RESOLVING COMMUNITY CONFLICT IN THE NUCLEAR POWER ISSUE:
A Report and Annotated Bibliography

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with

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OFFICE OF WASTE ISOLATION
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PREFACE

This report and bibliography have been completed under subcontract to the Office of Waste Isolation, a branch of Union Carbide Corporation, Nuclear Division, as part of the U. S. Department of Energy's National Waste Terminal Storage (NWTS) Program. This NWTS Program has as its objective the development of repositories in deep geologic formations for the disposition of solidified radioactive wastes produced by the nation's commercial nuclear power operations. Since it was thought that public conflicts over the location of these repositories might arise during the NWTS program of locating suitable sites for these repositories, it was considered desirable to obtain a scholarly ventilation of problems related to these conflicts. This initial discussion of conflict resolution is intended to aid in the development and presentation of information to help assure that such conflict might turn on a clear understanding of the issues involved. Since the public affects the siting and operation of nuclear waste repositories and nuclear facilities in general, through public "hearings" as discussed in Chapter 1, controversy over siting and operating waste repositories as well as nuclear power plants have been treated together in this report as the "nuclear power issue." Also explained in the first chapter is my focus on the local community as the decision-making unit in conflict. Accordingly, this report is a scholarly discussion of the escalation and possible resolution of community conflict in the nuclear power issue. My concern is at all times with the social factors in this conflict. Technical problems in nuclear power are only considered to the extent that such problems are raised in conflict over nuclear power. Social science research on conflict is only reviewed to the extent that it bears on community conflict over nuclear power.

Chapter 1 describes the nature of community conflict escalation in the nuclear power issue; stages of escalation, typical individuals and groups involved, typical issues raised, typical manners in which participants become involved, and the basic social parameters of conflict escalation. Taking the discussion in Chapter 1 as the end result of a causal process, Chapter 2 outlines the community level determinants of conflict escalation in the nuclear power issue. How is a community in which conflict over a nuclear facility is most likely different from a community in which such conflict is

is least likely? Chapter 3 is a detailed consideration of alternative methods of containing and resolving conflict as described in the previous two chapters. Chapter 4 brings together the preceeding three chapters so as to list principles for dealing with community conflict in the nuclear power issue. Finally, Chapter 5 is an annotated bibliography of the literature reviewed in the report. Citations to the bibliography are explained in Section 5.3.

I want to caution the reader wishing to make policy inferences from the report. Social science research rarely involves the precision and replication potential of experimental work in the natural sciences. There is no experimental evidence on resolving community conflict. No two communities of similar demographic, economic, political and social characteristics have been "seeded" with conflict and used to compare the efficacy of two conflict resolution techniques. Cross-sectional survey analysis is the basic source of evidence here. Characteristics of communities are correlated with characteristics of conflict in order to describe what characteristics seem to be associated with conflict escalation. Thus, while we can say that an urban community is more likely than a rural community to develop conflict over a nuclear power facility being established in the community, such knowledge leaves us somewhat short of an understanding of how to resolve conflict. While cross-sectional survey analysis is adequate for describing community conflict escalation and concomitants of escalation, it need not be adequate for predicting the effect of a conflict resolution technique on an actual conflict. Inferences here from survey analyses will often be of the type: "Research has shown factor X to be significant in conflict escalation, therefore the absence of factor X might be significant in resolving conflict." Since the emphasis here is on community decision-making, experimental work in psychology is deemphasized. Nevertheless, such work is used extensively in chapter three to make inferences concerning the efficacy of alternative conflict resolution methods. Inferences here from psychological experiments will often be of the type: "Research has shown factor X to be significant in conflict, therefore if the characteristics of individuals in an artificial laboratory situation generalize to an actual community in conflict, factor X might be significant in resolving the community conflict." While a wide range of material is brought to bear on the points raised in the report, I want to emphasize inherent limitations in using the evidence to guide action in real conflict situations. Once a conflict emerges and polarizes a community into factions, very little definitive

knowledge is available on resolving the conflict. Nevertheless, there are some guesses to be made based on survey and psychological experiments that can be useful in addressing the social factors in conflict resolution even when the conflict reaches advanced stages. The report and bibliography should be most useful, I believe, in making opponents in the nuclear power issue sensitive to unintended social impediments to resolving their differences.

The report was drafted during October and November of 1977. While I directed and participated in the work on the bibliography, the bulk of the annotations were written by Michael Fischer with the library and abstracting assistance of Tim Corbett, Karen Garrett, and Mark Lundgren. Marcia Nakagi and Cynthia Robinson deserve thanks for their editorial and secretarial assistance.

CHAPTER ONE

THE STRUCTURE OF COMMUNITY CONFLICT IN THE NUCLEAR POWER ISSUE

1.1 Introduction

With the nuclear destruction of Hiroshima and Nagasaki, the threat of annihilation during a cold war nearly transformed into a hot war during the Cuban missile crisis, the popular media presentations of radiation mutation, and the ongoing proliferation of nuclear weapons, it is not too surprising to find that many Americans fear nuclear power.¹ While there is a considerable popular literature catering to this fear by emphasizing the linkage between nuclear power and its applications in weapon development², fear of nuclear power can not be dismissed as mere emotional rant from those ignorant of the true facts. On the one hand, we have technical experts presenting studies showing that, while nuclear power involves some risks, the risks involved in terms of the safety of persons working in the nuclear facility, the safety of persons living near the facility and the safety of the natural environment surrounding the facility are far less than the same risks involved in fossil fuel power facilities³. On the other hand, we have technical experts emphasizing evidence on the underestimation of the possible dangers of reactor failures, the unsolved problems of transporting nuclear waste, the constant problem of thermal discharge, and the problem of an emergency core-cooling system⁴. When

¹In corroboration on this common sense perception, Ebbin and Kasper (1974:19) cite a survey conducted in 1972 showing the 60% of adults associate the word "nuclear" with violence/anxiety and 83% associate the word "atomic" with violence/anxiety.

