

THE BUREAUCRATIC THEORY OF SYNTHETIC ADVERTISING/

by

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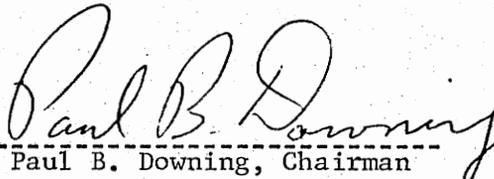
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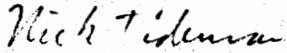
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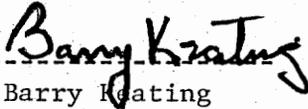
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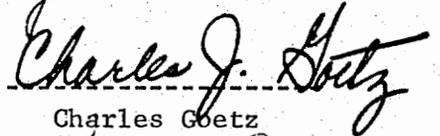
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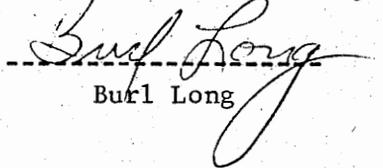
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TO

THE MEMORY OF MY MOTHER

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CHAPTER I

INTRODUCTION

The main task of this dissertation research is the study of the impact publicity activities of bureaus and social groups in general have on policy. I am specifically concerned with newspaper publicity because this medium handles a continuous flow of information which influences politically significant groups.

The central argument is the fact that the newspaper is perceived by certain groups as a medium that has the potential of altering public opinion. We would then anticipate these groups to try to push information through newspapers for the purpose of influencing policy outcomes. It is true that different groups have access to a variety of means with which they can influence policy. At all times they would be expected to use the least expensive and most effective means available and newspaper publicity is one of them. However, the perceived costs and benefits of newspaper publicity are not the same for all groups which creates differential access to that medium and thus limits or enhances their ability to affect the allocation of resources.

In brief, the narrow objective of the study is to examine the behavioral characteristics of the publicity activities of certain groups, mainly bureaus, and find out how they affect policy.

The study was based on documentary research. The major source of data has been the Los Angeles Times, one of the most prestigious and largest newspapers in California. Every environmental article that appeared in the L.A. Times between the years 1971 and 1974 has been copied and placed on file. The basis of the survey was the simple presence of a news item or mention. This included photographs, editorials and letters to the editor. It may be noted that each separate piece was counted even if it dealt with a topic already mentioned elsewhere in the paper.

Structure of the Study

The study is organized in five chapters. Chapter II provides a theoretical overview of certain communication theories which describe the significance of newspaper information in the political system. One of the findings is that the newspaper appears to be a major form of communication for the following influential groups: a) high income, highly educated, b) environmentalists, and c) public officials.

In the same chapter the theoretical background is developed and the main hypothesis is stated which contends that bureaus will try to maximize their policy objectives partially through newspaper publicity.

Chapter III is a case study which traces the publicity development of a central environmental issue in Southern California. The issue is what I call the NOX case which pertains to two programs - requiring installation of antismog devices-that the State of California was involved in an effort to reduce smog. The NOX case constitutes a case where the press-government relationship and its policy implications

unfold in the pages of the L.A. Times. The case reveals how when an agency develops access to publicity takes advantage of it to pursue specific policy goals.

Chapter IV supports the hypotheses developed in Chapter II with some statistical analysis using data on water and air pollution. In essence, it carries out the research on a larger scale. The NOX case was limited in a particular aspect of air pollution, however, additional evidence was needed to strengthen the original hypothesis.

The conclusions of Chapter IV are consistent with the findings in the NOX chapter. Mainly that bureaus appear to have greater access to publicity than other social groups have and that they utilize it to their advantage to influence policy. It was also found that other agents obtained substantially less publicity than the bureaus did on both air and water pollution.

CHAPTER II

THE ROLE OF INFORMATION IN A POLITICAL SYSTEM

Political decisions, like other decisions, are made by people who employ available information and react to goals and constraints. The information flow between the governors and the governed is vital to the outcome of the political process. It is practically impossible to comprehend the workings of our political system without an understanding of how this flow of information takes place.

Political communication takes place at many levels and in different forms. The process of issue emergence involves an interplay of groups and individuals at various levels, their perceptions, dispositions, resources, the relative costs of actions, and the constitutional framework as well as the power relationship within which they operate.

We have identified several social groups that influence the allocation of resources via the political mechanism and hence have an interest in the production and transfer of information. These groups include bureaus, interest groups, industries, and individual citizens. Each of these groups has certain goals and resources and face certain constraints. It would not be surprising, then, to find that some groups employ one method of communicating their views or demands to

some groups more than other groups do. One of the principle methods of communication is through the media and in particular through newspapers.

Newspapers are treated in this study as two-way information conveyors which through their messages create, confirm or alter tastes, preferences, demands and cognizance. Hence, a newspaper is a place where centralized trading activity takes place between bureaus, interest groups, individuals and others. In other words, not only newspapers are used for information collection purposes, by political significant groups, but they also serve as a method of transmitting ideas or messages that these groups want to convey to the readership. This particular view of the two-way information flow is not common in the literature.¹ On the contrary, there is widespread belief that newspapers carry messages outward to the population but never transmit return messages in the opposite direction. One purpose of this chapter is to show that newspapers do function to transmit information in both directions between various politically relevant groups.

A second purpose of this chapter is to show that the goals and constraints of each group influences the extent of their use of newspapers to transmit information. I hypothesize that biases in access to this medium and constraints on the use of other methods of transmitting desired information cause bureaus to employ this medium more heavily than other groups do.

¹Ben H. Bagdikian, *The Information Machines: Their Impact on Media*, (Harper and Row, Publishers 1971), p. 108.

Acceptance of media exposure as a significant factor converting social problems into policy issues leads to the question of how significant newspaper information is as an input into the policy making process. Information, in this paper, consists of events tending to change the individual's subjective probability or belief distributions over possible states of the world.² In other words, information tends to change the uncertainty of various outcomes thus offering a possibility for:

- a) improved solutions to problems implying the reallocations of resources via the political process, and
- b) emergence of issues and their consequent status as political problems.

Newspapers, and the information they contain, possess several distinct characteristics that give them the potential to: a) influence public opinion in a desired direction; b) instigate some desired action; and c) generate reaction to the content because individuals and groups react to propositions in terms of their previous educational, social, and religious training and conditioning, as well as their general attitude toward the basic underlying proposition.

The distinct characteristics of newspaper information are:³

- a) The reader controls the exposure in the sense that he may read when he pleases and stop when he pleases. He may scan, skip, or plod

²Jack Hirshleifer, "Where are we in the Theory of Information," Journal of Political Economy, June 1961, pp. 213-225.

³This section draws heavily upon Joseph T. Klapper's, "The Comparative Effects of the Various Media as it appears" in the Process and Effects of Mass Communication, ed. by Wilbur Schram (Urbana: University of Illinois Press, 1965).

as he pleases. Finally, he may expose himself to print at the time he is most amenable to such exposure.

b) Exposure may be and often is repeated. Unlike electronic media, newspapers remain available, and readers commonly return to material already read to confirm their memory or retrieve information. Cumulative effects and availability for references are thus more possible in newspapers than in other media.

c) Newspapers provide fuller treatment than radio or television, which present predetermined sequences of ideas and have relatively brief durations. Therefore, complex discussions are more tractable for newspapers than for other media.

In this study we develop the view that newspaper space is a scarce resource for which several societal groups have incentives to compete for. This resource is allocated by the price mechanism only in the case of paid advertisements. However, paid advertisement firstly lacks the authenticity and prestige that the same information possesses when appearing in the form of a news article, secondly, it is too costly to be used frequently, and thirdly, some groups, e.g., like bureaus are constrained by law from using it.

We would then expect to see different groups competing to transmit their views through the newspaper in the form of news articles since the perceived benefits are greater from this type of advertising than the other alternative available to them. It may be noted that the competitive behavior of groups is partly attributable to the fact that newspapers are considered prestigious and authentic sources of information by their readers.

We expect to find that some groups have greater success at getting their policy goals published in the print media. This is because each group will face different opportunity costs and constraints from that process.

The narrow hypothesis I wish to focus upon is that bureaus will have less relative costs than other groups have and that they are constrained from employing other methods of influencing policy which are available to other groups. This makes the net benefits of publicity through media higher for bureaus than for other groups. Therefore, we expect to find bureaus disproportionately represented in newspaper articles and publication views. One would expect bureaus to do so more than other groups because:

a) The cost of transmitting their views is relatively lower than other groups which renders "sale" of information cheaper to bureaus.

This has already been demonstrated by W. J. Small who observes:

In a critique of the American press, Tom Wicker, of the New York Times told a Columbia University Audience that the press suffers from its orientation towards establishmentarianism. Said Wicker, "if I had been in Mr. Agnew's place and been trying to make an intelligent useful criticism of the American press, I think I would have said that its biggest weakness is its reliance on and its acceptance of official sources; indeed, its objectivity in presenting the news. That is, that the fundamental reliance of the American news media in my experience has been, with rare and honorable exceptions, on the statement of the official source, be it government or business, or whatever."

b) The perceived benefits are greater since it is not only newspapers that consider government information authoritative but the public too. In fact, it can be argued that an article which contains

information about government activity will be more easily "sold" in the sense of having the potential to alter belief distributions than a particular article which deals with the activities of an environmental organization.

c) The cost of reaching a large number of people is low.

d) Bureaus can reach through that medium-specialized appeal-politically significant groups which are part of the newspaper readership.

e) Their alternative ways that can influence policy are rather limited, e.g., they cannot lobby while other groups can, they cannot advertize, and they cannot engage in mass mailings. That particular limitation warrants the heavier use of newspapers by bureaus.

The second goal of this study is the analysis of the role of newspaper publicity as a factor contributing to the emergence of issues. The data collected for this research consist of environmental articles covering all types of pollution. Among them the most numerous and the most prominent were the ones on air and water pollution which were selected for the purpose of testing which was conducted in the following manner:

1) The publicity significance of water and air pollution will be tested according to: a) the amount of media exposure. That is simply the total amount of articles in a particular category of pollution, and b) the prominence⁴ of articles falling in a particular category of pollution.

⁴ See Appendix A for definition of prominence.

The analysis of the above variables will allow: a) ranking of newspaper attention paid to the different forms of pollution, and b) give us an understanding of the relative changes of publicity significance of different forms of pollution over time.

2) The overall publicity effectiveness of interest groups, bureaus and concerned individuals will be analyzed. For that purpose, the following variables will be considered:

a) Direct publicity⁵ obtained in terms of numbers (quantity of articles,

b) Prominence of direct publicity,

c) Response created by direct publicity. Response in the present context is considered as the total number of articles that followed in subsequent issues for which initial direct publicity was responsible,

d) Evaluate the policy impact of such publicity. This can be accomplished by tracing the development of leading issues and their impact on policy attributable to publicity. More specifically, one or more leading environmental stories will be examined from the point publicity originated until it subsided. This period of active publicity for an issue is critical for policy purposes. It is then that societal problems become political issues. Therefore, a careful analysis of the overall development of an issue in the press will yield valuable insight to the research question in terms of the policy process, and

e) Breakdown overall publicity effectiveness of agents according to different categories of pollution.

⁵ Favorable direct quotations of individuals who managed to get their viewpoints across.

- 3) Evaluate the publicity strategies of different groups by:
 - a) Closely monitoring methods of release and/achieving publicity.

Socioeconomic Characteristics of Newspaper Readership

A review of the existing literature on the socioeconomic characteristics of newspaper readership confirms the significance of newspapers as a major source of information to politically influential groups. Several prominent writers have reached the conclusion that print media are a relatively more important source of information to higher income and more educated groups.⁶ V. O. Key⁷ argues that those more attentive to print media as an information source are mostly higher in socioeconomic status, political knowledge, and political activity, than are consumers of any other mass medium. Similar conclusions were reached by W. Schram and D. White,⁸ who found that "reading of public affairs and editorials increase with age, education and with higher economic status." Furthermore, Samuelson⁹ and et al. indicate that newspapers and magazines provide information more likely to be suited for business and professional people than for craftsmen and

⁶Leo Bogart, "No Opinion, Don't Know and May be no Answer," Public Opinion Quarterly, XXXI (Fall 1967), p. 336.

⁷V. O. Key, Jr., Public Opinion and American Democracy (New York: Alfred Knopf, 1961), Chapter 14.

⁸W. Schram and D. White, "Age, Education and Economic Status as Factors in Newspaper Readings," in Process and Effects of Mass Communication, ed. by Wilbur Schram (Urbana: University of Illinois, 1965).

⁹Meril Samuelson, Richard F. Carter and Lee Ruggels, "Education Available Time and Use of Mass Media," Journalism Quarterly, XL (Autumn 1963), pp. 491-496.

laborers. Moreover, people with college level educations are prepared for roles that will involve more opportunities for exposure to printed media.

These studies point out that high income and highly educated groups use newspapers as a major form of communication in the political environment. Therefore, it is natural that newspaper readers would be more attentive to issues and have more policy influence than consumers of any other mass medium. Furthermore, another group of studies indicates that interest groups and associations, in general, consist of persons with higher income and educational levels. For example, E. E. Schattsneider¹⁰ has concluded that a class bias exists in the universe of organized interest groups. He observed that middle and upper income groups are much more organized than are other groups.

The empirical work of V. O. Key, Jr. points in a similar direction. His results can be summarized as follows.¹¹

a) Survey research data have consistently disclosed that frequency of group membership tends to vary with status indices of education, occupation, and income.

b) Data on farm group membership reveal that wealthier farmers were better represented than less well-to-do farmers.

¹⁰ E. E. Schattsneider, The Semi-Sovereign People (Holt, Rinehart and Winston, Inc., New York, 1960), pp. 30-36.

¹¹ V. O. Key, Jr., op cit., pp. 502-503.

