent. Two others had a greater number of articles but took up less space, Leisure and Violations--Foreign Countries. The number of Leisure articles grew by 37 percent and inches shrank by nearly 16 percent. Violations--Foreign Countries had 19 percent more stories but they occupied 5 percent less space. U.S. Policy and Prosecution stories increased in number of stories and in inches--5 percent in number and 16 percent in inches, for Policy, and 83 percent and 151 percent, respectively, for Prosecution. Education was the only

category that started small (four articles spanning sixty inches pre-speech) and shrank, 75 percent reduction in number of articles and 72 percent reduction in inches.

V. DISCUSSION

The relative focus of *New York Times* coverage did not change much from pre- to post-speech as shown in the circular graphs (Appendix 2) but neither did the espoused policies of President Bush's September speech change much from former President Reagan's, which were still in effect during Bush's first months in office (*Congressional Quarterly*, 1989; Lamar, 1987). Both presidents placed most emphasis on law enforcement, rather than education, health, or research. In this study, the *Times* followed President Bush's lead and reported mostly on policy matters, such as anti-drug legislation, anti-drug police operations, financial costs, and drug testing, along with articles about breaking drug laws in the U.S. and abroad. Sixty-seven percent of all stories and approximately 65 percent of all inches before and after Bush's speech addressed these enforcement issues. Conversely, less than 18 percent of all drug articles and less than 24 percent of all inches before and after discussed health and education, crucial matters to many legislators, counselors, and educators.

President Bush's Sept. 5, 1989, anti-drug speech signaled a shift in the location and number of illegal drug articles in the *Times*. After Sept. 5, more anti-drug articles appeared on the front page and in the entire front section of the newspaper, a reflection of the *Times*' heightened emphasis on the significance of illegal drug issues after Bush's speech. Adding to that emphasis, articles in the metro section climbed by an even greater number. Though the total number of articles increased only slightly, 5 percent, the total space occupied by those articles grew by nearly 16 percent, a further reflection of the consideration being given.

The emphasis change tends to support the theory of the

agenda-setting effect of presidential activity on the media, rather than media affecting the President's agenda as has been suggested (Wanta, et al, 1989). By stressing the same issues as the President rather than any of many other voices, the *Times* appears to be a follower of the President's program. Congressman and educators have strongly suggested the need for more education and research, if the United States is to significantly alter current trends in drug abuse and addiction (*Congressional Quarterly*, 1989; Coffin, 1990), yet *Times* coverage of these areas was scanty to nonexistent.

The news media, of which a national newspaper like the *Times* is an integral part, play an important though unspecified role in determining what the public will think about and embrace as its own agenda (Salwen, 1988; Dennis, 1988). Studies have shown that the news media do figure in social change (Altheide, 1984; Hagan, 1980), and the public does generally believe news reports (Sudman, 1987). The press has been accused of "grossly misinforming " the public about some issues because of focusing on too few of the many aspects of an issue (Cohen, 1983). This study suggests that the *Times* may be guilty of focusing on the President's agenda of enforcement, to the detriment of the public's overall knowledge of the nature of the drug abuse issue and its possible remedies, even given that the media have a limited effect on the public's awareness.

VI. COMMENTS

In a content analysis that uses any method short of cover-to-cover reading as the indicator to an appropriate article, some articles on the desired topic will be missed. For instance, this study did not include any articles about Panama's Noriega because those articles' headlines lacked a key word. To be completely thorough, newspapers would have to be read exhaustively, a time-consuming proposition and beyond the scope of this study.

Once the categorization instrument was tested for reliability and validity, the study could be expanded to compare newspapers, the *New York Times* and the *Washington Post*, for example. Or compare a national daily with a border town newspaper where illegal drugs enter the United States, such as Tucson or Nogales. Do the national dailies all tell us the same information? Do the border newspapers offer any broader or narrower perspective than the nationals?

Regarding the instrument, a miscellaneous category would have been helpful. Several articles did not fit any of the seven categories and therefore could not be included in this study. An open category would allow the tester to track every article found.

The categorization instrument could be structurally re-designed to reduce the possibility of tester error in not filling out all appropriate items. Boxed groupings of associated items for each category would have been easier to read. One box for locale, one for drugs, type of news, etc.