²Ebbins and Kasper (1974:Appendix C) present a bibliography of literature on the nuclear power issue. See footnote four below for references appealing to the lay citizen.

³These points are summarized in a study jointly authored by a group calling themselves the Nuclear Energy Policy Group (1977:210-211, 240-242, 266-267). Other discussion supporting nuclear power facilities is given in (2), (61), (136), (175), (265), (286), (447), (494), (605), (648), (653), (654), (655), (662).

⁴There is an enormous literature opposing nuclear power facilities that is intended to appeal both to professional and lay audiences, e.g.; (34), (65), (97), (98), (113), (123), (136), (160), (173), (174), (175), (194), (195), (233),

technical experts are ambiguous on something frightening to the average citizen as is nuclear power, one can expect conflict over the establishment of nuclear facilities both to occur and to be based on rumour and misunderstanding. Indeed such appears to be the case already⁵. It is in just such situations that social factors achieve preeminence in conflict; factors that have little or nothing to do with the technical problems being questioned; factors that nevertheless can transform a discussion of technical problems into a major social confrontation. My purpose in this chapter is to identify the basic social parameters of the nuclear power issue as a community conflict. By so doing, I can more clearly address in subsequent chapters both the determinants of conflict escalation and methods of conflict resolution pertinent to the nuclear power issue.

1.2 The Nuclear Power Issue as a Community Conflict

In order to understand conflict in the nuclear power issue, it is important to be clear about how the public becomes involved in the issue. Unfortunately there is no first-hand research comparing communities so that I have had to rely on secondary sources presenting partial accounts of the issue⁶. The composite

(234), (240), (264), (284), (296), (303), (309), (310), (314), (326), (332), (349), (365), (369), (394), (410), (419), (422), (445), (446), (488), (499), (521), (522), (524), (543), (544), (545), (554), (566), (596), (612), (614), (634), (649), (650), (651), (656), (657), (663), (703), (710), (711), (748), (751), (752), (753), (785), (805).

⁵As early as 1970, the Joint Committee on Atomic Energy complained to the Congress (quoted from Lewis, 1972:3); "The Committee has noted with concern in the past year the increased public opposition, not a little of it wholly unreasoning, to the construction of all electrical generating sources and their transmission systems." In a recent campaign in Vermont to prohibit the establishment of nuclear power plants, a spokesman for the Vermont Yankee nuclear power plant was quoted (537) as saying: "Considering the wording of the proposals and the misinformation and scare tactics circulated in the last few weeks, we are not surprised at the result of the vote." Costaglioli (1971) similarly critiques mass media coverage of the nuclear power issue.

⁶The material upon which I have based this composite picture of the nuclear power issue is quite diverse. Details on stages in establishing a waste repository are taken from a progress report by the Office of Waste Isolation, Union Carbide, Nuclear Division (1976:7-10). The licensing process and public participation in the hearings is described succinctly in the annual report of the NRC (1976:19-25, 197-217) and Ebbin and Kasper's (1974:33-58) description of AEC hearings. The remainder of the Ebbin and Kasper monograph contains detailed discussion of the contents of three particular hearings. Equal to the Ebbin and Kasper monograph is Nelkin's (1971) description of the actors and questions involved in the controversy over establishing a nuclear power plant in Cayuga Lake, NY. Less extensive descriptions of aspects of the nuclear power issue are

picture here is accordingly tentative. While the social aspects of the nuclear power issue can only be analyzed at this time a considerable distance from fact, public participation in a formal manner is well documented. In accordance with the Atomic Energy Act, the U. S. Nuclear Regulatory Commission (NRC) provides the public an opportunity to scrutinize the establishment of nuclear power plants, nuclear waste repositories, or nuclear facilities in general through formal hearings; particularly hearings on construction permits and operating licenses⁷.

If everything proceeded according to the path of least conflict, a utility or company or coalition of firms wishing to establish a nuclear facility would go through a process something as follows. After testing a variety of possible sites for their conformity to NRC safety and environmental standards, and checking with local government and business interests so as to gauge the local support for the facility, a site is selected and "ten or more large volumes" of the environmental report and safety analysis report are submitted to the NRC with an application for a construction permit for the proposed facility. The NRC staff conducts safety, environmental, and anti-trust reviews of the proposed facility while an additional safety review is conducted by the independent Advisory Committee on Reactor Safeguards.

given in: (26), (33), (58), (61), (71), (82), (97), (98), (113), (114), (120), (122), (123), (124), (125), (126), (144), (160), (162), (183), (185), (194), (205), (224), (232), (238), (239), (251), (254), (264), (265), (267), (298), (304), (308), (312), (317), (326), (345), (356), (357), (358), (360), (370), (386), (387), (412), (413), (414), (441), (446), (447), (459), (466), (473), (488), (499), (522), (524), (527), (529), (530), (531), (532), (533), (534), (535), (536), (537), (538), (539), (544), (554), (557), (570), (596), (603), (612), (614), (640), (643), (646), (647), (651), (652), (657), (662), (663), (670), (679), (694), (699), (700), (716), (731), (746), (747), (749), (750), (752), (769), (770), (785), (786), (810).