Similar results were obtained by C. R. Wright and H. H. Hyneman,¹² who disclosed that a substantially higher percentage of persons in higher status positions belong to voluntary associations than do persons of lower status. They also found that increases in social status are associated with an increase in the percentage of persons who belong to several organizations.

Finally, the most convincing evidence, which applies directly to environmental groups, comes from the work of Dunlap.¹³ His findings are threefold:

- 1) Environmentalists are an extremely well-educated group.
- 2) They are predominantly white collar workers, and most of them hold high status positions, and
- 3) They have higher-than-average family incomes.

The tables that follow in the next two pages permit comparisons of educational, occupation, and income characteristics of environmentalists compared with general population, by EPA region.¹⁴

¹²Charles R. Wright and Herbert Hyneman, "Voluntary Association Memberships of American Adults: Evidence from National Sample Surveys," American Sociological Review, Vol. 23 (1958) reprinted in American Political Interest Groups: Readings in Theory and Research, ed. by Betty Zisk (Wadsworth Publishing Co., Inc., Belmont, Calif., 1969), pp. 304-307.

¹³Dunlap, "The Socioeconomic Basis for the Environmental Movement: Old Data, New Data, and Implications for the Movement's Future," Washington State University College of Agriculture Research Center, Scientific Paper No 4350 (1974). Region III includes Pennsylvania, Virginia, West Virginia, Maryland, Delaware, and the District of Columbia. Region VIII includes Colorado, Utah, North Dakota, Wyoming and Montana. As quoted in Gordon Brady's, "The Institutionalization of Citizen Participation in the Clean Air Act," (Doctoral Dissertation, VPI, 1975).

¹⁴Ibid.

TABLE II-1
Socioeconomic Characteristics of Environmentalists Compared with
General Population, by EPA Region

Characteristics	Region III		Region VIII	
	Environment	Population	Environment	Population
<u>Education:</u> ^b				
Some high school	5.8%	50.2%	3.6%	39.0%
High school graduate	14.7	30.9	9.7	33.6
Some college	18.5	8.3	21.4	14.9
College degree	21.5	5.9	24.6	7.3
Graduate work	39.6	4.6	40.8	5.3
No. of cases	(655)	(12,898,451)	(248)	(2,841,468)

^a"Population" data for each region obtained by combining appropriate census data on all states in that region. All data obtained from U.S. Bureau of the Census, 1970: Chapter C, "General, Social and Economic Characteristics" -- Table 46 (Education), Table 54 (Occupation), and Table 57 (Income). "Environmentalist" data represents responses from individuals in the 3,300 organizations sampled in Regions III, VIII, and five cities: San Francisco, St. Louis, Mo., Birmingham, Ala., Amherst, Mass., and Durango, Colorado. Five questionnaires were sent to each organization.

^bEducational data reported on those 25 years and older.

TABLE II - 1 continued

Characteristics	Region III		Region VIII	
	Environment	Population	Environment	Population
<u>Occupation:</u> ^c				
Professional/Technical/ Academic	55.8%	15.3%	60.7%	16.1%
Mgr./Administrator	15.3	7.6	12.4	9.6
Sales	3.0	6.7	4.1	7.0
Clerical/Office	6.4	18.3	2.1	16.6
Service	1.8	12.3	1.4	14.1
Agriculture	3.2	1.7	15.2	8.8
Skilled Labor	9.6	14.4	3.4	12.4
Unskilled Labor	4.8	23.6	.7	15.4
No. of cases	(437)	(8,885,431)	(145)	(2,017,017)
<u>Family Income:</u>				
Under \$4,999	3.8%	18.7%	7.0%	21.5%
\$5,000 - \$9,999	18.5	34.8	20.7	36.5
\$10,000 - \$14,999	27.9	26.6	27.8	25.5
\$15,000 - \$24,999	33.4	15.4	32.6	12.9
\$25,000 and over	16.4	4.5	11.9	3.6
No of cases	(736)	(5,902,418)	(270)	(1,363,597)

^cOccupational data reported on those 16 years and older.

Source: Dunlap, The Socioeconomic Basis of the Environmental Movement.

The area of greatest divergence between the general public and the environmentalists is in graduate school attendance. In Regions III and VIII, the comparisons are indeed startling; in Region III, 39.6 percent of the environmentalists have done graduate work, as contrasted to 4.6 percent of the general public; the corresponding figures for Region VIII are 40.8 percent versus 5.3 percent.

Moreover, it seems that policy makers and bureaucrats tend a) to devote more time in reading newspapers, and b) read a greater number of newspapers than the average citizen does.

The findings are summarized as follows:

a) There is a high positive correlation between reliance on newspapers and with levels of both income and education.

b) Membership in interest groups and associations increases with income.

c) The educated and higher income groups not only belong to more associations and rely on print media as a major source of communication, but also engage in a larger number of political activities. In addition, it was found that environmentalists belong to the educated and higher income groups.

d) Bureaus and policy makers consider newspapers a major source of information.

Nature of Political Environment, Information Production and Group Dynamics

The political environment can be said to encompass a variety of events. These events vary in magnitude and prominence through time

and very often attract attention of groups and individuals that shape public policy.

Public interest varies according to the prominence of the events themselves. Such events may include oil spills, air disasters, minority group rebellions, etc.

Events and/or occurrences can be classified into the following three broad categories:

(a) Events or unplanned occurrences that make the news because the media considers them newsworthy. This category of events simply includes all issues for which news agents perceive a readership demand.

(b) Events that are indirectly newsworthy because they relate to newsworthy events; e.g., complaints from citizens in the form, say, of letters to the editor or press releases by citizen groups concerning the X amount of crude oil that was spilled in the sea.

(c) Events or actions that anybody can make newsworthy by being their sole producer; e.g., if I blow up the public library, I can be absolutely certain that such an action will generate substantial publicity.

Categories (b) and (c) are critical to this study because they allow citizens interest groups and policy makers to vary within limits the salience of certain issues. It can be said that these two classes of events are sometimes conscious attempts to create or further magnify an issue on the public agenda.

It is true as Anthony Downs argues that "All reporting is biased because the reporter must select only some of the extant facts to pass on to his audience."¹⁵ However, classes (b) and (c) of the events can change the direction of the bias by "leading" the reporter as to what must be published. Chapter treats this point more analytically by examining the policy strategies of certain groups, as revealed through newspaper publicity.

Once the events are in print, they separate themselves from a mass of unnewsworthy and thus irrelevant information and they become relevant and accessible information. Therefore, information is produced and events that reach the production stage potentially relate to the emergence of issues. Information not reported is unlikely to generate any impact or response; hence, one would expect the issue area that the event relates to be unaffected. On the other hand, not all produced information necessarily affects opinion, but at least it has the potential to do so.

Produced information reaches the public through the media. The public consists of bureaus, interest groups, and plain citizens. These three groups can be further categorized according to the degree of involvement. In what can be called the "high involvement" model, which approximates Ninmo's model,¹⁶ bureaus, interest groups and

¹⁵Anthony Downs, Economic Theory of Democracy, p. 204, 1954, (New York: Harper & Row).

¹⁶Dan Ninmo, The Political Persuaders: The Techniques of Modern Election Campaigns (Englewood Cliffs, N.J.: Prentice-Hall, 1970), p. 192.

under certain circumstances citizens, are included. For such groups print media is largely preferred to electronic media as one information source. It would also be expected that the highly involved groups would be more attentive to the topics that media will produce and that can be classified as potential issues. Groups with high involvement must be considered more important to issue emergence than those with low involvement because they are those with "opinions the government likes to head."¹⁷ On the other hand, in the low involvement category one could place most citizens who are less interested in political issues, and there the only participation, if any at all, is voting. Insensitivity to environmental stimuli and almost non-existent participation in political life are two additional characteristics of that group.

When information reaches the high involvement group, a series of interpretations and actions take place. Interactions of demand and response often convert events into political issues which require solution and hence alter resource allocations. It is these responses, such as the nature of participatory activity and its frequency, that can be considered as indicators of the relative importance of the problem as a political issue. Therefore, it can be said that political issues emerge in response to certain factors in the political environment and that the media, apart from the fact that it constitutes one of the main sources of political reality, can contribute to the setting of issue emergence.

¹⁷V. O. Key, Jr., Public Opinion and American Democracy, p. 14, (New York: Alfred Knopf, 1961).

Once the political issues are established and their solution demanded, the role of information and its differential interpretation by the highly involved group becomes critical.

Decision making requires knowledge which can be treated as information. Before a decision is being made or action is being taken, information collection relative to the issues is important.

One of the goals of the program study is to examine the importance that newspaper coverage of a certain issue plays in decision making and policy formulation for the three groups that belong to highly involved category. All three groups interpret information differently and react differently. Their reactions vary in scope and are limited by their resources. The nature of the participatory activity and their time dimension are instrumental for explaining the behavior of the above mentioned groups. Analysis of newspaper activism may generate some fresh views on both how these groups behave and what their contribution to policy formation is.

Costs of Information and Participation

Information collection for intelligence purposes, and participatory activity on a political issue for the purpose of exerting influence upon policy formation both entail costs similar to those the decision making voters face. Information collection and transmission is costly in terms of alternatives foregone. These costs can be analyzed as follows:

a. Procurement costs: mainly costs of gathering and selecting data. Imagine the costs involved in gathering information from

government sources alone where the government produces a horrendous deluge of information.

b. Analysis costs: costs of factual analysis of data.

c. Evaluative costs: those of relating data to specific goals and weighing alternatives.

d. Participatory or response costs: those which the individual must incur either to actively participate or respond with some form of behavior with the intention of exerting influence upon policy formation or to affect the salience of an issue.¹⁸

It becomes clear that costs of undertaking the above discrete four steps in information evaluation and action will increase according to both a) the intensity of information intelligence activity, and b) the extent and form of participation.

Participatory and intelligence costs vary among different social groups and usually depend on a) the nature of their resource constraints, and b) their capability to process and transmit information.

The newspaper appeals to all groups for intelligence purposes because a) it contains capsule information, b) it is a low cost source of information about specific issues for which otherwise separate information is necessary, and c) it can reduce the previously mentioned step-wise cost increase.

¹⁸Ibid. The cost distinction is basically identical to that of A. Downs with the exception of the fourth category which I have added. See p. 210.

Bureaucracies as Pressure Groups and Their Publicity
Efforts in Shaping Policy

Bureaucracies influence social policies and thus influence the allocation of resources. Policy decisions are made when they exercise choice and judgment in trying to shape stated policies.

Bureaucracies are usually concerned with special limited types of public policy and therefore one could say, that they are indeed similar to pressure groups in the sense that groups of people pursue the same interests. Moreover, bureaucracies promote special solutions to policy problems in their respective areas.

One could then identify two common characteristics of interest groups and bureaucracies:

a) the bureaucracy pursues ad hoc solutions to its special areas of concern, e.g., education, air quality, etc., and

b) bureaucratic objectives are in line with the interests of the bureaucrats themselves, e.g., maximization of the total budget where public reputation, power, and ease of managing the bureau constitute motives which are a positive function of the total budget.¹⁹

Bureaucracies, being part of the government, are subject to constraints with respect to the publicity activities in which they can engage. An act passed in 1913 forbids the use of public funds to "compensate any publicity expert unless explicitly appropriated for that purpose."²⁰ A similar act which was passed in 1919 forbids

¹⁹William A. Niskanen, "Bureaucracy: Servant or Master?" (Institute of Economic Affairs, 1973), p. 22.

²⁰Stat. L. 212.

"directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, or other device, intended or designed to influence in any manner a member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation."²¹

Being rather broad in their content, the laws were designed for deterrence rather than as basis for actual cases. And, even though "publicity experts" have not been reported as being hired, "information" and "publication" officers have been employed.²²

As already mentioned, different agents cannot directly bid for scarce newspaper space, however, paying for the allocation of specific newspaper space is not unknown to bureaucracies. In 1958 the Brooklyn Post Office employees paid for a full page advertisement in The New York Times to reprint an article by Senator Olin D. Johnston, Chairman of the Senate Committee on Post Office and Civil Service, which in general, favored increasing the postage rates and modernization of the service. It may be noted that readers were urged to clip the article and mail it to their senators.

²¹Stat. L. 68.

²²James L. McCury, "Government Publicity," (Chicago: University of Chicago Press, 1967), p. 7.

The Importance of Newspaper Information vs. Information
from other Sources from the Bureau's Point of View

The main advantages of the newspaper in providing information
are:

- a) its broad circulation,
- b) the broad scope of its information,
- c) its condensation of information which reduces the time the
official must expend to become informed,
- d) its sense of use and availability, and
- e) its elimination of vertical distortion.

It is true that all information that flows in a bureau gets distort-
ed in a vertical level on its way to top officials.²³ The head of an
agency, for example, must either be aware of the biases and use coun-
ter biases to eliminate distortion to restore information to its
original form, thus eliminating the biases of his subordinates.

In the case that the official does not know what type of infor-
mation distortion he is faced with, he can either reduce reliance on
such information, or he can ask to be the first to evaluate the in-
coming information. This latter way of eliminating distortion gives
newspaper information a distinct advantage over other sources of in-
formation and makes it at least internally distortion free. It is
most likely that the top level official will read the newspaper him-
self rather than have others read it for him.

²³Gordon Tullock, The Politics of Bureaucracy (Washington: .
Public Affairs Press, 1965), pp. 137-141.

Successful top-level officials inside bureaus develop networks of information sources outside their bureaus to verify information conveyed by their subordinates or just to get new information. These information sources include social acquaintances, politicians, friends in other bureaus, gossip, and newspaper clipping services within the bureau itself.²⁴ The circulation of newspaper clippings within bureaus enhances the significance of this type of information for multi-person organizations involved in the making of policy decisions.²⁵

However, the extent to which bureaus rely on newspaper information for decision making and the relative weight of that type of information compared to other sources are both points the present study will attempt to examine empirically and theoretically.