Appendix 1: Tables A & B

Table A.*

Totals and Percentage Change, Pre- and Post-speech

<u>Item</u>	<u>Pre-speech</u>	<u>Post-Speech</u>	<u>%Change</u>
Number of articles**	205	215	+ 4.9
Number of inches	2923	3458	+18.3
Articles on page 1	18	25	+38.9
Articles in front section	62	92	+48.4
Articles page 1 of metro	9	10	+11.1
Articles in metro section	34	58	+70.6
Articles in section C	5	1	-80.0
Articles in section D	8	6	-25.0
Weekend articles	50	54	+ 8.0
Local articles	43	32	-25.6
National articles	91	112	+23.1
International articles	66	67	+ 1.5
Articles about cocaine	85	85	No Chg.
Articles about marijuana	12	7	-41.7
Articles about methamphetamine	2	0	-----
Articles about LSD	0	1	-----
Articles about PCP	1	0	-----
Articles about heroin	13	7	-46.2
Articles about steroids	26	15	-42.3
Articles about drugs(generic)	89	104	+16.9
Editorials**	23	12	-47.8
Regular news**	181	201	+11.0

*If no activity occurred in an item, it was excluded.

**Tester error accounts for the slight difference in total number of articles and total editorials and regular news under pre-speech and post-speech.

TABLE B.*

Totals and Percentage Change by Category, Pre- and Post-speech.

<u>Item</u>	<u>Pre-speech</u>	<u>Post-speech</u>	<u>%Change</u>
1. Violation - U.S. Drug Laws			
Total Number of Stories	35	34	- 2.9
Arrests	17	13	-23.5
Charges	1	6	-----
Indictments	4	0	-----
Criminal Organization	5	3	-40.0
Death	3	3	No Chg.
Official Corruption	3	0	-----
Inches	333	388	+16.5
2. Violation - Foreign Countries			
Total Number of Stories	26	31	+19.2
Arrests	2	1	-50.0
Criminal Organization	17	8	-52.9
Official Corruption	1	0	-----
Inches	472	450	- 4.7
3. Prosecution			
Total Number of Stories	12	22	+83.3
Trials	10	15	+50.0
Convictions	6	4	-33.3
Acquittal / Dismissal	1	1	No.
Chg.			
Inches	105	264	+151.
4. U.S. Policy			
Total Number of Stories	75	79	+ 5.3
Anti-Drug Legislation	15	18	+20.0
Anti-Drug Operations	33	37	+12.1
Decriminalization	0	2	-----
Financial Costs	8	16	+100.
Civil Liberties/Drug Testing	10	9	-10.0
Ethics	3	2	-33.3
Death	2	0	-----
International Relations	18	17	-5.6
Inches	1175	1365	+16.2

5. Education

Total Number of Stories	4	1	-75.0
School Programs	3	1	-66.6
Community Resources	1	0	-----
Inches	60	17	-71.7

6. Health

Total Number of Stories	34	22	-35.3
Community Resources	12	9	-25.0
Human Tragedy	16	6	-62.5
Government Policy	0	4	-----
Inches	550	782	+42.2

7. Leisure

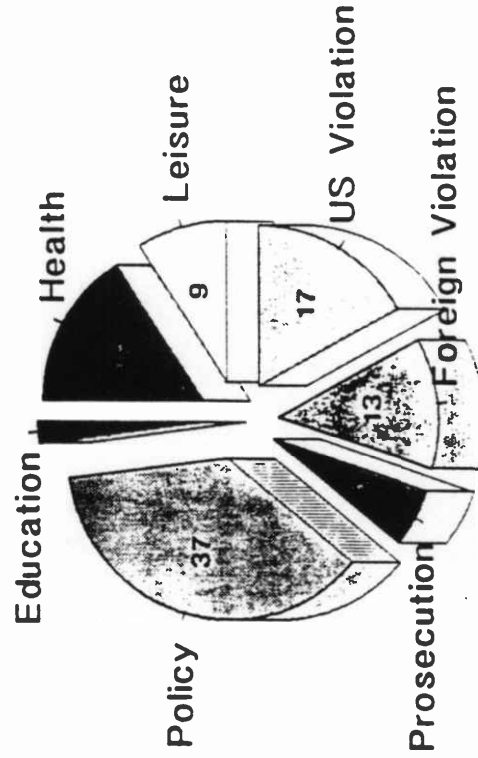
Total Number of Stories	19	26	+36.8
Entertainment	1	1	No Chg.
Sports	16	26	+43.7
Inches	228	192	-15.8