⁷In order to separate the regulatory and development roles of the Atomic Energy Commission, the Commission was replaced in 1975 with the Nuclear Regulatory Commission (NRC) as the supervisor of nuclear facilities and the Energy Research and Development Administration (ERDA) as the developer of nuclear technology. While the agencies involved in the nuclear power issue are therefore different before versus after 1975, the licensing process at all times has been in accordance with the Atomic Energy Act so I have not distinguished controversies occurring under the Nuclear Regulatory Commission. Where the change in administration has some consequence a note to that effect is made.

As soon as the application is filed, notice of that fact is published in the FEDERAL REGISTER and copies of the application are furnished to appropriate State and local authorities and to a public document room established near the site of the proposed facility and another in Washington, D.C. Simultaneously, notice is published in the FEDERAL REGISTER and local newspapers stating that in thirty days there will be a public hearing on application for the license for the proposed facility. The public hearing is conducted by a three person Atomic Safety and Licensing Board (ASLB) which makes an initial decision as to whether the permit should be granted. Two of the members of the ASLB are technical experts and one is to be qualified in administrative proceedings. Affected members of the public are invited to petition (within a specified time before the hearing) the ASLB appointed to the case if they wish to: 1) submit a written statement at the hearing, 2) make an oral presentation at the hearing, or 3) become an "intervenor" in the proceeding with full participatory rights including cross-examination of other participants. Petitions to intervene are considered on the basis of the extent to which the petitioner's property, financial or other interests are affected by the proposed facility and the extent to which he is offering "irrelevant, duplicative, or repetitive evidence and argument" given the other petitioners⁸. Additionally, if the NRC feels that the same problem is being raised at separate hearings, they can set up a special "rulemaking" hearing to deal with that point so as to proceed with the problems of the specific facility being proposed⁹. As with any decision by the ASLB, the decision to deny a petition can be appealed by the

⁸In response to this point, there are increasing numbers of consolidated interventions where multiple intervenors pool their resources to make a common argument in a hearing (Ebbin and Kasper, 1974:41).

⁹Ebbin and Kasper (1974:122-138) describe the evolution of the rulemaking hearings on the emergency core-cooling system for nuclear power plants. In fact there are six types of hearings in which the public can participate under the administration of the NRC; rulemaking proceedings, manufacturing license proceedings, construction permit proceedings, operating license proceedings, materials license proceedings, and show cause proceedings (described in the NRC annual report, 1976:204). Nevertheless, most participation occurs in the hearings for a particular facility and the rulemaking proceedings that are offshoots of licensing particular facilities.

petitioner¹⁰. The process for obtaining an operating license occurs in the same manner once a nuclear facility is nearing completion¹¹. Once licensed, the facility remains under NRC surveillance and undergoes periodic inspections throughout its operating life.

Note that the above process, a process among the proponents of a proposed facility, is primarily concerned with economic and legally defined environmental and safety questions. The major proponent, a utility or coalition of corporations seeking to establish the facility, wishes to provide a source of power capable of meeting a projected future demand at a rate per kilowatt hour lower than fossil fuel. Nuclear facilities have the potential to be quite profitable¹². As a consequence, the spread of nuclear power has created a need for nuclear waste repositories. In accordance with NRC rules, technical experts are employed to conduct requisite safety and environmental tests for the company proposing the facility. Academia and the federal (and to varying extents, the state¹³) government become involved toward the end of

¹⁰The ASLB's decision is subject to appeal to an Atomic Safety and Licensing Appeal Board (ASLAB) and could ultimately go to the NRC itself for decision. Additionally, the law provides for appeal beyond the NRC in the Federal Courts. Perhaps the best known of the last type of appeals is the Calvert Cliffs decision that forced the AEC to consider environmental issues in establishing nuclear facilities((123), (125), (370)). A significant point here is that a favorable decision by the ASLB allows the NRC to grant a Limited Work Authorization to the company proposing a facility in advance of a final decision of the license. Thus, work can begin on a facility even while controversy over the facility mounts.

¹¹While the public hearing is not mandatory for an operating license, it will be held if requested by affected members of the public or by the NRC.

¹²Even with licensing delays, the cost of nuclear electricity is generally less than that of fossil fuel electricity--leaving to one side the questions of the costs imposed on residents surrounding the power plant (see e.g., (265), (286), (546)).

¹³The role of State agencies in the nuclear power issue is unclear. While state agencies may occasionally appear as intervenors if a proposed facility affects two or more states (e.g., the Vermont Yankee plant hearings where the proposed plant discharged into the Connecticut River thereby affecting Vermont, New Hampshire and Massachusetts), states are increasingly passing their own environmental laws comparable to the National Environmental Protection Act so as to impose their own restrictions on environmental pollution (see (339), (356), (357), (358)). Trzyzna and Jokela (1974) describe the implications of the oldest and most extensive of such laws; the California Environmental Quality Act. A well known example of state and federal regulations coming into conflict is the problem of setting radiation level standards for the power

insuring efficient facility operation under existing legal codes¹⁴. Local business interests are informed of the increased tax base and/or income that will result from constructing the facility and are therefore well disposed toward it¹⁵. The County Board of Supervisors (and potentially other local zoning and decision-making agencies) enters the picture as the coordinating mechanism determining land use for the proposed site¹⁶. These economic and legal concerns can be expressed in specific questions. How much will the tax base and local business benefit from the proposed facility? Do the site and proposed facility meet the NRC safety and environmental regulations?

In contrast to the facility's proponents who use concern over comparatively specific economic and legal questions to solicit initial support, the facility's opponents are concerned with less easily specified questions and accordingly solicit support based on more ambiguous grounds. The prime question raised involves the possible effects on the local environment of radiation poisoning from

plant at Monticello, Minnesota where the state wanted lower levels of radiation permitted than the level permitted under AEC standards ((82), (238), (267), (370), (506), (646), (657)). Indeed, the NRC and state agencies are logical partners in co-administrating the public hearings on a proposed facility. The first such co-administration was conducted in 1976 by the NRC and the Public Service Commission of Maryland in regard to the Douglas Point Generating Station (NRC,1976:207).