Officials devote scarce resources to extract information from the newspapers not because they believe that it is interesting, but because they want:

- a) collection of factual information,
- b) evaluation of reactions and opinions on policy,
- c) interpretations by public suggestions and ideas on policy issues,
- d) monitoring of any comment or criticism of the bureau itself or its activities,
- e) monitoring of the press attitudes of other bureaus, and

²⁴Anthony Downs, "Inside Bureaucracy," p. 119 (Boston: Little, Brown).

²⁵Interview with Professor Paul Downing, member of the faculty in the Economics Department at VPI&SU, who has worked as a systems analyst at the Pentagon.

f) gauging specific reactions from politically important groups and individuals.

All of the above described information intelligence activity is aimed at better evaluation of policy alternatives and policy changes. Furthermore, newspapers play the important role of informing people about and interpreting government activity. Since people become interested in reading about issues related to their work, one would expect policy makers and bureaucrats in general to a) devote more time in reading newspapers, and b) to read a greater number of newspapers than does the average citizen.

Methods of Information Issuance Used by Bureaus

Among the most important ways officials communicate their views are as messages which in turn become news. These messages may take the following forms:

a) Personal contacts with members of the press which can be either reporters or editorial boards. Officials engage in exchange of information with reporters in their attempts to secure publicity on a certain issue. Personal contact helps both parties discover their mutual interests and needs. If the story is indeed what the newspaper readers want, then not only the public official is better off, but the reporter as well for his writing a successful story which will increase his possibility of advancement and stature among editors. The public official has an edge in the sense that he was the first and probably the only one to get his story in the paper. It must be remembered that substantial competition exists among

bureaus, competition not only to publish a story first, but to publish it at all, newspaper space being a scarce resource.

b) Press releases and press conferences. These two methods of communicating officials' views are considered the most common. To the official, the press releases offer the advantages of being concise, they offer control over the content of the story, and they provide opportunity for revision.

A brief comment about press releases and the reliance of newspapers upon them will not be out of place here. Machlup observes that:

"...that the selection of the news that is printed is not so much from what could be obtained by a corps of ubiquitous expert reporters than it is from a mass of press releases distributed by interested parties. For national and international news, most papers rely on the large news agencies, and these agencies in turn rely to a large extent to handouts received from public relations officers of government departments, private corporations, and public and private organizations of all sorts."

In relation to the above, he goes on saying:

"...but I challenge the newspaper publishers or editors to produce the evidence showing what percentage of the contents of their papers was originally written by their own reporters and staff writers, and how much came, directly or indirectly, from the handouts of interested parties."²⁶

Publicity activities of bureaus entail costs that I have previously designated mainly as participatory costs which bureaus will incur in the following cases:

²⁶Fritz Machlup, "The Production and Distribution of Knowledge in the United States," (Princeton, New Jersey: Princeton University Press, 1962), p. 229.

a) When they want to bolster or obtain support for their overall function as a bureau. Such objectives may coincide with expansion of the bureau itself, creation of a favorable public image, reaffirmation of the quality of the bureau's services, etc. All these information transmission activities can be labeled as institutional advertising.

b) When they pursue new policy objectives in the form of new programs. These activities fall into two categories: 1) activities prior to the initiation of a program which may overstress the nature of the program and act as "trial balloons" awaiting favorable editorial coverage and prominent display in general in the newspaper, and 2) activities undertaken after a new policy is initiated which will be directed in finding out reaction through the press and through other sources.

c) When agency heads want personal publicity. Public officials often want to identify themselves with successful programs having a profound impact on the political environment. Other publicity seeking can be classified as image building and making himself known.

d) When routine information is transmitted. One of the functions of all bureaus, that of keeping the citizens informed by making routine information available, is in line with the widespread notion that a well informed citizenry strengthens democratic government. But careful control of the form of this "routine" information helps strengthen the bureau.

Press conferences allow the official press control over the content of the message since the bureaucrat is subjected to questions.

On the other hand, he controls the timing of the press conference so that it will offer maximum publicity and the number of conferences, too, since an overwhelming number of conferences may fail to generate maximum publicity.

On the Emergence and Role of Interest Groups

One of the focal points of the present study is the analysis of the publicity generating effects of interest groups. Interest groups are considered to be a major link between the citizen and the government in the sense that they transmit the desires and demands of individuals to their representative. Furthermore, through their activities, they play a significant role in allocating material and human resources.

A brief review of the most influential political theories dealing with the formation and position of interest groups in the political milieu is necessary for a more complete understanding of their behavior.

The existence of interest groups has occupied scientific interest as early as 1335 when Alexis De Tocqville made the following comment during one of his trips in the U.S.:

In no country in the world has the principle of association been more successfully used, or applied to a greater multitude of objects, than in America. Besides the permanent associations, which are established by law, under the names of townships, cities, and countries,

a vast number of others are formed and maintained by the agency of private individuals.²⁷

However, it has not been until recent years that political scientists have developed a systematic interest in the interest group.

There exists substantial agreement among scholars that the interest group was given its first theoretical emphasis in Arthur Bentley's, The Process of Government.²⁸ The essence of his book is that politics is a system in which, through the institutions of government, interest groups can achieve allocation of social resources favorable to them. Bentley's contribution created an avalanche of responses and developments of similar theories such as the Proliferation Hypothesis.²⁹

This theory was developed by several political scientists who argue that various processes of social differentiation have as an outcome the emergence of increasingly specialized sets of people who engage in an ever-expanding range of roles. The specialized differentiation of role and function generates an even larger diversity of interest or functions as new sets of people desire different social goals.

²⁷Alexis De Tocqville, "Democracy in America," edited and abridged by Andrew Hacker, revised translation by Francis Bauer, (New York: Washington Square Press, 1964), p. 71.

²⁸Arthur Bentley, "The Process of Government," (San Antonio Texas: Principia Press of Trinity University, 1949).

²⁹For further analysis of the theory, see David Truman, "The Governmental Process," (New York: Knopf, 1951), p. 66 and Robert Mc-Iver, "The Web of Government," (New York: The MacMillan Company, 1947), p. 52ff.

The farmer in the U.S. is presented as a typical example of the theory of Proliferation. In short, farmers were led into specialized groups with specialized interests by the commercialization and expansion through specialization that agriculture experienced during and after the Civil War.

Another theory is the Homeostatic Mechanism Hypothesis with emphasis on disruptive factors such as wars, innovation, and other variables which primarily disturb a previous equilibrium. The disequilibrium which will emerge will generate response in the form of an association which according to Truman "...tends to occur in waves."³⁰ One of the most important implications of the theory is that there is a cyclical pattern of membership in the groups. Once the very cause of formation - say adversity - is not present anymore, membership would decline.

The third theory to be surveyed is that of entrepreneurial group formation.³¹ In brief, the theory states that groups may come into existence as an outcome of entrepreneurial action. The entrepreneurs will combine scarce resources to provide a set of benefits at a price in the market. The price is membership and whatever pecuniary and nonpecuniary obligations go with it. The persons interested in buying the benefits constitute the market. Groups

³⁰Ibid., p. 59.

³¹Robert H. Salisbury, "An Exchange Theory of Interest Groups," Midwest Journal of Political Science, Vol. XIII, No. 1, February 1969, pp. 11-32.

organized through exchange will cease to exist when the benefits accrued by its members are perceived as inadequate.

Groups are distinguished as a) material groups, i.e., groups organized solely around material benefits such as the Grange and other farmer organizations; and b) cell-based organizations, where together with the possible material benefits there are expressive benefits. This latter category of benefits implies benefits limited to ideologies such as the maintenance of a clean environment, etc.

Salisbury believes that cell-based groups are politically irrelevant which implies that they have no impact on policy. He specifically states that "fringe groups are unlikely to have much impact on public decisions..."³² This latter statement has already been invalidated by recent research on the issue.

Group formation is explained directly by exchange. The group entrepreneur exchanges benefits with consumers or members in this case. He provides benefits offered at the price of the membership. It may be noted that for the organization to survive a certain number of members must be attracted and a certain flow of benefits must be provided to both directions through exchange. A competitive rate of return must prevail to enable the entrepreneur stay and not shift his energies to some other enterprise.

Before the significance of publicity activity of interest groups can be understood, their place in the political and social structure must be considered.

³²Op. cit., p. 18.

For an interest group to establish itself in the political environment, it must be cohesive, have leadership, wealth and numbers, access to decision making centers and be acceptable to decision makers with whom they register their claims.³³

Acceptability to decision makers depends on two things:

a) on the legitimacy of interest groups accorded to them by those in a position to make authoritative decisions,³⁴ and

b) by the importance of interest groups not in society generally but in that part of it which is most relevant to the legislator.

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It would be a serious omission to neglect a discussion of the public choice view of pressure groups as formulated by Mancur Olson, Richard Wagner and David O'Brien.³⁵

³³ Joseph Monsen, Jr. and Mark W. Cannon, "The Makers of Public Policy," (New York: McGraw Hill Book Co., 1965), pp. 48-56.

³⁴ Harmon Ziegler, "Interest Groups in American Society," (Englewood Cliffs: Prentice Hall, Inc.), p. vi.

³⁵ David J. O'Brien, "Neighborhood Organization and Interest Group Process," (Princeton University Press, N.J., 1975, Ch. I), pp. 7-42.

In brief, this type of approach is concerned with large groups, which have as their primary goal the maximization of the real income of their members. Its essence consists of the way they solve the public good dilemma. The formulation of such groups is explained by the modern theory of public goods supply in the sense that they provide their members with a public good. Pressure groups face the typical public goods dilemma where the individual has no incentive to contribute for the provision of the good and has to be coerced by the government to do so. In the case of pressure groups, the role of the government is assumed by some legal mechanism which allows members of the pressure group to coerce themselves into paying for the benefit that the group provided.

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b) by the importance of interest groups not in society generally, but in that part of it which is most relevant to the legislator - the constituency.

Obviously, interest groups aid the democratic processes by letting the legislator know what the people want. The legislator finds it impossible to contact each one of his constituents and find out their opinions. Therefore, it is cheaper for him to utilize the inexpensive information that groups are willing to provide. On the other hand, it can be said that reliance on information provided by interest groups may be biased in the sense that these groups provide the legislators with information that will maximize the benefits of that particular group. One, of course, might argue that legislative candidates who are more insecure in their personal and political positions will be more receptive towards interest groups than those who are more secure, thus limiting the significance of the effective communication of the interest group's preferences to certain legislators.

However, the findings of H. Teyne's³⁸ study point to a different direction. It is the candidates who are usually backed by a strong party or organization that are also favorably inclined toward what the interest groups have to say.

Having already discussed different theories dealing with the emergence of interest groups as well as their position in the

³⁸Henry Teyne, "Legislative Attitudes Toward Interest Groups," Midwest Journal of Political Science, Vol. II, p. 489, November 1967, No. 4.

political environment, I feel that I must try to explain the importance of the newspaper as a source of information for interest groups.

The Importance of the Newspaper as a Source
Information for Interest Groups

Interest groups will be expected to have varying needs for information, depending on their size and their activity in political life.

Newspapers will be primarily used by interest groups for the following purposes:

- a) as a primary source of information and link with the political environment,
- b) for collection of factual information relevant to their goals,
- c) to monitor the policies of bureaus on issues they are interested in,
- d) to monitor the interpretations and suggestions made by the public on policy issues in which bureaus are directly involved,
- e) to "gauge" the proper climate for the timing of their actions,
- f) to measure the extent of public interest on a particular issue, and
- g) to evaluate the publicity success of the group itself which is very critical for future membership and support.

Interest groups devote a major part of their resources to find out what the public government is doing.³⁹

Collected Data and Methodology

The major source of data will be the Los Angeles Times which is the most prestigious and the largest of the daily newspapers in the Los Angeles metropolitan area. Prestige here is treated in the sense Milton Friedman treats "reputation as economizing on search." The Los Angeles Times will be treated as an institution which searches for superior quality of information. It may also be noted that the involvement of the Los Angeles Times in the environmental pollution field has started as early as in the 1940's. Furthermore, a Rand field study concluded that out of 46 chief editors, the New York Times was read regularly by 16 followed by the Wall Street Journal by 10, the Los Angeles Times by 6 and the Washington Post by 5. The Louisville Courier Journal, St. Louis Post-Dispatch, Kansas City Star and the London Times and London Mirror were regularly read by two of them.

Every environmental article that appeared in the Los Angeles Times between the years 1971 and 1974 has been copied and placed on file. The basis of the survey was the simple presence of a news item or mention. This included photographs, editorials and letters to the

³⁹ David B. Truman, "The Governmental Process," (Alfred A. Knopf, Inc., New York, 1951), pp. 26-44, Chapter 3, "Groups and Government: Introduction," and Chapter 4, "Group Origins and Political Orientations."

editor. It may be noted that each separate piece was counted even if dealt with a topic already mentioned elsewhere in the paper.

The significance of newspaper information has been stressed earlier in the study along with the two-way conveyor notion. Nevertheless, I have not yet described how the transmitted information reaches its destination that is the newspaper. Societal groups willing to transmit their views through newspapers cannot bid for scarce space for that purpose. Therefore, the scarce space is allocated by criteria other than price. The fact that a price mechanism does not exist does not imply absence of competitive behavior by different groups. In fact, the very idea of publicity activism cannot be explained along these lines.

The main focus of the paper is to show that bureaus will devote resources to sell information through newspapers for the purpose of achieving policy goals that they favor. Moreover, the bureaus being possessors of information will not only give away that valuable commodity without compensation, but they will incur costs as to gratuitously "push" information to potential recipients.

CHAPTER III

THE NOX CASE

Introduction

It is the task of this chapter to trace the publicity development of the NOX¹ issue in California and its impact on policy as presented in the Los Angeles Times.