**If no activity occurred in an item, it was excluded.*

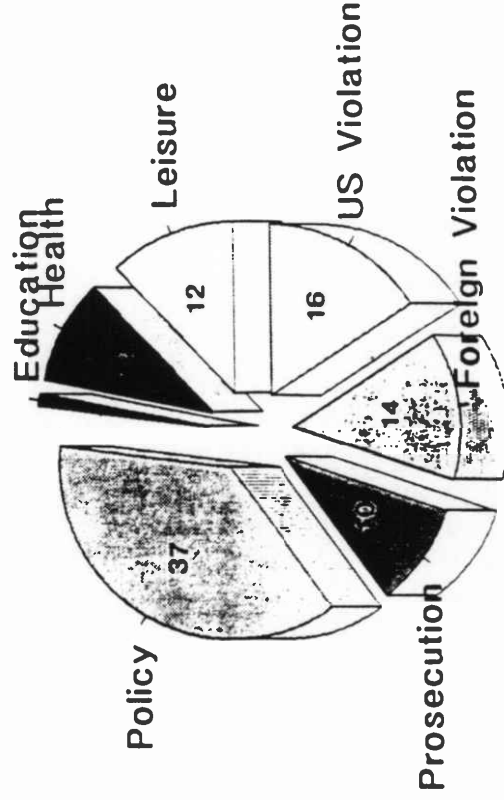
Appendix 2: Graphs A & B

Graph A

Pre-Speech: Number of Articles

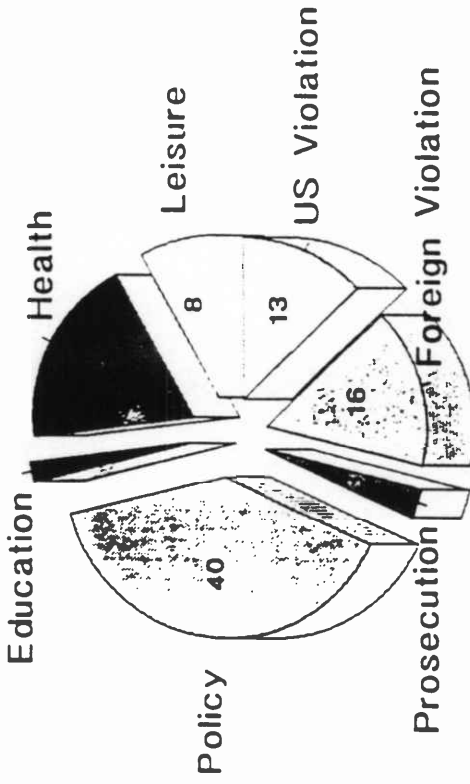


Post-Speech: Number of Articles

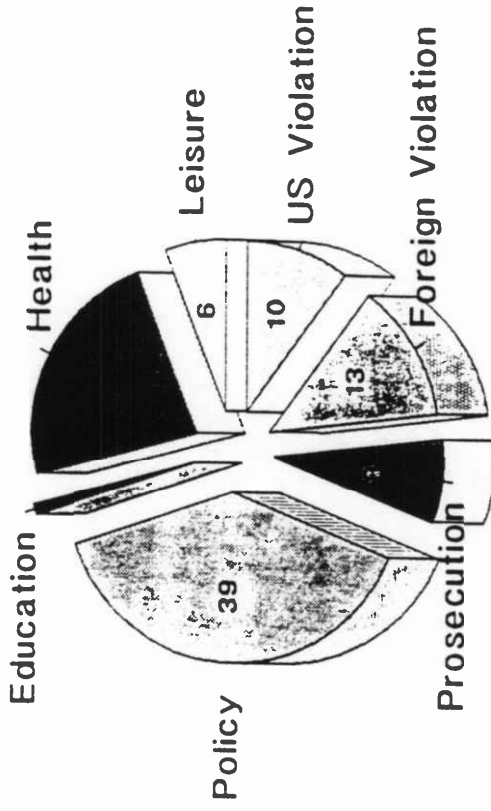


Graph B

Pre-Speech: Length of Articles



Post-Speech: Length of Articles



Appendix 3: Pre-Speech Measurement Instrument

Figure 1.

Preliminary Content Analysis Parameters

1.VIOLATION OF DRUG LAWS in U.S.

_____	# of persons arrested
_____	# of persons charged
_____	criminal organization
_____	amounts seized in pounds
_____	estimated street value
_____	money or property seized
_____	story length--column inches
_____	page and section

_____	local (NYC)
_____	national (any state or PR)
_____	international
_____	cocaine or crack
_____	marijuana
_____	methamphetamine (speed,ice)
_____	LSD
_____	PCP (angel dust)
_____	heroin
_____	glue-sniffing
_____	drug (generic for illicit)
_____	editorial
_____	hard news

2.VIOLATION OF DRUG LAWS OUTSIDE U.S.