¹⁴ Before the AEC was dismantled into the current two agencies dealing with nuclear power (see footnote six), there was a clear conflict of interest here. The federal regulation of licensing facilities was confounded with the promotion of such facilities (see Orlans, 1967, for an extensive discussion of the relations among the AEC, private industry and academia). Even before the AEC was abandoned, there were clear efforts to separate regulation from promotion ((e.g., (640), (652)). However, with the creation of the NRC, this separation seems unambiguous so that I have treated the initial relation between the NRC and a company proposing a nuclear facility as one of neutral insistence on the company's conformity to existing legal codes.

¹⁵ An increased tax base is often cited by citizens as a reason for supporting a proposed facility (e.g., (231), (523), (679)) and in some cases support above and beyond taxes is offered (e.g., the Vermont Yankee power plant constructed a new library, town hall and community swimming pool for the residents in Vernon, Vermont). It is not surprising to find a company proposing a nuclear facility named by the local Chamber of Commerce as "company of the year" (Nelkin,1971:34).

¹⁶ Most utilities possess a right of eminent domain to condemn any property they require for expansion. This legal basis as well as the link between local business and government agencies tends to result in local government agency support for the efforts of the company proposing a nuclear facility--at least in this preissue stage of conflict (e.g., see Novich,1968:37; Nelkin,1971:34).

a reactor meltdown and the transportation of nuclear wastes¹⁷. The second (and sometimes uppermost¹⁸) question involves the thermal pollution discharged by a nuclear facility. These questions are legitimated to the undecided citizen by the fact that public hearings are to be held concerning the proposed facility. The undecided citizen being asked to support opposition to a proposed facility is faced with the question; "If the facility is safe, why are there to be public hearings?" Opposition to a facility can organize anywhere from the first announcement by a company that it is considering an area for a nuclear facility up to and beyond the issuance of an operating license¹⁹. Opposition initiates with an individual or group reacting to news of the proposed facility. Support is then solicited, usually in terms of the above questions, from other individuals and groups on the basis of social relations²⁰. Those concerned about the environment

¹⁷ The issues raised by citizen groups are scattered through the literature cited in footnote four. Nelkin (1971:79-108) provides detailed discussion of the development of salient issues in one controversy, although the opposition in this case involved an unusually professional group. A comprehensive survey could be accomplished by taking an inventory of issues raised in the petitions to intervene in public hearings. Ebbins and Kasper (1974:59-101) provide some specific questions of concern to intervenors against proposed facilities.

¹⁸ In the Bodega Head controversy, for example, the safety issue only arose after the environmental questions had long been the basis for opposition (Novick, 1968:37-38). In the Cayuga Lake controversy, thermal pollution was a prime question since the lake had a delicate temperature structure that would be upset by the thermal discharge of a nuclear power plant ((34), (177), (233), (234), (521), Nelkin, 1971:79-98). An ongoing problem with nuclear power plants along the Hudson River has been the thermal discharge killing the popular striped bass (e.g., see (97), (98), (248)).

¹⁹ In addition to opposition arising in response to the necessary announcements of public hearings, the announcement of a particular area as a potential site for a nuclear facility can generate opposition (e.g., (248), (249)), and the retroactive nature of regulation over the nuclear power industry in the sense that every facility is subject not only to current legal decisions but all future ones as well means that while modifications are made to bring them into compliance with new regulations (e.g., (532)).

²⁰ Information on this early stage of opposition is at best sketchy. The use of social support relations seems common in available descriptions, however. For example, reacting to his perception of the potential thermal pollution problems for Cayuga Lake, a professor at Cornell called together a group of his colleagues to issue a statement and subsequently called a community meeting that evolved into the Citizens Committee to save Cayuga Lake and eventually defeated the proposed plant (Nelkin, 1971:40, 58). The controversy over the Bodega Head power plant began with a woman refusing to sell her land to the utility proposing the facility. She solicited aid from local residents and groups familiar to her (claiming; "I am not asking for your sympathy. I am asking for justice."), and this aid developed into the Northern California Association to Preserve Bodega Head run by a staff member of the Sierra Club (Novick, 1968:34-44; Holden and Herrera, 1971:192-203).

tend to be well educated, politically left individuals²¹. A concerned individual speaks to friends and co-members of local groups perceived to be supportive who in turn speak to their friends, and so on. These support solicitations extend in the same manner to national to national organizations espousing similar concerns (e.g., Environmental Defense Fund, Friends of the Earth, National Resources Defense Council, Sierra Club) and to technical experts espousing data in keeping with their social concerns (e.g., Union of Concerned Scientists).

With the formation of opposition groups(s), support is mobilized by the facility's proponents on a social basis as well. Local business interests activate social relations among friends and, in place of the earlier economic and legal concerns, we now have appeals to one's sense of progress and confidence in American institutions²².

As conflict develops between a facility's proponents and opponents, each side begins to borrow existing stereotypes of the other side; opponents viewing the facility's supporters as harbingers of doom while supporters view the facility's opponents as naive impediments to progress²³.

²¹The characteristics of "environmentalists" are discussed in articles intended to appeal to a wide variety of audiences (e.g., (14), (32), (191), (200), (311), (316), (418), (423), (437), (495), (684), (720), (754), (758), (778), (783)).