This will be accomplished by separating newspaper information from a mass of newsworthy events pertaining to the NOX case for the purpose of reconstructing the past. Isolation of print media attention on a specific issue lends itself to systematic observation of the behavior of different groups who try to influence public opinion toward a particular direction, generate reaction to the content and in general, reach goals that they pursue. Thus, the identification analysis and interpretation of trends and issue strategies of certain groups will contribute to the better understanding of:

- a) the formulation of political issues, and
- b) the policy influence groups can exert through newspaper publicity and their limitations.

I must point out that the issue is extremely complicated and identification of the exact roles of the main participants has created

¹NOX stands for oxides of nitrogen a major component of photochemical smog. However, in the study the NOX issue has a broader meaning, mainly applying to the two programs-requiring installation of antismog devices-that the State of California was involved in an effort to reduce smog.

several analysis problems. I was however, able to isolate a few cases where institutional support of the press provided meaningful policy insights.

The chapter is divided in the following parts:

- a) Chronology of important events relating to the development of NOX,
- b) Institutional publicity and its impact on policy: The case of ARB and the Los Angeles Times,
- c) The significance of the NOX issue as compared to air and water pollution: A statistical and graphical analysis, and
- d) Conclusions.

The Nox Issue: A Cronology of Events

The whole NOX issue revolved around two programs designed to reduce smog through reduction of oxides of nitrogen. These programs were:

- a) the per-1966 car program and
- b) the 1966-70 one.

Both programs implied mandatory installation of NOX control devices which according to several studies were supposed to have a considerable effect on smog.

The NOX issue was brought to the surface of publicity at a particularly opportune time. It was when ARB scored a victory over EPA with respect to the Clean Air Act waiver it obtained for assembly line inspection of all 1973 cars.

Here is why ARB's victory was significant:

On the 29th of April 1971, William Ruckelshaus (Administrator of EPA) rejected the State's request for the waiver. The decision was met with severe criticism in the State of California. Governor Reagan and Senator Alan Granston submitted statements to an EPA hearing for inspection of all 1973 cars. Several assemblymen as well as the automobile club of Southern California and the Student Environmental Confederation advocated the tests. Also, John Maga, ARB officer, and State assemblyman Peter Schabarum (Republican of Covina), prime mover of the assembly line legislation, expressed their surprise and dismay about EPA's decision.

The final result of all these developments was that on the 28th of August 1971, it was announced on the first page story (No. 0221) that EPA permitted California to require assembly line testing of every new car destined for the California Market.

EPA's latest decision was interpreted as favorable for the whole motor vehicle control program that ARB was in charge and not just assembly line testing (No. 0221).

It was then in an environment of victorious enthusiasm, where public reaction would be at a minimum, that ARB decided to go ahead with its mandatory pre-1966 NOX control program.

The Pre-1966 Car Program

Only a month after the State of California scored its first victory over EPA, John Maga, of the ARB announced his decision to provisionally certify an exhaust control device. More specifically, he said, "I expect

further testing to lead to full certification" (No. 0237). It may be noted that that was the first mention in the press about the installation of exhaust controls and that it was probably going to be mandatory. The exhaust controls concerned older cars mainly 1955-66.

At that time there were five million cars falling in this category and an estimated one-sixth of them were changing ownership each year.

The expected reduction of smog would be around 6.5% in a period of five years according to Robert Brattain, chairman of ARB's technical advisory committee. ARB initially wanted reductions of carbon monoxide, hydrocarbons and oxides of nitrogen. However, when it decided to approve the Swanson and GM device it dropped carbon monoxide from its list of pollutants that had to be reduced since that pollutant is not an element of photochemical smog.

The role of the mandatory installation of smog devices pre-1966 cars as related to the NOX issue is a minor one and can be considered sort of a "trial balloon" in the sense that ARB's decision concerning 1960-70 cars would rest partially on the success of the pre-1966 program. It was believed that, from an engineering standpoint, useful information could be gathered about the performance of cars with NOX which could be used on the larger scale program concerning 1966-70 cars.

The older car program is contained in the following stories according to chronological order.

(No. 0237) It was on the 16th of September 1971 that it was first announced that mandatory devices on pre-1966 cars could be required and

that one of them, made by Emission Control Technology Inc. of Crange, had already been tentatively approved.

In the editorial (No. 0230), which followed the next day, the pre-1966 program gained considerable support and optimism was expressed in the fight against atmospheric pollutants.

On March 16th, 1972 (No. 0471), ARB approved the General Motors device which would cost \$20 for the older cars. In the same article John Maga, executive officer of ARB, said, "I expect the board will move by June to make the device mandatory in July or August". He also added that the units would be required before a pre-1966 auto could be sold and that the installation schedule would be set by the board.

On the 30th of May, an interesting article, by Fisher,² appeared in the L.A. Times in which the technical aspects of the two devices approved by ARB were discussed. More specifically, the two devices were the GM and the Air Quality Products respectively. The GM device would sell at \$20 while the other one would go for \$39. However, Caleb Swanson, President of Air Quality Products, argued that the GM device would lead to valve damage. Here is why:

While both devices disconnect the car's spark advance they do it at different times and/or under different circumstances. The GM device disconnects the spark advance when coolant temperatures exceed a certain level while the Air Quality Products device electronically phases the spark advance back into operation at speeds above forty miles per hour,

²Dan Fisher has written 24% of all NOX stories and 46% of all stories authored by members of the L.A. Times Staff.

thus protecting valves. The GM device on the other hand causes exhaust gas temperature to become hot enough to ruin valves even at freeway driving speeds when the coolant itself is at safe temperature limits.

The interesting aspect of the story is that GM acknowledged the fact that exhaust gas temperature rises but denied any possible valve damage, while ARB officially contradicted that the GM device causes valve damage. However, according to Fisher, one ARB official (no name mentioned) was quoted, "I'm a little worried about valve problems and that ARB is checking the GM's system further."

(No. 0694) On the 10th of August in an unathored article, the Board voted unanimously to require all 1955-66 cars sold in the Los Angeles region after the 1st of September to be fitted with a control device.

On the 1st of September 1972, the program went into effect (No. 0712) and as mentioned earlier, it required installation exhaust control devices when transfer of ownership occurred in the older cars. Furthermore, the CHP (California Highway Patrol) announced on the 9th of September that it would start enforcing standards for passenger vehicle exhaust emissions in eight areas of the State. Written warnings were to be issued at first requiring the violators to obtain certifications of compliance from authorized inspection stations.

Two months later in an article by Fisher, (No. 0822) it was found that the GM device had already run into problems. There were two reports in a meeting of ARB indicating that most auto repair shops could not properly install the GM devices in at least 75% and possibly more than

90% of the autos. It was also mentioned that out of the 24 cars that ARB checked only 2 had properly installed devices. By that time an estimated 80,000 cars had already been equipped with devices and the majority of them with the GM version.

The issues discussed in this section can be considered as the most significant events in the pre-1966 car program which took place between 1971-74, the four year period that my study covers.

The 1966-70 Car Program

This second and most important program in the NOX issue gained momentum when on the 12th of October 1971, it was reported in an article by Fisher, that the Senate Finance Committee killed the bill introduced by Sieroty that would require smog devices on all cars between 1966-70 (No. 0260).

Meanwhile, an identical measure, as an amendment to a bill, sponsored by Senator Gordon Cologne was before the assembly. On the 15th of October a front page article revealed a widespread feeling of confidence about the alternate bill's legislative passage. As expected, on the 2nd of November the Cologne bill passed the assembly by a vote of 57 to 0 and on the 15th of November the bill was signed into law by Reagan. The measure required installation of exhaust control devices which would significantly eliminate the oxides of nitrogen emitted from 1966-70 cars. In addition, it required initially that ARB would have to set standards for such antismog equipment. There was a limit of \$35 set on the cost of the NOX device inclusive of installation and that maintenance should be performed every 12,000 miles at a maximum cost of \$15.

On the 24th of August 1972, ARB approved two exhaust emission control devices. However, a month later the Board voted for a delay and on the 30th of October it stopped formal adoption altogether.

On the 19th of April 1973, in an article by Fisher, it was reported that hearings were scheduled to be held in front of the Senate Transportation Committee to review ARB's administration of the problem while Reagan announced his decision to investigate the issue.

ARB in another controversial meeting, according to Fisher, which took place on June 21st decided to begin proceedings to disapprove five smog kits for causing damage to the engine and valves. These devices were the ones manufactured by: Echlin Corp, Air Quality Products, STP Corp, Carter Carburetor Division of ACF Industries and Contignitron Motors, Inc. Excluded from the threat of being discredited was only a device made by Dana, which was utilizing a different technology (No. 1057). However, ARB announced at the same time that if manufacturers will take steps to modify existing designs it would drop the proceedings. Furthermore, Fisher quoted an unidentified ARB member as saying: "I expect that most, if not all the affected manufacturers will make the necessary changes in time to be certified by the Board in July."

A month later ARB changed its mind again, which was interpreted by Fisher as a "compromise move", and dropped proceedings ordered earlier to withdraw approval of the devices except in two cases. These devices were Echlin and Kar-Kit. Apparently they thought that the latter devices would cause the greatest possible valve damage as compared to the others (No. 1076).

On the 20th of September, according to Fisher again, ARB appeared to have finally decided on the date and implementation of that program. Dates were set January 1st and October 31st, 1974 depending on the last digit in the vehicle's license plate number. ARB's decision was challenged by several groups (No. 1245). A detailed explanation is given later in the chapter with respect to who these groups were and what the opposition were. Between December 13-18 several important events took place which were very critical for the whole NOX issue. An analysis of these events would be out of place in this section of the study, and which again, are covered later in the study. Therefore, I shall restrict myself to simply mentioning what those events were.

- a) premature retirement of Hoagen-Smit,
- b) resignation of Robert Brattain, ARB member,
- c) the firing of Cladys Meade, and
- d) the filling of a four month old vacancy on the ARB.

On the 19th of December, fired member Cladys Meade, appeared before the panel of ARB which was to make a decision based on the staff's recommendation. The Board voted:

- a) unanimously on one year delay for the installation of the \$35 NOX device and
- b) for a delay in the requirement pertaining to the installation in the case of change of ownership. This latter provision was supposed to have gone into effect on January 1st, 1974 and was further postponed until the 1st of April.

The Board's delay obviously upset the plans of the manufacturers of the devices. There was already talk about bringing the matter to court in order to reverse the ARB position and proceed with the original plan.

On the 9th of January, 1974 ARB's position was challenged in a civil suit filed in Superior Court. The suit was brought by the Clean Air Constituency, Dana Corp, Ehlin Manufacturing and Cladys Meade. According to Fisher the suit was prepared by the Center of Law in the Public Interest and it claimed that "The ARB impermissibly balanced the energy shortage against the need for Clean unpolluted air." Almost a month later the Superior Court upheld ARB's decision in face of the energy crisis. According to M. Oliver (No. 1320) the judge implied that the NOX devices were a victim of the energy crisis.

The case was later taken to the California Supreme Court, which decided in the words of P. Hager (No. 1416) "that ARB must rescind its order for a one year delay in requiring exhaust control devices for 1966-70 model automobiles". Furthermore "the court in a unanimous decision, held that the board had exceeded its authority ARB complied with the Supreme Court's decision and the program went into effect on August.

But the opposition to the NOX continued strong. In early August two bills were introduced siming at repealing the NOX schedule. But according to information provided in story (No. 1499) they earned little chance of being considered in that session of the legislature after the Senate Transportation Committee failed to achieve a quorum at a specially called hearing."

The developments covered in the previous pages extend over a period of four years (1971-74), the period this study is concerned with, not only constitute the heart of the NOX issue but the main input of the analysis that follows in the next section, focuses on cases where newspaper publicity is believed to have a definite bearing on policy.

Institutional Publicity and Its Impact on
Policy: The Case of ARB and
the Los Angeles Times

The NOX issue constitutes a case where the press-government relationship unfolds in the pages of the L.A. Times. This study has argued in earlier chapters:

- a) the significance of publicity in a major newspaper from a bureau's point of view and
- b) that the newspaper serves as a major point of linkage between the official and his larger political environment. Furthermore, it can be argued that the linkage is a continuous one with other decision makers and the public.

The protagonists in the NOX case can be said to be the following: ARB, State Senate, Governor Reagan, Manufacturers of NOX devices, citizens groups, courts, Caltech, the press, and the people of California. What remains to be seen is that in an issue of the magnitude of NOX how effectively the main participants managed to get their point across through the L.A. Times.

Since the greatest part of the stories on NOX was devoted to the activities of the Air Resources Board, I consider appropriate to stress separately the publicity of ARB as related to the NOX issue.

The initial phase of ARB's publicity can be characterized as an all out effort to:

a) build program support and

b) test public reaction with "trial balloons." It should also be mentioned that during that phase ARB enjoyed substantial editorial support.

There is nothing surprising with such behavior. Bureaus are expected to create a favorable public image in order to increase the probability of acceptance of new programs by the public. Such an activity falls within the framework of the agency's main responsibility to the public as a provider of services essential to the welfare of the people.

ARB in this case had clearly established superiority of publicity as compared to other participants. In terms of differential access to the press ARB's position can be evaluated as follows:

a) by finding out in how many NOX stories ARB members were quoted directly by the authors of the stories. The results will be indicative of how well they could communicate their opinions through the press.

b) by comparing ARB's publicity access to that of the other participants and

c) whether ARB has maintained that access to publicity overtime.

In the NOX case, ARB has maintained a superficial relationship with the press which can be regarded as part of its overall strategy to achieve its goals. This can be verified if one takes a look at:

a) in how many NOX stories ARB members were directly quoted and b) in how many ARB was mentioned. Both can be considered as indicators of differential access to newspaper publicity.

The NOX issue is comprised of 150 newspaper stories over a period of four years. Out of the 150 stories ARB members were quoted in 23 stories slightly, over 15% of all stories; while ARB was mentioned in 25.5% of the stories. Let's now compare the findings that pertain to ARB with the ones of the other main participants. Members of the Senate were quoted in 5.3% of the stories, while NOX manufacturers in 4.6%, while the rest of the participants do not even score 1% of the stories.