_____ # of persons arrested
_____ # of persons charged
_____ criminal organization
_____ amounts seized in pounds
_____ estimated street value
_____ money or property seized
_____ story length--column inches
_____ page and section

_____ local (NYC)
_____ national (any state or PR)
_____ international
_____ cocaine or crack
_____ marijuana
_____ methamphetamine (speed,ice)
_____ LSD
_____ PCP (angel dust)
_____ heroin
_____ glue-sniffing
_____ drug (generic for illicit)
_____ editorial
_____ hard news

3. PROSECUTION/TRIAL

- _____ prison term
- _____ fine
- _____ probation
- _____ confiscation of property
- _____ acquitted/dismissed
- _____ story length--column inches
- _____ page and section
- _____
- _____
- _____ local (NYC)
- _____ national (any state or PR)
- _____ international
- _____ cocaine or crack
- _____ marijuana
- _____ methamphetamine (speed,ice)
- _____ LSD
- _____ PCP (angel dust)
- _____ heroin
- _____ glue-sniffing
- _____ drug (generic for illicit)
- _____ editorial
- _____ hard news

4. EDUCATION

- _____ school programs
- _____ educating adults
- _____ community resources/rehab
- _____ story length--column inches
- _____ page and section
- _____
- _____
- _____ local (NYC)
- _____ national (any state or PR)
- _____ international
- _____ cocaine or crack
- _____ marijuana
- _____ methamphetamine (speed,ice)
- _____ LSD
- _____ PCP (angel dust)
- _____ heroin
- _____ glue-sniffing
- _____ drug (generic for illicit)
- _____ editorial
- _____ hard news

5. HEALTH

- _____ community resources
- _____ effects of drug use
- _____ human tragedy
- _____ government policy
- _____ story length--column inches
- _____ page and section
- _____
- _____
- _____ local (NYC)
- _____ national (any state or PR)
- _____ international
- _____ cocaine or crack
- _____ marijuana
- _____ methamphetamine (speed,ice)
- _____ LSD
- _____ PCP (angel dust)
- _____ heroin
- _____ glue-sniffing
- _____ drug (generic for illicit)
- _____ editorial
- _____ hard news

6. GLAMOUR

- _____ entertainment
- _____ sports
- _____ story length--column inches
- _____ page and section
- _____
- _____
- _____ local (NYC)
- _____ national (any state or PR)
- _____ international
- _____ cocaine or crack
- _____ marijuana
- _____ methamphetamine (speed,ice)
- _____ LSD
- _____ PCP (angel dust)
- _____ heroin
- _____ glue-sniffing
- _____ drug (generic for illicit)
- _____ editorial
- _____ hard news

7. U.S. POLICY

_____	legislation
_____	military operations
_____	decriminalization
_____	financial costs
_____	civil liberties
_____	inter'l relations/efforts
_____	story length--column inches
_____	page and section

_____	local (NYC)
_____	national (any state or PR)
_____	international
_____	cocaine or crack
_____	marijuana
_____	methamphetamine (speed,ice)
_____	LSD
_____	PCP (angel dust)
_____	heroin
_____	glue-sniffing
_____	drug (generic for illicit)
_____	editorial
_____	hard news

Appendix 4: Post-Speech Measurement Instrument

Figure 2.

Final Content Analysis Parameters

1.	<u>VIOLATION OF U.S.DRUG LAW</u>
	arrests
	charges
	indictments
	criminal organization
	death
	official corruption
	story length-column inches*
	page and section
	local**
	national***
	international^
	cocaine (crack)
	marijuana (hashish)
	methamphetamine (speed,ice)
	LSD (acid)
	PCP^^ (angel dust)
	heroin (opium, methadone)
	glue-sniffing
	steroids^^^
	drug (generic for illicit)
	editorial
	hard news

*Rounded to nearest integer.
 **New York City.
 ***Any state or Puerto Rico.
 ^Occurring in foreign country.
 ^^Phencyclidine.
 ^^^Any performance-enhancing drug.

2.