²²For example, in reaction to opposition to the proposed power plants in Midland, Michigan, about fifty persons representing "trades, professions, businesses, organizations, and industries" banded together under the chairmanship of the Senior Minister of the First Methodist Church of Midland to form the Midland Nuclear Power Committee (Ebbin and Kasper, 1974:62). In reaction to the effective opposition to the proposed power plant on Cayuga Lake by the Citizens Committee to Save Cayuga Lake, thirty-five persons representing local business interests banded together to form the Citizens Committee to Save Bell Station and circulate a petition reading; "We the undersigned of the area involved, having faith in the Electric and Gas Corporation, its employees, the Federal and State regulatory agencies governing licensing of nuclear-powered generating stations, pledge our support to the planned project of Bell Station." (Nelkin, 1971:76-77).

²³Writing from the view point of the opposition to nuclear facilities, Lewis (1972:112) suggests; "Under the administrative philosophy, dissent was equated with disruption. Dissenters were 'crackpots.' They were in the AEC-industry view 'unscientific, rabble rousers, publicity seekers, alarmist, fanatics.'" While using more innocuous adjectives, the quotes in footnote five together with limited survey work (e.g., (400), (495)), suggests that such

Individuals and groups linked by social relations to both opponents and proponents are forced to be neutral in the controversy since they can not support one side without rejecting the other. Academia can not "legitimize" either side in the controversy since technical experts are used by both sides to support their perspectives. Local government agencies may support the facility, however, elected officials look to their clamoring constituencies so that the local government is at best a partial supporter for both sides. Local business too is interested in supporting the proposed facility but hesitant to alienate workers and consumers opposed to the facility.

Public hearings are conducted but little issue resolution can occur in such a setting. Hearings are intended to resolve specific questions over a proposed facility. This intended purpose is enforced by the ASLB. However, the questions at issue now are of a social (and accordingly vague) nature. The insistence of the NRC through its ASLB on specific, concrete questions in the hearing only serves to further alienate the facility's opponents so they view the NRC as a supporter of the proposed facility²⁴. Opponents use their technical advisors as a support for their social concerns; concerns that can not easily be cast in concrete questions. Technical safety and environmental questions, questions that can be cast in concrete terms, are used as tools by each side to solicit support; proponents making comparisons to other sources of electricity and opponents emphasizing the fact that disaster is after all still possible. Accordingly, the public hearings must degenerate into rhetoric and legal gymnastics while the controversy rages in the community outside. Not surprisingly, Ebbins and Kasper (1974:252) found this to be the case in their analysis of public participation in the hearings on the nuclear power issue:²⁵

perceptions of environmental opposition to nuclear facilities exist. For their part, the nuclear power opponents have equally negative stereotypes of an agency-industry "establishment" conspiring to spread nuclear power (e.g., (114), (185) so that even the general public seems not to trust the ability of industry or the government to resolve environmental problems (e.g., (25)).

²⁴ This is illustrated by complaints that quantitative cost-benefit analyses in environmental impact statements are biased against capturing aesthetic concerns (e.g., (36), (40), (68), (231), (398), (470)).

²⁵ A seemingly promising approach to the nuclear power issue is in terms of citizens alienated from a technological and impersonal society lashing back at it as might be expected in a mass society (421). Certainly, citizens feel powerless in confrontation with industry and the federal bureaucracy. This argument was advanced by some as a promising approach to understanding why

The relative ease of access to the Atomic Energy Commission hearings, while providing a means for them to express themselves, does little or nothing to diminish their feelings of powerlessness in the face of decisions which will impact on their lives. Their participation can be characterized as a manifestation of their anger and frustration at what they interpret as a hollow extension of procedural due process and the denial of meaningful or substantive due process. The result is that the hearings are, in the view of some citizens, expensive wars of attrition, designed to obfuscate rather than clarify the true risks and benefits of nuclear power.

In this emotional context, it is a simple matter for extremist leaders to emerge so that no matter what the decision of the public hearings and subsequent appeals moderate leaders can be overruled and support mobilized for potentially extra-legal action²⁶.

The hearing process with its emphasis on questions concerning only a specific proposed facility (the rulemaking hearing being the proper forum for questions pertaining to multiple facilities); plus those questions being necessarily posed by citizens directly affected by the facility, and the mobilization of support by opponents and proponents in terms of economic and social concerns of the residents surrounding the proposed facility, combine to make the nuclear power issue a distinctly local or "community" conflict. As summarized by Ebbins and Kasper (1974:22-23):

citizens rose in opposition to the fluoridation of water (e.g., (316), (418), (685)). For the same reasons that the alienation approach was dismissed by Crain et al (1969:31-51) in the study of conflict over fluoridation, it would seem erroneous here. The alienation hypothesis is ambiguous about measuring levels of alienation underlying conflict in a community, tends to equate a rejection of some administration proposal with an extremist, alienated ideology independent of the adequacy of the proposal, and fails to consider the social context of conflict. As discussed here and in the next chapter, community structure plays a significant role in the course a conflict is likely to take. The feelings of alienation manifested in the obstructionist and dilatory tactics adopted by citizens in the public hearings are rooted in a social organization not apparent in the hearing. The road to resolving obfuscationist tactics in the hearing process lies in the resolution of the more general conflict in the community outside the hearing.

²⁶The common form of such action is occupying the construction site for a proposed facility so construction can not proceed. First begun in Europe (e.g., see (179), (232), (254), this strategy has begun to be used in the United States; the most notable example being the recent confrontation in New Hampshire over the Seabrook plant ((412), (413), (414), (533), (534)).

But while the number of contested nuclear power plants at both the construction and operating license stages have increased dramatically since 1969, our observations have led us to believe that they are, for the most part, essentially individual, local actions and do not represent a consolidated national effort, as is often alleged. ... There is even some evidence that suggests to us that were plans to build such a plant in one locality to change and a different site elsewhere selected, those who have joined the opposition would drop their active roles.