If we now examine the percentages of stories where the participants were simply mentioned ARB's superiority remains 25.5% but the results for the other participants are different. NOX device manufacturers were mentioned in 16.2% of the stories, Governor Reagan 15%, members of the Senate in 4%, courts in 3.3%, and citizens groups in 2.6%.

It has been mentioned earlier that during the early phase of the NOX issue ARB has been enjoying direct publicity and editorial support that no other participant in the NOX issue enjoyed. However, a series of events has brought about a gradual loss of access to publicity to that agency. A simple look at some data is convincing. In 1971, 21 pro-NOX and certainly pro-ARB articles appeared, in 1972 the number increased to 28, in 1973 it dropped to 11 and in 1974 it was down to 7 (See Table 1).

Table III-1. Pro-NOX Neutral and Anti-NOX Articles.

Year	Pro-NOX	Neutral	Anti-NOX
1971	21	1	1
1972	28	10	1
1973	11	11	2
1974	7	25	2

The data on stories where ARB members were quoted exhibits similar trends and reinforce our conclusions about the gradual publicity loss.

In 1971 ARB members were quoted directly in 8 articles, in 1972 the number of articles remained the same at 8, but in years 1973 and 1974 ARB members were quoted only in three articles per year. Now, let us consider the case of Dan Fisher, the most important environmental writer on the NOX issue who wrote 46% of the total number of authored stories on NOX and 1/3 of all prominent stories. Fisher wrote a total of 14 pro-NOX out of his 37 stories. However, in 1971 he wrote 4 articles and all of them were pro-NOX, in 1972 he wrote 9 articles and 7 of them were pro-NOX, in 1973 he wrote 19 and only 3 of them were pro-NOX and finally, in 1974 he wrote five and none of them were pro-NOX.

The above information documents the fact that ARB has lost progressively its access to publicity, an important variable that influences policy making.

Story (No. 0237) is a typical example of the program support trial balloon hypothesis. John Maga, ARB officer, in an interview with Dreyfuss announces that pretty soon pre-1966 cars will have to be equipped with exhaust control devices. More specifically, Maga said, "I expect further testing to lead to full certification" he also said, "I also expect an ARB requirement that some such antismog device be put on pre-1966 cars sold in California's ten most populated counties."³

The whole article dramatizes the existence of the emissions problem which is in desperate need of solution. There is no doubt that

³Fisher has written 24% of all NOX stories and 46% of all stories authored by members of the L.A. Times staff.

the agency obtained prominent display coverage in new columns in that story. It appeared on the first page of the first and on an outside column.

Another sign of publicity success during the initial phase of the NOX issue is the development of editorial support. The very next day following the Dreyfuss article the pre-1966 car exhaust program obtained favorable editorial support. The editorial concluded: "This is a useful step, certainly, and also a grim reminder of the threat of our well being that filthy air continues to pose." (No. 0238)

In my attempts to evaluate the weight of editorials I have discussed the issue with some journalists. Almost every single one of them say that editorials are read by a very small percentage of the public and are thus unimportant. Somehow I was not convinced that this was the case with bureaus. Additional research on the subject revealed that editorials are important for bureaus for the following reasons:

a) officials recognize the fact that other officials read editorials as do policy makers. Therefore, drawing editorial support elevates the agency in the eyes of other government agencies, and

b) it is often asserted that editorial comments accurately reflect the opinion of the public to a new program. Therefore, if an agency has editorial support it in fact demonstrates to other bureaus that it has public support for the program.⁴

⁴Bernard C. Cohen, The Press and Foreign Policy (Princeton, N.J.: Princeton University Press, 1963), pp. 196-198, 202-204.

The initial phase of NOX in relation to ARB can be described as a period during which the Air Resources Board:

- a) earned considerable prestige over its case with EPA,
- b) was enjoying direct publicity, and
- c) had editorial support on both of its programs on the NOX devices.

The strength of the agency and its impact on policy making was revealed in the "Death of the Antismog Bill" case which in that respect can be considered as unique.

On the 12th of October the Senate Finance Committee killed the bill introduced by Sieroty that would require smog devices on all cars between 1966-70. The bill would require mandatory installation, by 1973, of smog devices (NOX for oxides of nitrogen reduction) for the purpose of reducing photochemical smog. In addition the bill provided that the device should not cost over \$35.

The measure had already cleared the assembly and needed seven affirmative votes, in the Senate Committee consisting of thirteen members, to advance to the floor. According to Fisher, only eight members were present instead of thirteen. The negative votes came from Sen. Randolph Collier (D-Yreka), chairman of the committee and Sen. Lou Cusanovitch (R-Sherman Oaks). According to the committee secretary there was no record kept indicating what members of the committee were absent that night.

Immediately after the committee killed the bill, the chairman of the Air Resources Board, who personally supported the bill, in a carefully staged press conference made an open attack on the committee with

statements such as that the action to kill the bill was "plain crazy" also "I think its a shame that something they give so much lip service to the environment that there are thirteen people on the committee and five were absent and couldn't be reached." He also added "If I had to recommend one thing more than inspection (of cars on the road) more than assembly line testing (of new cars) - it would be to cut back on oxides of nitrogen in 1966 through 1970 cars" (No. 0260).

In the same issue Tom Goff, the Sacramento Bureau Chief, in a very prominent front page article, polled each member of the committee to find out who were the five absent members. Goff in his article says that the members of the committee could not remember who were the absent ones. Each senator could remember some others who were present but their recollections did not agree. In the words of Goff "no Senator could say - or was willing to say - that any of his colleagues was wrong."

For a formal roll call to be taken in most committees the committee members must demand it. In this case there was no committee record. Needless to say that Goff's article mentions the names of all committee members and even the reasons of absence of the three members who admitted that they were not present.

At this point the Times' support of ARB and the new measure was obvious. To start with, the Goff article is an example of aggressive reporting aiming at embarrassing the Senators by revealing their names to the public for beign absent when such an important bill was to be discussed. An that is exactly what Goff intended to do when he wrote "Each

of the remaining seven committee members told the Times he was one of the six who was present and voted "aye" obviously feared by the electorate."

The article was obviously trying to:

a) uncover the names of the Senators who claimed they were there and were not thus proving that some Senators were lying and

b) to mobilize public opinion.

With respect to the latter part, the L.A. Times published three letters by the public complaining about the committee's apathy on important legislation (No. 0263, 0264).

The very same day the leading editorial (No. 0265) follows a line of attack against the committee's decision while openly supporting the bill and the Air Resources Board. The following excerpts of the editorial make my point clear.

"The situation, said Dr. Haagen-Smit, chairman of the Air Resources Board, is "just plain crazy". It certainly is. "Also:

"Committee records don't show the names of the Senators who took a walk when the roll was called. They don't have to show them. The Legislature makes it easy for its members to hide from public view. How easy is shown by the article today by Times Sacramento Bureau Chief Tom Goff. Only eight Senators were present in that committee meeting, but nine claim they were".

In the meantime an identical bill was before the assembly as an amendment to a bill introduced by Senator Gordon Cologny (R-Indio). If passed the bill would bypass the Finance Committee and go to the Senate

Floor. When Haagen-Smit was asked whether the Cologne bill would have the same fate as the Sieroty one he said "I hope not".

After a short period of time the bill passed the assembly by a vote of 57 to 0 and was signed into law by Reagan.

The "Death of Antismog Bill" case represents an example of how an institution can use publicity as a means of promoting poliobjectives it pursues. Haagen-Smit was personally supporting the bill that was previously killed. Through direct publicity, editorial support and a very aggressive press the bill was revived and signed into law.

The analysis of the following events aims at demonstrating how ARB, due to internal problems related to the future of the smog devices of the 1966-70 model cars, lost access to publicity a policy factor that had worked for its advantage in the past. The rest of the chapter describes the circumstances as well as the facts that have brought about the eventual change in the composition of ARB and its policy.

On the 24th of August, 1972, ARB in another "Controvesial and compromise" move, similar to the one described earlier in the study, approved another two exhaust emission control devices which it had earlier refused approval. The approval decision was not an easy one. According to Dreyfuss Cladys Meade, and ARB member voted for the approval of the devices contrary to the recommendation of some members who feared valve damage. The center of the controversy was the Echlin device which was believed to cause overheating and consequent valve damage a deficiency that was pointed out be some members of the board and the evaluation committee. Mrs. Meade made the following comment: "Based on the data

presented I disagreed with the staff's judgment and the committee's recommendation".

The Dana device was utilizing different technology than that used in the Echlin. The main difference being that the Dana device was recirculating the exhaust gases through the motor thus eliminating overheating problems and reducing NOX emissions by 50%.

The disagreement on the board can be interpreted as the first sign of the internal problems ARB was faced with and the events that followed make this point clear.

On September 28th the board votes for a delay and a month later it stopped formal adoption altogether. At this point the board's internal politics problems and second thoughts about the used car smog device in general can be summarized in a statement by Haagen-Smit who was quoted by Fisher as saying at an ARB meeting: "I am very seriously thinking we should rescind this whole business and start all over again". The most probable reasons of ARB's pessimism were that:

a) the manufacturers could not produce a device that could not cost more than \$35 installed before 1973 car plates could be issued and

b) fears that garages may not be qualified for the installation of the devices and that such an installation would greatly exceed the \$35 set by law.

By November 3, 1972 ARB's confusion and inability to reach a decision was evident. Instead of announcing their final decision the Board scheduled another meeting on November 21st while it ordered another

staff report on an alternate way of cutting pollution that would eliminate the \$35 devices (No. 0810).

A month later ARB approved another device (STP) for 1966-70 cars. During the month of December the technical controversy continued unresolved while the number of voices expressing pessimism about the whole operation was growing. In technical circles the issue of whether a car overheats if the spark advance is disconnected and what the valve damage would be appeared to be the main topic of conversation.

From this point and on all the events that followed demonstrated clearly that ARB was inconsistent and spasmodic in its actions. It often reversed itself on policy decisions and its status was rapidly deteriorating.

The period between the 19th of April and the 13th of December, 1972 comprises of events that created confusion and drew criticism.

On the 19th of April, 1973, the forthcoming change in the mood of the press was evident when Fisher wrote that ARB with its internal inconsistency its inability to reach a decision and take a firm stand on the issue has invited criticism of the overall performance of the board. Hearings were scheduled to be held in front of the Senate Transportation Committee to review ARB's administration of the problem while Reagan announced his decision to investigate the issue.

Almost a month later the chairman of the Transportation Committee asked ARB to consider a three month delay of the installation of the NOX devices. ARB had pressure from everywhere. In the meantime legislation

introduced by Welsh, the Chairman of the Transportation Committee, to delay installation was rejected.

However, ARB voted on June 7, 1973 to suspend installation until October 1st, but already an estimated 100, 000 cars in the State had been equipped with NOX devices during the earlier phases of the program, where cars had to have the controls before they were sold. It must be remembered that the initial phase began on the 1st of February in Riverside, April 1st in L.A. and June the 1st in the rest of the State.

On the 20th of September, 1973 ARB finally decided on the date and implementation of the program. Its decision encountered opposition from the Automobile Club of Southern California and particularly from Senator Lawrence Walsh, Chairman of the Transportation Committee (No. 1245) to postpone or abandon the program. Walsh even threatened reintroducing a bill in ARB did not act. As quoted by Fisher, he said "if that agency does not act, I'll probably reintroduce a bill to postpone it".

What can be considered as a turn point in ARB's policy came along with ARB's shake up ordered by Governor Reagan. The move took place before the panel was supposed to convene and decide once more what the future of the NOX devices was going to be. The shake up consisted of the departure of Haagen-Smit, ARB Chairman, who retired, the firing of Cladys Meade and the filling of a four month old vacancy.

Surprisingly enough the only member who was available for comments was dismissed member Cladys Meade. She said that she was "disgusted", according to a report by Fisher, by the action and charged that it was aimed at killing a controversial program to require new antismog devices

on 1966-70 cars in the State. The only other comment Mrs. Meade had was that she was planning to appear at next week's ARB meeting as a private citizen and to speak in favor of the program. Indeed on the 19th of December of 1972 Mrs. Meade, who had already been replaced, appeared before the panel of ARB and urged its new members to "exercise common sense and courage". The panel by the way was supposed to make a decision based on the staff's recommendation about the future of smog devices. The board contrary to her recommendations not only delayed the installation of NOX devices for a year but it voted for a delay in the case change of ownership would occur a requirement which was supposed to have gone into effect on January 1st, 1974.

From this point and on a series of legal developments took place as a reaction to the Reagan's shake up and the subsequent changes in policy.

The manufacturers of the NOX devices, a group hard hit by the new developments, were quoted in an unauthored article saying that they "got burned" and also that the "ARB has done a very poor job of selling the smog program to the people and the legislature.

On the 9th of January, 1974 the Clean Air Constituency brought a suit together with Dana Corporation, Echlin Manufacturing and Cladys Meade to the State Superior Court which upheld ARB's decision in face of the energy crisis. But when the case was taken to the Supreme Court it was decided that ARB exceeded its authority when it approved the one year delay in requiring exhaust controls for 1960-70 cars. ARB had no alternative but to comply with the court's decision and the program went into effect as scheduled.

It turned out later that the opposition from the Reagan administration was so strong that a bill was passed and signed into law by Governor Reagan repealing mandatory installation of the NOX devices in all parts of the State except the six-county South Coast Air Basin.

These latest developments conclude the analysis since the end of 1974 happens to be the end of the time period my study is concerned.

The significance of the NOX issue as compared to air and water pollution: A statistical and graphical analysis.

The major source of data will be the Los Angeles Times which is the most prestigious and the largest of the daily newspapers in the Los Angeles Metropolitan Area. Prestige here is treated in the sense Milton Friedman treats "reputation as economizing on search." The L.A. Times will be treated as an institution which searches for and disseminates superior qualities of information.