VIOLATIONS--FOREIGN

COUNTRIES

	arrests
	charges
	sentencing
	criminal organization
	official corruption
	story length--column inches
	page and section
	local
	national
	international
	cocaine (crack)
	marijuana (hashish)
	methamphetamine (speed,ice)
	LSD (acid)
	PCP (angel dust)
	heroin (opium, methadone)
	glue-sniffing
	steroids
	drug (generic for illicit)
	editorial
	hard news

3. PROSECUTION--U.S.
trial
convictions
acquitted/dismissed
story length--column inches
page and section
local
national
international
cocaine (crack)
marijuana (hashish)
methamphetamine (speed,ice)
LSD (acid)
PCP (angel dust)
heroin (opium, methadone)
glue-sniffing
steroids
drug (generic for illicit)
editorial
hard news

4.	<u>U.S. POLICY*</u>
	anti-drug legislation
	anti-drug operations
	decriminalization
	financial costs
	civil liberties/drug test
	ethics
	death
	inter'l relations/efforts
	story length--column inches
	page and section
	local
	national
	international
	cocaine (crack)
	marijuana (hashish)
	methamphetamine (speed,ice)
	LSD (acid)
	PCP (angel dust)
	heroin (opium, methadone)
	glue-sniffing
	steroids
	drug (generic for illicit)
	editorial
	hard news

5.	<u>EDUCATION</u>
	school programs
	educating adults
	community resources/rehab
	theory
	story length--column inches
	page and section
	local
	national
	international
	cocaine (crack)
	marijuana (hashish)
	methamphetamine (speed,ice)
	LSD (acid)
	PCP (angel dust)
	heroin (opium, methadone)
	glue-sniffing
	steroids
	drug (generic for illicit)
	editorial
	hard news

*government or regulatory agency at the national, state, or local level, such as the federal Drug Enforcement Agency or a town's police force.

6.	<u>HEALTH</u>
_____	community resources
_____	human tragedy
_____	government policy
_____	story length--column inches

_____	page and section

_____	local
_____	national
_____	international
_____	cocaine (crack)
_____	marijuana (hashish)
_____	methamphetamine (speed,ice)
_____	LSD (acid)
_____	PCP (angel dust)
_____	heroin (opium, methadone)
_____	glue-sniffing
_____	steroids
_____	drug (generic for illicit)
_____	editorial
_____	hard news

- 7. LEISURE
- _____ entertainment
- _____ sports
- _____ story length--column inches
- _____ page and section
- _____ local
- _____ national
- _____ international
- _____ cocaine (crack)
- _____ marijuana (hashish)
- _____ methamphetamine (speed,ice)
- _____ LSD (acid)
- _____ PCP (angel dust)
- _____ heroin (opium, methadone)
- _____ glue-sniffing
- _____ steroids
- _____ drug (generic for illicit)
- _____ editorial
- _____ hard news

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VIII. NOTES

^a'Substance abuse' includes legal drugs, such as alcohol, tobacco, and prescription drugs. Far-reaching social problems bedevil policy efforts regarding these drugs, but for the purposes of this paper, only drugs that are illegal will be considered.

^bThroughout this paper drug and substance are interchangeable for illicit drug.

^cHard-core was defined as use of cocaine at least once per week.

^dSelf-reported data from studies of national trends may not be reliable, an inherent limitation expressed by pollsters.

^eThe media and the press will be used interchangeably to denote television, radio, magazines, newspapers, tabloids, etc. Many studies discuss social issues regarding the media in general terms, rather than specifying one medium.

^fEight months was chosen because approximately eight months had passed from the time of President Bush's Sept. 5, 1989 announcement to the beginning of this study.

^gReliability and validity of the testing instrument were not measured because of the limited scope of this study. Several coders would need to apply the categorization instrument to a series of newspapers and repeat the procedure at a later date. Their results would be statistically analyzed for error of measurement across people and across time. Poor, or unreliable, results would require reworking the instrument. Validity of the testing instrument could be addressed in asking professors of journalism and journalists for appraisals. Berelson suggests that validity is not generally a major problem in content analyses. [Content Analysis in Communication Research by Bernard Berelson, (New York: Hafner Press, 1952) 169-171].

^hKey words were: drug(s), narcotic(s), cocaine, crack, coca, speed, marijuana, hashish, methamphetamine, pot, LSD, acid, PCP, angel dust, heroin, opium, methadone, poppy, steroid, addiction, addict, junkie, dealer, substance abuse, overdose, shooting, shoot, black market, cartel, war, kingpin, cult, slaying, money laundering, suspended, Columbia, Peru.

ⁱSix percent was chosen to provide a reasonable number of newspapers (174) given the limitations of this study. Five percent would have required analysis of 216 newspapers, 4 percent 270 newspapers, etc. The simple random sample formula: $n' = (1.96)^2 PQ/6^2$ where $P = 85\%$. The finite population correction: $n = Nn'/(N + n')$ where $N =$ the total population size, 242.

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