1.3 Basic Social Parameters in the Nuclear Power Issue as a Community Conflict

As a structural process, community conflict involves two basic types of parameters; the form of conflict given by the pattern of relations among the participants in the conflict and the content of conflict given by the substance of the communications exchanged by participants in the conflict²⁷. My purpose in this section is to succinctly state the structure of the nuclear power issue as a community conflict in terms of these basic social parameters using recent developments in network analysis to make the parameters maximally explicit. Note the concern here with parameters in the escalation of a particular conflict. This is a quite modest concern taken in light of work available on the general sociology of conflict ruling out as it does both the causes and the consequences of conflict²⁸.

1.3.1 Stages of Conflict Escalation

In the course of responding to events confront them, individuals and groups as "actors" in a community pursue a wide variety of actions; new buildings are proposed, old ones destroyed, new social programs are initiated, careers are planned, etc. Each of these day-to-day activities is potentially a seed for

²⁷ The separation of form from content in relations is most often attributed to Simmel (1917:40-57). These two types of parameters in community conflict have been discussed by Coleman (1957:9-14) as changes in the social organization of a community and changes in the issues at question in the conflict. Coleman's discussion applies early metaphors discussed by Simmel (1904:1908).

²⁸ To be more specific, I am not concerned with the analysis of inherent tendencies for conflict in a differentiated social system (e.g., Dahrendorf, 1959; Oberschall, 1973:1-84; Collins, 1975) nor the functions of conflict in a system for maintaining the system (e.g., Coser, 1956, 1967), nor efforts to bring these two streams of work together (e.g., Turner, 1975a, 1975b). A consideration of conditions that exacerbate conflict escalation--and thus a partial consideration of its causes--is presented in the next chapter.

eventual community conflict. It is not until a "precipitating event" occurs, however, that what was previously a matter-of-fact course of action becomes the preliminary stage of a community conflict. Recognized in both theoretical and empirical work on conflict, the precipitating event is any occurrence that sparks initial conflict between two or more actors²⁹. Analyzing community mobilization over air pollution in Illinois for example, Bridgeland and Sofranko (1975) found that the best predictor of mobilization was not the actual level of pollution but rather the occurrence and publication of some event demonstrating the potentially dangerous consequences of pollution (e.g., property damage, livestock or fish kills, evacuations, hospitalizations, etc.). Further, when controlling for the occurrence of a precipitating event, the actual level of pollution in a community had no association with mobilization in the community to combat pollution! The precipitating event in the nuclear power issue is undoubtedly connected with the announcement of an impending nuclear facility in an area. However, the announcement itself is not sufficient since opposition does not always develop immediately after the first announcement of a public hearing for a proposed facility. Three factors in combination seem to act as a precipitating event here; 1) an announcement that a nuclear facility is being or will be constructed, 2) publicity of the potential dangers of such a facility, and 3) a perception on the part of some citizens who object to the presence of such a facility that they could prevent the construction of the facility by mobilizing in opposition to it³⁰.

²⁹ As proposed by Walton (1969:76); "We refer to these stimuli as triggering events, and propose that they can have their effect either by increasing the magnitude or salience of the issues in the conflict or by lowering one of the barriers to action." Similar attention to precipitating events in conflict is given by Smelser (1963:16-17) and Oberschall (1973:295-303). With specific reference to environmental issues, Downs (1972) discusses an "issue-attention cycle" in which "alarmed discovery and euphoric enthusiasm" result from "some dramatic series of events."

³⁰ The precipitating event then involves fear of the announced facility coupled with a feeling of being able to do something about it, the last of the three factors being demonstrated to be a significant precipitant in the formation of coalitions (e.g., see (132), (133), (139), (165), (292), (403), (599), (777)).

Recognizing the precipitating event in community conflict is crucial because it distinguishes the potential issue from the actual issue, the preissue or implicit stage of community conflict from the issue or explicit stage. The "preissue" stage of community conflict consists of all actions taken prior to the precipitating event and relevant to the subsequent conflict. In the nuclear power issue, preissue activities involve the NRC, the company proposing a facility, technical experts and local business and government concerns. A literature has developed on strategies available to those in power that prevent specific questions from ever arising as explicit issues to be resolved³¹. Where these strategies are effectively employed, a community conflict never develops as such and it is difficult--although not impossible--to analyze the actions occurring in the preissue stage of conflict³².

Subsequent to the precipitating event, community conflict enters the stage of being an explicit issue to be resolved by the community decision-making process³³. It is in this stage that opponents and supporters of the proposed facility in the nuclear power issue activate social relations so as to mobilize support for their respective sides. At some point in this decision-making process, there will be a formal confrontation between factions in conflict. While

³¹For example, Meltsner (1971) describes three strategies officials use in "public avoidance"; 1) consensual where officials perceive a consensus so the public can be ignored, 2) negotiatory where officials discuss proposals with cooperative citizens on a face-to-face basis before implementing decisions, and 3) anticipatory where officials anticipate public reaction so as to avoid having to negotiate. Similar ideas are presented by Bachrach and Baratz (1963) and Wolfinger (1971).

³²For a discussion of problems in analyzing actions in the preissue stage see the exchange between Wolfinger (1971a, 1971b) and Frey (1971). There have been two methods used to analyze preissue actions. One method is to do a case study analysis of the actions leading up to an actual conflict. For example, Bachrach and Baratz (1970:67-103) discuss strategies employed by city officials to prevent race riots from occurring in Baltimore; and Crenson (1971) discusses strategies employed by the steel industry to keep air pollution from becoming an issue in Gary, Indiana. A second method is to focus on one type of issue in many communities and determine why the issue arises into conflict in some communities but not others. Crenson (1971) and Bridgeland and Sofranko (1975) illustrate this approach in analyzing the determinants of community action over air pollution.