It may also be noted that the involvement of the L.A. Times in the environmental pollution field has started as early as in the late 1940's.

Of a total number of 1700 environmental articles that appeared in the L.A. Times during 1971-74, 244 were on water pollution and 375 were on air pollution. The 375 articles on air pollution can be distinguished in two categories: a) general air pollution and b) NOX articles. There are 255 articles in the general air pollution category and 120 in the NOX category. It should be noted that the NOX issue accounted for almost 50% of all air pollution articles that appeared in the L.A. Times, a fact that clearly demonstrates the importance of the NOX issue in California.

The increasing salience of environmental pollution and specifically air pollution as an issue can be partially supported by the fact that the 375 articles on air pollution during the 1971-74 period represent 22% of all environmental articles while the respective ones on water pollution represent only 15% of the total environmental articles. Furthermore, there has been an increase in air pollution articles between 1971-74 the sharpest one being between the years 1971-73 which represented a 19% increase.

Let us now consider the prominence aspect of the environmental articles examined which lead to the following conclusions: a) the Prominent category has been the one containing the largest number of articles in all four years. 1973 was the year with the largest number of articles (both with or without the NOX data); b) the Less Prominent category scores second to the prominent one in terms of number of articles, exhibits no trends in the four year period and is the one the addition of the NOX data affects the least; c) the Very Prominent category contains the least number of articles shows practically no change in articles published each year with the exception of 1972 when the number of articles dropped to three.

However, with the addition of the NOX articles the picture changes considerably. Firstly, the Very Prominent articles show an upward trend, which they didn't before and secondly the NOX articles then 71 account for approximately 1/4 of the total Very Prominent articles of that year, in 1972 the articles without NOX accounted for 1/4 of the very prominent

Table III-2. Articles on Air and Water Pollution Appearing in Years Indicated.

Year	Water	Air (without NOX)	NOX	Air (with NOX)
1971	72	61	23	84
1972	44	50	39	89
1973	51	80	24	104
1974	77	64	34	98
	244	255	120	375

NOX articles and in the years 1973 and 1974 the number of NOX articles was equal to the ones without NOX.

The findings so far can be summarized as follows:

a) that air pollution has been a considerably more important form of pollution than water - at least in the eyes of the press,

b) concern with air pollution seemed to increase with time as it can be seen from the table, and

c) the NOX issue was given considerable attention. It should be noted that it represents 50% of all air pollution articles covered in the 1971-74 four year period.

The next step in the analysis will be to break down the prominence of the articles to air and water pollution.

Again, it becomes evident that the NOX issue affects the prominence of Air Pollution. Even though air pollution articles have been significantly more than that of water pollution during the four year period, the addition of the NOX issue renders the results even more dramatic. This can be easily seen in the Very Prominent and Prominent category. There were 39 more articles in the Very Prominent category, that dealt with NOX, and which raised the total number of air pollution articles from 19 to 58. In the Prominent category the figures look even more impressive, the increase in air pollution articles attributable to NOX is represented by 79 more air pollution articles.

Conclusions

The main purpose of this research is the examination of the relationship between newspaper publicity and policy decisions.

Table III-3. Prominence of Air and Water Pollution Articles Between 1971-74.

Year	Air			Air (with NOX)			Water			NOX		
	VP	P	LP	VP	P	LP	VP	P	LP	VP	P	LP
1971	9	39	13	13	52	18	3	45	13	4	13	5
1972	1	31	18	15	56	19	2	25	17	14	26	1
1973	6	61	25	22	84	28	3	32	10	15	25	3
1974	3	42	17	18	60	17	7	40	27	15	18	9
	—	—	—	—	—	—	—	—	—	—	—	—
	19	173	73	58	252	82	15	42	67	48	82	9

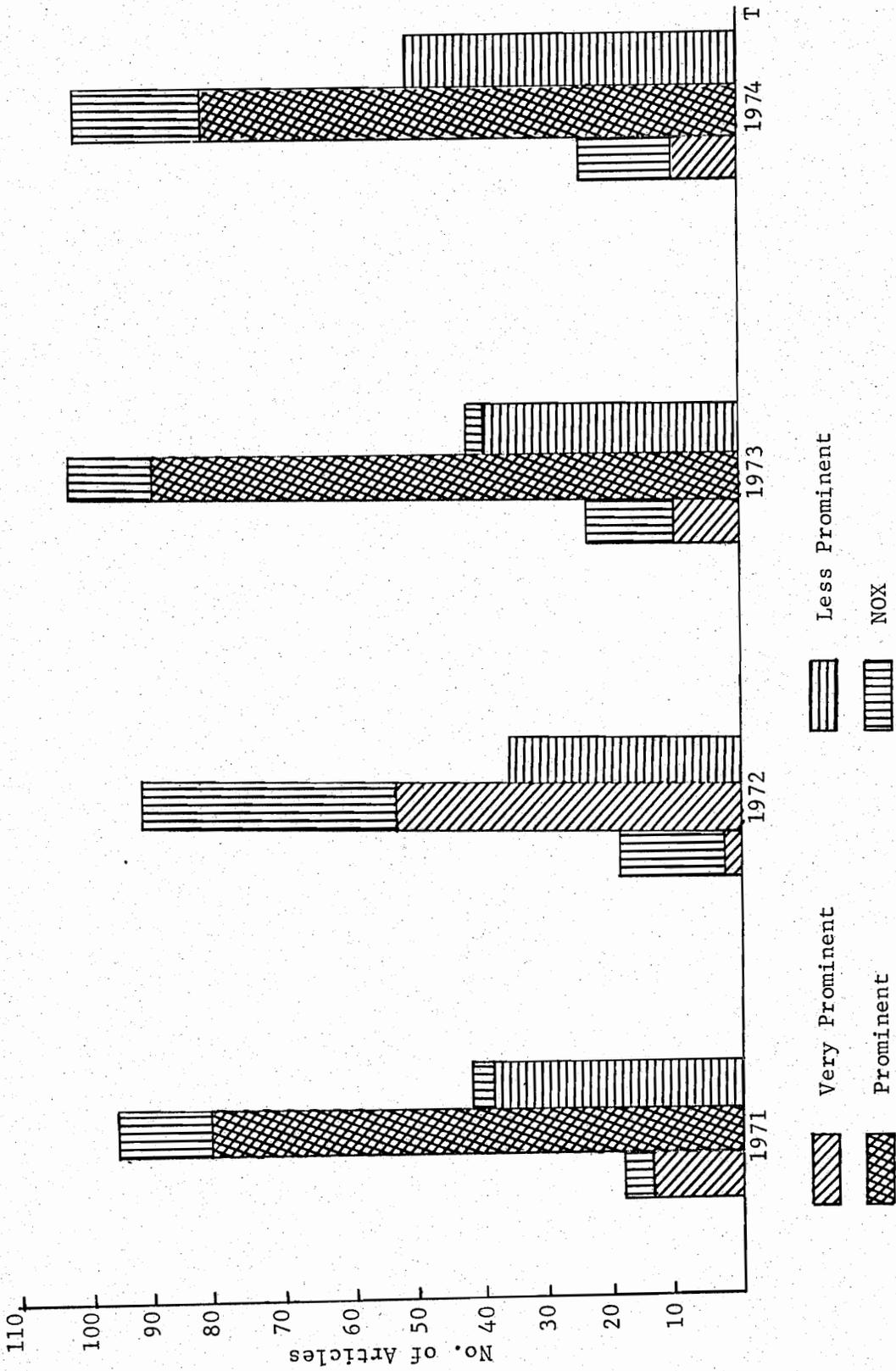


Figure 1. Air Pollution Articles Between 1971-74.

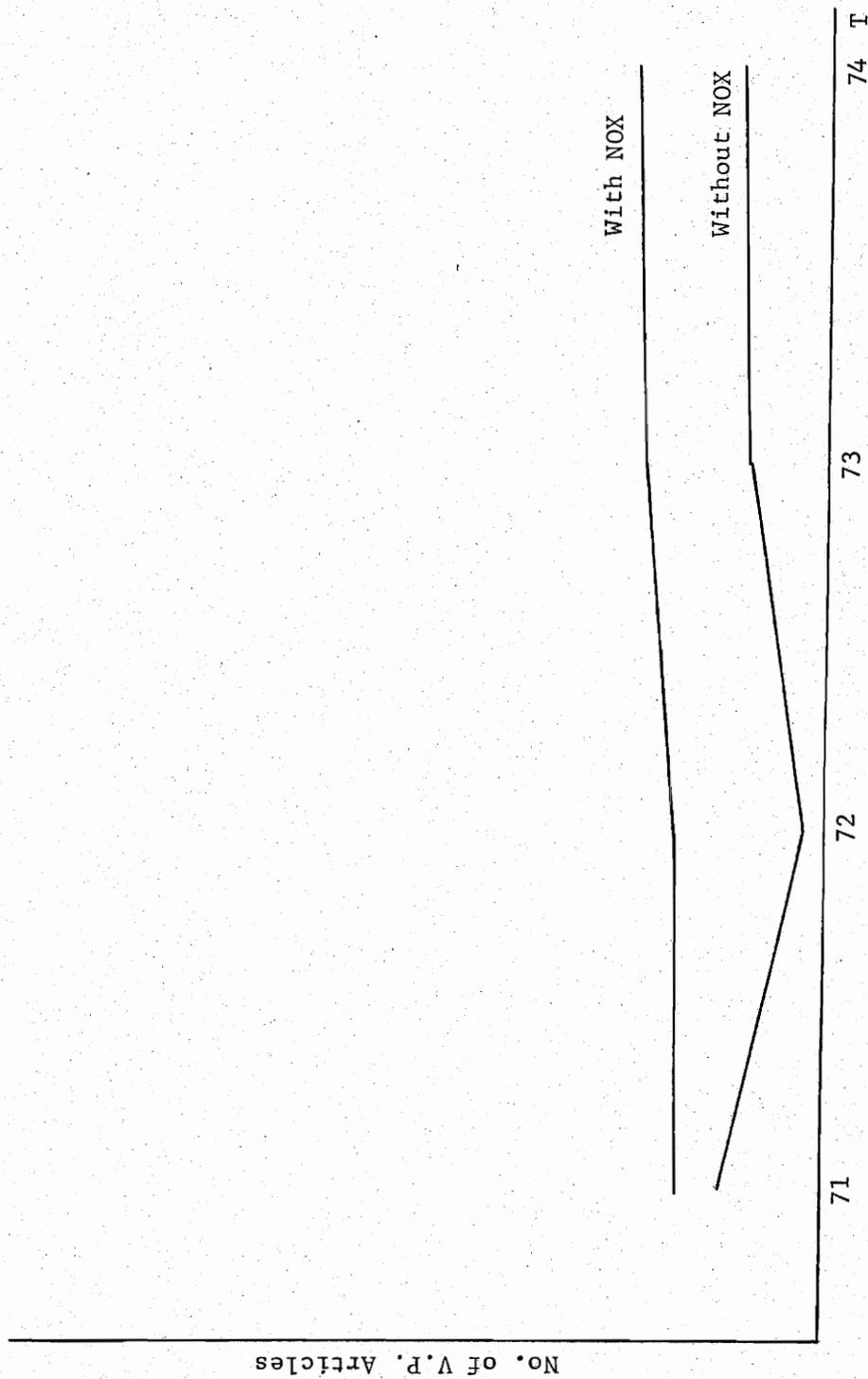


Figure 2. Very Prominent Articles on Air Pollution With and Without NOX.

No. of V.P. Articles

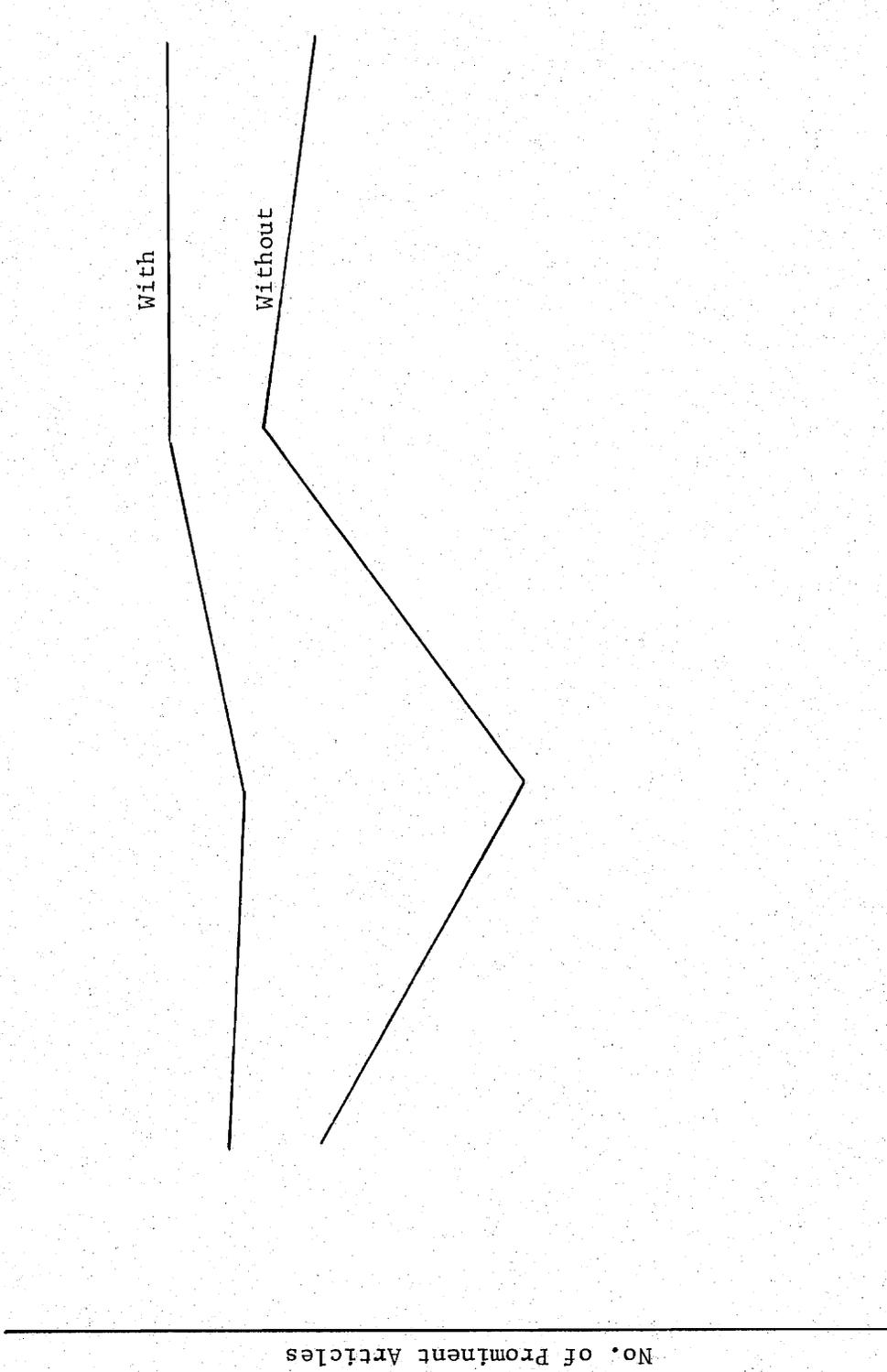


Figure 3. Prominent Articles on Air Pollution With and Without NOX.