³³The bulk of the literature on community issues is concerned with this explicit issue stage (e.g., see reviews by Bonjean et al., 1971; Clark, 1968a, 1974a, 1975a). This topic is addressed in the next chapter.

communities do occasionally have popular referenda in the nuclear power issue as a means of indicating popular support for a proposed facility, the formal confrontation more often than not consists of the public hearing occurring after the precipitating event. It is of some moment here to distinguish the "preconfrontation" stage of an issue as all actions taken after the precipitating event and before a formal confrontation from the "aftermath" stage of an issue as all actions taken subsequent to formal confrontation³⁴. Depending on the degree to which conflict has escalated by the time a formal confrontation occurs, the losers in the confrontation may either retire from the conflict or, if escalation has progressed significantly, pursue the conflict with more extremist tactics and ideology that characterized the preconfrontation stage³⁵.

In short, community conflict in the nuclear power issue can be seen--in an admittedly crude sense--as having three developmental stages; a preissue stage, a preconfrontation stage, and an aftermath stage. The first two stages are separated by the occurrence together of three circumstances as a precipitating event. The last two stages are separated by the occurrence of a formal confrontation in a public hearing between supporters and opponents of a proposed facility.

1.3.2 Issue Network

The "escalation" of a conflict through the above stages involves changes in the relations among actors in a community. It is useful to be able to discuss these relations explicitly. Participants in a conflict can be seen as interconnected within an issue-specific network, an "issue network", composed of what can be simplified here to three types of relations; 1) support relations between participants

³⁴ More detailed distinctions of actions within the preconfrontation stage of escalation are occasionally given (e.g., (223), (635)).

³⁵ Brinton (1952:148-175) remains a classic discussion of the ouster of moderate leaders by radical leaders. Coleman (1957:14) discusses this process as "Gresham's Law of Conflict" under which; "the harmful and dangerous elements drive out those which would keep the conflict within bounds." Gamson (1975) specifically addresses the strategies of protest groups who feel that they are being excluded from a "meaningful" input into the political decision-making process. Both sides in such protests seem more willing to use violence in achieving their ends.

on the same side of the conflict, 2) opposition relations between participants on opposite sides of the conflict, and 3) null relations between participants who are neutral toward one another or between participants and those actors not yet involved in the conflict. The issue network for a community conflict is then the complete set of relations concerning the conflict (support, null, and opposition) involving the actors participating in the conflict.

It is important for describing and resolving conflict, to distinguish between relations and distances separating actors in a conflict. Given the relation between actors i and j as a tendency for interaction between the actors in regard to some conflict:

$$z_{ij} = z_{ji} = \begin{cases} +1, & \text{if } i \text{ and } j \text{ support one another,} \\ 0, & \text{if } i \text{ and } j \text{ are neutral toward one another} \\ -1, & \text{if } i \text{ and } j \text{ oppose one another,} \end{cases} \quad (1)$$

then the distance between i and j is the difference between the overall pattern of relations involving i and j as participants in the conflict:

$$d_{ij} = d_{ji} = \sqrt{\sum_{k=1}^N (z_{ik} - z_{jk})^2}, \quad (2)$$

where N is the number of actors in the issue network. If the distance between actors i and j is zero, then i and j have exactly the same relations with every actor participating in the conflict (the difference between z_{ik} and z_{jk} is zero for all actors k). The larger the distance between i and j , then the more different are the relations linking i versus j to actors participating in the conflict³⁶.

The form and content of a conflict are made explicit by the issue network for the conflict. Issues are of the same "type" to the extent that they have the same form and content³⁷. The form of the conflict is given by the $N(N-1)/2$

³⁶ Borrowing from recent developments in network analysis, I have taken a topological approach here to represent the issue network. Citations to further reading, as well as detailed and applied discussion of Eqs. (1) and (2) are given in Burt (1976, 1977a, 1977b). Coppock (1977) uses topological concepts to analyze the perception of public opinion in the nuclear power issue by decision-makers. Davis and Weinbaum (1969) innovatively use published case studies to trace issue networks over time in metropolitan decision-making.

³⁷ A similar sentiment is reflected in Laumann and Pappi's (1976: 163-172) analysis of "types" of community issues in terms of the different functional sectors of the community activated in support and opposition for each type of issue.

different relations and distances between participants in the conflict. The content of the conflict is given by the substance of the communications occurring in each of these $N(N-1)/2$ relations. The escalation of a conflict through its stages consists of changes in the form and content of an issue network.

1.3.3 The Form of Conflict Escalation in the Nuclear Power Issue

The nuclear power issue involves (for the purposes of illustration here) eight "groups" of individuals as participants. The issue network among these "actors" is presented in Table 1.1 for the preissue stage of conflict. The relations between actors (the z_{ij}) are given in the diagonal and lower diagonal cells. The distances between actors (the d_{ij}) are given in the upper diagonal cells. For example, the initial relation between the company proposing a facility (C) and the Nuclear Regulatory Commission (NRC) is neutral (zero entered in the second row, first column of Table 1.1) while the distance between the two actors is nonzero (according to Eq. (2), $d_{12} = 1.4 = \sqrt{\{(1-0)^2 + (0-1)^2 + 4(1-1)^2 + 3(0-0)^2\}}$, which is entered in the first row, second column of Table 1.1)³⁸. Table 1.1 makes explicit the relations among participants in the nuclear power issue prior to the issue emerging. The company proposing a facility is supported by academic (A) in the form of technical experts, and local business (LBF) and local government agencies such as the County Board of Supervisors (LGA). These three actors similarly support the NRC. While the technical experts are not internally supporting one another (zero in the third diagonal cell), the local business and government interests are both internally organized and support one another--at least in regard to the proposed facility. At this stage of conflict neither the national opposition groups nor the local citizens are organized over their views on the proposed facility so the entire three bottom rows of the issue network are null.