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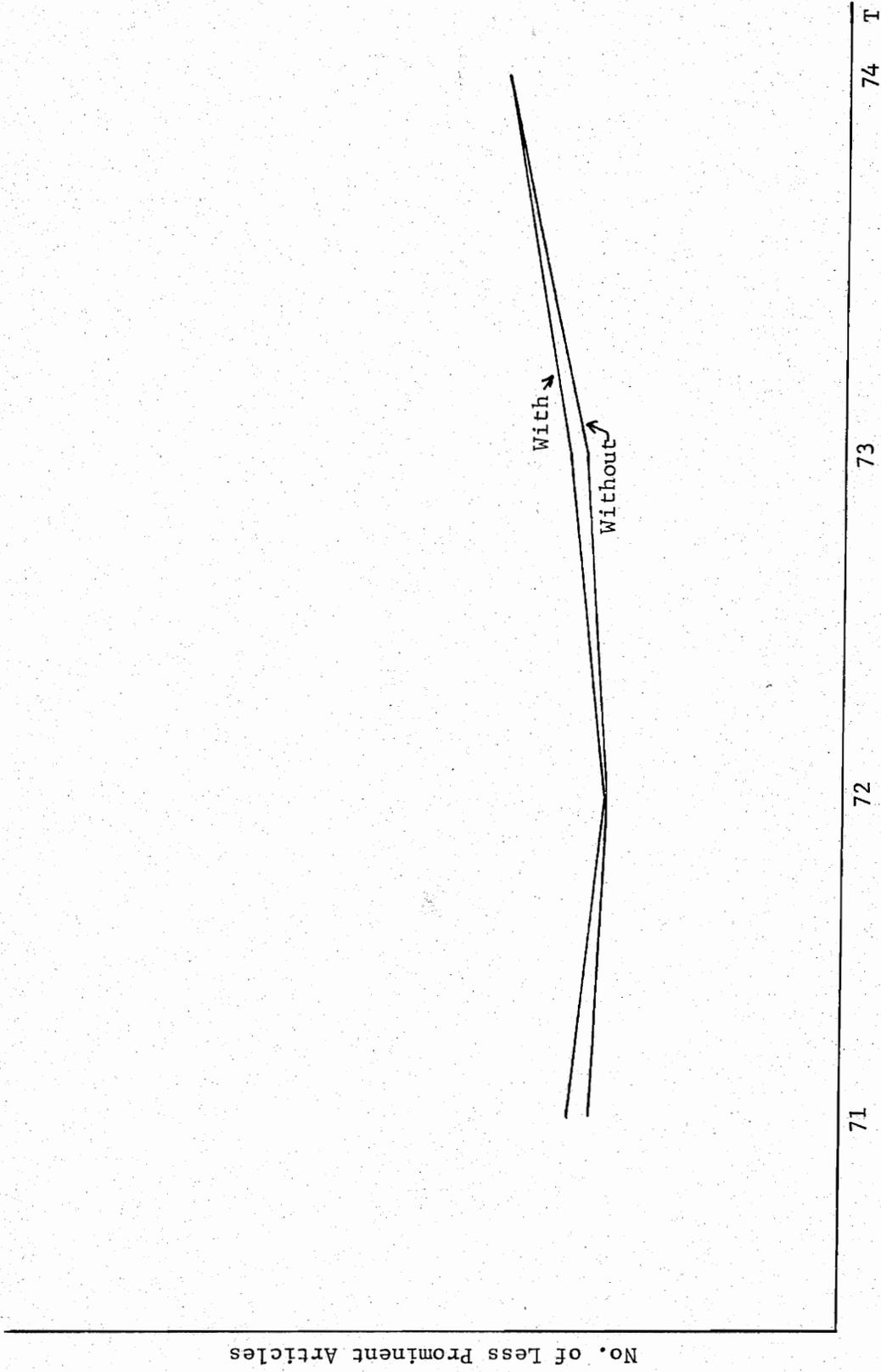


Figure 4. Less Prominent Articles With and Without NOX.

No. of Less Prominent Articles

It has been argued in earlier chapters that the messages transmitted by the press place demands on the political system for the solution of societal issues such as the NOX issue.

Issue emergence involves an interplay of groups and individuals, who make policy, at various levels. The case study of the NOX issue has clarified the following:

a) not all the participants involved in the NOX issue had the same access to publicity,

b) a State agency, the Air Resources Board, not only obtained the greatest amount of direct publicity than any other participant but the publicity per se was in line with the goals the agency was pursuing,

c) the "Death of the anti-smog bill" case constitutes a solid example of the significance of favorable publicity in the policy making process, and

d) that ARB had lost access to the favorable publicity it had enjoyed for a certain length of time which was instrumental for the policy influence it had exercised.

If one considers the overall position of ARB as a publicity user we can conclude that newspaper space was not used by the agency for simple transmission of data but instead the evidence points out that it was used to present its viewpoints for the purpose of influencing policy. After all, publicity efforts, as examined already in a context of a pluralistic democracy whereby public opinion is not static, can:

- a) influence public opinion toward a desired direction and,
- b) instigate some desired action.

Since the primary role in the NOX issue was played by ARB - the main explanation being that all participants were on the same side, hence they had no incentive to obtain publicity - one could explain ARB's relationship with the press using elements of interest group theory.

Bureaus and in this case ARB could be identified as an interest group in the sense that it pursued common interests for its members. An example of such behavior is the Antismog Bill case where ARB tried to influence the salience of the issue through newspaper publicity. The newspaper was chosen as a means of influencing policy for the following reasons:

a) expedient reaction to the killing of the bill was necessary and timing was critical,

b) mobilization of public opinion and support was needed a condition necessary for its passage the next time around, and

c) it appeared that ARB had control, within limits, of what the Los Angeles Times would print as evidenced by the overwhelming amount of direct quotations found in the articles and editorials of that time.

Public interest varies according to the prominence of the events themselves. ARB's conscious attempt to magnify the issue on the public agenda was directed toward public reaction which would influence the decisions of the politicians at the time the bill would be considered again. Furthermore, one can interpret the Goff article as an exercise running along the goals of ARB mainly trying to influence the senators themselves and the people of California. In this particular case the

commonality of interest of Tom Goff and the ARB's goals made the latter's publicity efforts more effective.

CHAPTER IV

ANALYSIS

In Chapter II, it has been argued that bureaus will try to maximize the attainment of their policy objectives, given their financial and institutional constraints, through newspaper publicity. We had reasons to believe so because:

a) the cost of transmitting their views is relatively lower than other groups which renders "sale" of information cheaper to bureaus,

b) the perceived benefits are greater since it is not only newspapers that consider government information authoritative but the public too. In fact, it can be argued that an article which contains information about government activity will be more easily "sold" in the sense of having the potential to alter belief distributions than a particular article which deals with the activities of an environmental organization,

c) the cost of reaching a large number of people is low,

d) bureaus can reach through that medium-specialized appeal, politically significant groups which are part of the newspaper readership, and

e) their alternative ways that can influence policy are rather limited, e.g., they cannot lobby while other groups can, they cannot

advertise and they cannot engage in mass mailings. That particular limitation warrants the heavier use of newspapers by bureaus.

The NOX case although limited in its scope, presented convincing evidence that ARB's involvement with the Los Angeles Times has promoted the agency's specific policy goals. In this chapter, we are going to present further evidence that will support the original hypothesis. This will be mainly accomplished by carrying on the research on a larger scale while comparing the publicity different agents, including bureaus, obtained in air and water pollution.

The following procedures were used for testing purposes.

Firstly, I tried to find out which of the above mentioned agents obtained the most publicity by simply being mentioned in the article. The results, listed in Table IV-1 indicate that bureaus obtained almost three times the publicity citizens groups did. By the way, citizens groups scored the lowest number of articles that were mentioned in out of all four categories. Even though the test itself is rather simple, in the case of citizens groups, the absolute number of articles they were mentioned in indicates that it is highly unlikely that they would have any perceptible impact on policy with such a small number of articles.

Secondly, I decided to conduct some additional testing to find out (whenever possible) in what methods of release the articles were contained in where the agents were mentioned.

Five methods of release were selected and these are: 1) signed report (SR), 2) editorial (ED), 3) Associated Press, (AP), 4) United Press International (UPI), and 5) other (O).

Table IV-1. Number of Articles Where Agents were Mentioned in all Kinds of Pollution.

Year	Bureaus	Citizen Groups	Individuals	Firms
1971	46	23	23	17
1972	11	10	9	13
1973	36	7	19	24
1974	<u>19</u>	<u>6</u>	<u>6</u>	<u>31</u>
	114	46	57	85

Table IV-2. Percentage of Articles Falling in Each Category of Release.

Year	Bureaus					Citizen Groups				
	SR	ED	AP	UPI	0	SR	ED	AP	UPI	0
1971	66	8	1	0	9	58	0	8	0	29
1972	54	9	36	0	0	40	10	2	0	3
1973	80	0	3	0	16	42	0	14	0	42
1974	73	0	16	0	17	83	0	0	0	16

Year	Firms				
	SR	ED	AP	UPI	0
1971	58	0	12	0	29
1972	54	31	7	0	33
1973	38	0	12	0	37
1974	61	3	0	0	35

Here again bureaus managed to dominate the signed report category. Bureaus have the edge over citizens groups and firms. The results are in line with previous arguments. We find that a personal interview often will result in a signed report with a good chance of direct publication of personal opinions of agency heads who pursue programs with which they are identified and which have an impact on the political environment.

Thirdly, I went through all the environmental articles that concerned water and air pollution, and distinguished the ones that agents obtained direct publicity. This was accomplished by finding out the number of articles where agents (bureaus, citizens groups, individuals, and firms) obtained favorable direct publicity.¹ Such publicity enabled them to transmit their views, through the newspaper, on issues that they intended to influence their salience.

The total number of articles on water and air pollution where agents obtained direct publicity represents 9 percent of all articles between 1971-1974. Once more, the superiority of air pollution becomes evident since the articles on air pollution represent two and half as many as there are in water pollution.

The NOX issue is again heavily represented in the direct publicity category. A quick look at the data shows that during the four year period, there are as many articles on the NOX issue as there were in air pollution.

¹When agents are quoted favorably in newspaper articles.

TABLE IV-3. Total Number of Articles Where Agents Obtained Direct Publicity.

Year	Articles	Water	Air	NOX	Air (with NOX)
1971	36	17	19	11	30
1972	19	14	5	13	18
1973	33	8	25	21	46
1974	19	9	10	7	17

Table IV-4 shows the direct publicity obtained by different agencies according to the number of articles and year. From the table, we can conclude that the only group significantly represented is the bureaus while all others have obtained very little publicity with the exception of individual citizens who did not obtain any at all. It should be noted that bureaus obtained direct publicity in slightly over than three-fourths of all articles. Furthermore, 68 out of the 77 articles where bureaus obtained direct publicity were prominent - 4, less prominent, and 5 very prominent. (See Appendix A for definition of prominence.)

One of the goals of the study was the evaluation of publicity strategies of different agents. It was believed that each agent according to resource constraints and ability to influence publicity would develop a publicity strategy. In other words, we would expect the different agents to utilize the most advantageous means, of transmitting information and personal views through the Los Angeles Times, that were available to them at the time.

I have distinguished five ways that can lead to publicity and they are: press conferences, press releases, articles, personal interviews, and letter to the editor. Unfortunately, the method of release used in each individual article cannot be easily determined from the newspaper itself, which rendered the analysis at that point very difficult. Furthermore, since the bureaus were the only agent to obtain significant direct publicity, the other agents will not be discussed.

Table IV-4. Direct Publicity Obtained by Different Agents According to the Number of Articles and Year.

Year	Bureaus	Citizen Groups	Firms	Individuals
1971	20	3	3	0
1972	9	0	0	0
1973	31	0	1	0
1974	<u>17</u>	<u>1</u>	<u>0</u>	<u>0</u>
	77	4	4	0

Out of all the articles on pollution in only twelve of them was it clear that the publicity was obtained through personal interview. In exactly half of them, the publicity obtained involved bureaus. The next most popular method of release was the press conference. Again, out of thirteen articles where the press conference could be identified as the source, 49.2 percent of the articles involved bureaus.

From the general analysis, it is clear that only bureaus appear to have systematically pursued all lines of publicity to achieve their goals. The evidence of publicity strategy, we admit is weak, but consistent if the NOX case will be taken into consideration.

The obvious question that remains to be answered is why the other agents (firms, citizens groups, and individuals) obtained such a small amount of publicity.

My initial impression has been that firms and industry, in general, did not perceive newspaper publicity as an effective means of influencing policy decisions. After all, one could say that other alternatives were open such as lobbying, bribing, etc. which could produce more positive results than trying to get their views transmitted through newspaper publicity. However, after already been through every page of the L. A. Times for four years, my views on the subject have changed considerably.

The fact that out of the 1,700 environmental articles that appeared in the L. A. Times, only 183 of them could be classified as neutral and 13 as antienvironmental, while the rest of them were pro-environmental raises serious questions with respect to the objectivity

of the newspaper. Even when the industry was allowed to voice its opinion, it never took place through an editorial, seldomly in the form of an authored article and most of the times the articles appeared in obscure corners of the L. A. Times.

My explanation as to why interest groups have not gained much publicity is twofold:

a) Their primary activities would concentrate on influencing events that would capture local news such as ecology drives, voluntary works and community involvement. Therefore, we would expect their activities to focus more on local newspapers rather than the L. A. Times.

b) Secondly, according to the "establishmentarianism" hypothesis most interest groups do not constitute authoritative sources of information with press releases readily available and computerized indexes on hand.

Finally, for individual citizens, the participatory costs of engaging in publicity activities with the intention of exerting influence upon policy formation are probably substantially greater than the perceived benefits. Individuals usually have in addition to resource constraints a very low level of efficiency in information processing, and seldomly constitute authoritative sources of information that a big newspaper would consider reliable.

The analysis in this chapter confirms the fact that air pollution has attracted most newspaper publicity and that the NOX issue gave air pollution a considerable edge over water and other forms of pollution, both in terms of prominence and amount of exposure.

The data indicate that among all the agents examined, bureaus was the only category to generate substantial publicity, a fact already confirmed by the involvement of ARB in the case study presented in the previous chapter.

The two most popular and most evident means of obtaining publicity for bureaus were personal interviews and press conferences. The most appropriate explanation for these two methods of publicity is that:

a) Personal interviews will secure publication of personal opinions of agency heads who pursue programs that identify with themselves and which have a profound impact on the political environment. Furthermore, an official can influence the decision of a reporter by maintaining a good relationship, in the sense that both parties discover what their interests and needs are and by permitting him to have his story exclusively.

b) Press conferences allow the official to control the timing of the information release which may be critical for a policy issue.

The poor representation of the industry can only be explained by the apparent newspaper bias, a point that was discussed earlier.

CHAPTER V

SUMMARY AND CONCLUSIONS

The original objectives of this dissertation study were 1) to find out whether government officials obtained more publicity than other societal groups did in their efforts to shape policy, and 2) to provide descriptive data along several dimensions that dealt with newspaper information attention over time in an attempt to explain the emergence of issues.

The study established first a conceptual framework within which newspaper publicity was analyzed. Several theories of mass communications were considered. It was found that the newspaper plays a dominant role in the political environment as a primary source of information. The newspaper readership characteristics imply that the high income, highly educated and finally, government officials rely on newspaper information to form their opinions. Therefore, one would expect the politically influential groups, which fall in the newspaper readership, to have incentives to transmit their opinions through the newspaper in order to influence policy. This was found to be particularly true with bureaus. I traced the development of a leading issue, the NOX case, where I focused on the publicity activism of the protagonists. The most politically influential role - from a newspaper publicity viewpoint - was played by the Air

Resources Board during the critical stages of the adoption of the NOX retrofit device. The NOX case study leaves no doubt as to what the relationship between the press and government publicity was during that period.

The next step in the analysis was to seek additional evidence of such influential behavior by bureaus on a larger scale. Therefore, the data on water and air pollution over the 1971-1974 four-year period were analyzed. The findings with respect to bureaus were consistent with the results of the NOX case. Bureaus obtained both more media exposure and direct publicity than citizens groups, firms and individual citizens.

The major theoretical implications of this study relate to the hypothesis developed in Chapter II, which states that bureaus will try to maximize the attainment of their policy objectives, given their financial and institutional constraints, through newspaper publicity. The analysis suggests that the policy implications of bureaucratic publicity can be assessed by analyzing newspaper information and tracing the relative salience of an issue through time, which in turn reveals how influential the government can be on issues that alter the allocation of resources via the political mechanism. Obviously, "sale" of information through newspapers from one group to another has the potential of influencing policy outcomes.

One of the main conclusions has been that bureaus affect the allocation of resources through synthetic advertising via the newspapers. Even though the analysis at times was rendered difficult,

due to the nature of the data, I believe that I have obtained enough evidence to demonstrate the involvement of bureaus in the policy process through newspaper publicity.

Another aspect the analysis brought about was the emergence of political issues through newspaper attention. We know that the environment encompasses a variety of events. These events vary in magnitude and prominence through time and very often attract the attention of public opinion. Public interest varies according to the prominence of the events themselves. Such events may include oil spills, air disasters, minority group rebellions, etc. Therefore, ranking newspaper attention and prominence provides an understanding of issue salience through time and also tells us which forms of pollution were considered the most serious during that particular period.

Such analysis complements the conceptual framework within which the publicity activism of different agents has been analyzed.

Fianlly, this dissertation has been an exercise outside the "narrow" definition of economics. I am fully aware that the analysis lacks at points the quantitative sophistication that other works exhibit, but I believe that, even though such treatment was not present, I have unveiled an area of policy that has never been looked at from an economic viewpoint before. My conclusions raise questions such as whether such an influence of the press by government officials is desirable and if not, how can we render such activities more expensive.

REFERENCES

- Bagdikian, Ben H., The Information Machines: Their Impact on Media, (Harper and Row, Publishers 1971), p. 108.
- Bentley, Arthur, The Process of Government, (San Antonio Texas: Principia Press of Trinity University, 1949).
- Bogart, Leo, "No Opinion, Don't Know and May be no Answer," Public Opinion Quarterly, XXXI (Fall 1967). p. 336.
- Downs, Anthony, Economic Theory of Democracy, p. 204, 1954, (New York: Harper and Row).
- Downs, Anthony, Inside Bureaucracy, p. 119 (Boston: Little, Brown).
- Dunlap, "The Socioeconomic Basis for the Environmental Movement: Old Data, New Data, and Implications for the Movement's Future," Washington State University College of Agriculture Research Center, Scientific Paper No 4350 (1974). Region III includes Pennsylvania, Virginia, West Virginia, Maryland, Delaware, and the District of Columbia. Region VIII includes Colorado, Utah, North Dakota, Wyoming and Montana. As quoted in Gordon Brady's, "The Institutionalization of Citizen Participation in the Clean Air Act," (Doctoral Dissertation, VPI, 1975).
- Hirshleifer, Jack, "Where are we in the Theory of Information," Journal of Political Economy, June 1961, pp. 213-225.
- Key, V. O., Jr., Public Opinion and American Democracy (New York: Alfred Knopf, 1961), Chapter 14.
- Klapper, Joseph T., "The Comparative Effects of the Various Media as it Appears," in the Process and Effects of Mass Communication, ed. by Wilbur Schram (Urbana: University of Illinois Press, 1965).
- Los Angeles Times. "Death of Antismog Bill Raises Serious Questions," Friday, October 15, 1971.
- Los Angeles Times. "Smog Wins a Round," Friday, October 15, 1971.

Los Angeles Times. "Used-Car Smog Bill 'Rises Again'," October 15, 1971.

Los Angeles Times. "Oil at Beaches," September 10, 1971.

Los Angeles Times. "Killing of Smog Bill Called 'Plain Crazy'," Wednesday, October 13, 1971.

Los Angeles Times. "State Board OK's \$20 Auto Antismog Device," Thursday, March 16, 1972.

Los Angeles Times. "Controversial Smog Device Ordered for Most '55-'65 Cars," Thursday, August 10, 1972.

Los Angeles Times. "Smog Device Law for '55-'65 Autos Goes Into Effect Today," Friday, September 1, 1972.

Los Angeles Times. "State Board Again Delays Action on Used-Car Antismog Devices," Thursday, November 9, 1972.

Los Angeles Times. "Faulty Installing of Auto Smog Devices Found," November 23, 1972.

Los Angeles Times. "New Antismog Units Ordered for '66-70 Cars," Friday, June 22, 1973.

Los Angeles Times. "Board Revives 4 Smog Devices for Used Cars," Thursday, July 19, 1973.

Los Angeles Times. "Smog Controls Will Cost 1% More Gas, Legislators Told," Thursday, December 13, 1973.

Los Angeles Times. "Year's Delay on Car Smog Devices Upheld By Court," Friday, February 15, 1974.

Los Angeles Times. "State High Court Kills Board's Delay on Car Exhaust Devices," June 28, 1974.

Machlup, Fritz, The Production and Distribution of Knowledge in the United States, (Princeton, New Jersey: Princeton University Press, 1962), p. 229.

McCury, James L., Government Publicity, (Chicago: University of Chicago Press, 1967), p. 7.

- McIver, Robert, The Web of Government, (New York: The MacMillan Company, 1947), p. 52ff.
- Ninmo, Dan, The Political Persuaders: The Techniques of Modern Election Campaigns (Englewood Cliffs, N.J.: Prentice-Hall, 1970), p. 192.
- Niskanen, William A., Bureaucracy: Servant or Master? (Institute of Economic Affairs, 1973), p. 22.
- O'Brien, David J., Neighborhood Organization and Interest Group Process, (Princeton University Press, N.J., 1975, Ch. I), pp. 7-42.
- Salisbury, Robert H., "An Exchange Theory of Interest Groups," Midwest Journal of Political Science, Vol. XIII, No. 1, February 1969, pp. 11-32.
- Samuelson, Meril L., Richard F. Carter and Lee Ruggels, "Education Available Time and Use of Mass Media," Journalism Quarterly, XL (Autumn 1963), pp. 491-496.
- Schattsneider, E. E., The Semi-Sovereign People (Holt, Rinehart and Winston, Inc., New York, 1960), pp. 30-36.
- Schram, W. and D. White, "Age, Education and Economic Status as Factors in Newspaper Readings," in Process and Effects of Mass Communication, ed. by Wilbur Schram (Urbana: University of Illinois, 1965).
- Teyne, Henry, "Legislative Attitudes Toward Interest Groups," Midwest Journal of Political Science, Vol. II, p. 489, November 1967, No. 4.
- Tocqville, Alexis De, Democracy in America, edited and abridged by Andrew Hacker, revised translation by Francis Bauer, (New York: Washington Square Press, 1964), p. 71.
- Tullock, Gordon, The Politics of Bureaucracy (Washington: Public Affairs Press, 1965), pp. 137-141.
- Wright, Charles R. and Herbert Hyneman, "Voluntary Association Memberships of American Adults: Evidence from National Sample Surveys," American Sociological Review, Vol. 23 (1958) reprinted in American Political Interest Groups: Readings in Theory and Research, ed. by Betty Zisk (Wadsworth Publishing Co., Inc., Belmont, Calif., 1969), pp. 304-307.
- Ziegler, Harmon, Interest Groups in American Society, (Englewood Cliffs: Prentice Hall, Inc.), p. vi.

APPENDIX A

DEFINITION OF PROMINENCE

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DEFINITION OF PROMINENCE

VERY PROMINENT (3 Pts) -- Articles that appear on Page One of Part I, II and III and any articles appearing on Page One of any part of a Sunday edition. Articles must be located at the outside columns of the paper.

PROMINENT (2 Pts) -- a) Articles that appear on Page One of Part I, II and III and any articles appearing on Page One of any part of a Sunday edition, b) Articles written by influential authors, i.e., well known writers, senators, etc. regardless of location in the newspaper, c) editorials, d) Articles having at least 5½ cm. wide and more than 8 cm. length of column, e) Articles having headlines and column length less than category d), but including picture, and f) Articles written by environmental authors.

LESS PROMINENT (1 Pt) -- a) Articles having headlines less than 5½ cm. wide and 8 cm. length, and b) All the rest.

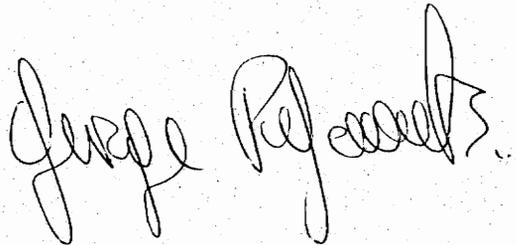
VITA

George Papadatos, born August 24, 1946 in Athens, Greece, was graduated from the Faculty of Law of the University of Athens, Greece in 1969. In 1970, he entered the graduate program in Economics at the Economics Department at the University of Utah, where he obtained a Master's Degree in Economics in 1972.

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Requirements for the Ph.D. degree were completed in April 1977.

A handwritten signature in cursive script that reads "George Papadatos". The signature is written in dark ink and is positioned in the lower right quadrant of the page.

THE BUREAUCRATIC THEORY OF SYNTHETIC ADVERTISING

by

George Papadatos

(ABSTRACT)

This paper is concerned with the analysis of the print media (specifically newspapers) impact on public policy making. The study examines the communications function the newspaper performs for societal groups that influence the allocation of resources via the political mechanism. It compares bureaus, interest groups, industry and plain citizens in their use of the press and analyzes differences among them. It also generates hypotheses which suggest how individual groups structure their relationships with newspapers. We expect to find that some groups have greater success at getting their policy goals published in the print media. This is because each group will face different opportunity costs and constraints from that process.

The narrow hypothesis I wish to focus upon is that bureaus will have less relative costs than other groups have and that they are constrained from employing other methods of influencing policy which are available to other groups. This makes the net benefits of publicity through media higher for bureaus than for other groups.

Therefore, we expect to find bureaus disproportionately represented in newspaper articles and publication views.

The hypothesis was tested using data obtained from the Los Angeles Times which dealt with air and water pollution. The results are generally favorable and suggest that the approach is fruitful.