With the occurrence of a precipitating event, an opposition relation develops between local citizens and the company proposing the facility. Mobilizing social support, citizens form voluntary associations against the proposed facility

³⁸ Only half a table of distances and half a table of relations are needed since both qualities are symmetric ($d_{ij} = d_{ji}$ and $z_{ij} = z_{ji}$). Also, distances between each actor and itself (the diagonal elements in the table, d_{ii}) need not be presented since they will always equal zero according to Eq. (2).

TABLE 1.1

THE NUCLEAR POWER ISSUE NETWORK AT A PREISSUE STAGE OF CONFLICT*

Participants in the Conflict	C	NRC	A	LBF	LGA	LCS	LCO	NGO
Company proposing the nuclear facility (C)	1	(1.4)	(2.0)	(1.4)	(1.4)	(2.0)	(2.0)	(2.0)
Nuclear Regulatory Commission (NRC)	0	1	(2.0)	(1.4)	(1.4)	(2.0)	(2.0)	(2.0)
Academia as technical experts (A)	1	1	0	(1.7)	(1.7)	(1.4)	(1.4)	(1.4)
Local Business Firms (LBF)	1	1	0	1	(0.0)	(2.0)	(2.0)	(2.0)
Local Government Agencies (LGA)	1	1	0	1	1	(2.0)	(2.0)	(2.0)
Local Citizens Supporting the facility (LCS)	0	0	0	0	0	0	(0.0)	(0.0)
Local Citizens Opposing the facility (LCO)	0	0	0	0	0	0	0	(0.0)
National Groups Opposing the facility (NGO)	0	0	0	0	0	0	0	0

*Relations are taken from Eq. (1) and are given in and below the diagonal while distances are taken from Eq. (2) and given above the diagonal in parentheses.

and activate national opposition groups (groups that enter the conflict already opposed to the company as well as NRC and having their own expert support from academia). Support is solicited from local government agencies (particularly from elected officials who must respond to constituencies) and local business firms. Local organizations seem to be neutral toward the national groups although their initial support of the proposed facility may result in some resentment of outside agitators. Table 1.2 presents the issue network after these changes.

In response to the opposition from citizens, proponents of the facility also activate social relations so as to mobilize support for the facility. Table 1.3 presents the resulting changes in the issue network. Local citizens supporting the facility form voluntary associations in support of the company and NRC while in opposition to the local citizen and national opposition groups. As did the citizens against the facility, local citizens supporting the facility solicit support from local government agencies and local business firms thereby neutralizing these actors as participants. The negative relation between the NRC and local citizen opposition groups is expected to develop as a result of the inability of these groups to adequately address their social concerns in the public hearing context. By insisting on concrete questions in the public hearing, the NRC in fact is supporting the interests of the company proposing the nuclear facility so a support relation is indicated between NRC and C.

The relations in Tables 1.1, 1.2, and 1.3 make explicit the description of the nuclear power issue given in the previous section. Four changes are occurring: (1) Support relations among allies become more dense. The facility's opposition develops citizen groups and elicits support from well organized national groups. The proponents of the facility develop their own citizen groups and exclude the neutralized academic, local business, and local government organizations. (2) Opposition relations between allies of the separate factions become more dense³⁹. Citizen groups develop opposition relations to the NRC and other local citizen groups supporting the facility. (3) Because of the above changes, distances

³⁹ As corroboration of these tendencies for support and opposition relations to become denser as conflict escalates, Davis and Weinbaum (1969:43,99) find that the most intense interaction among participants in decision-making tends to occur in the final stages of decision-making.

TABLE 1.2

THE NUCLEAR POWER ISSUE NETWORK AT A STAGE OF CONFLICT WHEN OPPOSITION TO A FACILITY HAS MOBILIZED*

Participants in the Conflict	C	NRC	A	LBF	LGA	LCS	LCO	NGO
Company proposing the nuclear facility (C)	1	(1.7)	(2.8)	(2.2)	(2.2)	(2.4)	(2.4)	(3.0)
Nuclear Regulatory Commission (NRC)	0	1	(2.6)	(2.0)	(2.0)	(2.2)	(2.2)	(2.8)
Academia as technical experts (A)	1	1	0	(1.7)	(1.7)	(2.0)	(2.4)	(2.2)
Local Business Firms (LBF)	1	1	0	1	(0.0)	(2.2)	(2.2)	(2.8)
Local Government Agencies (LGA)	1	1	0	1	1	(2.2)	(2.2)	(2.8)
Local Citizens Supporting the facility (LCS)	0	0	0	0	0	0	(2.4)	(2.2)
Local Citizens Opposing the facility (LCO)	-1	0	1	1	1	0	1	(1.7)
National Groups Opposing the facility (NGO)	-1	-1	1	0	0	0	1	1

*Relations are taken from Eq. (1) and are given in and below the diagonal while distances are taken from Eq. (2) and given above the diagonal in parentheses.

TABLE 1.3

THE NUCLEAR POWER ISSUE NETWORK AT A STAGE OF CONFLICT WHEN SUPPORT FOR A FACILITY MOBILIZED*

Participants in the Conflict	C	NRC	A	LBF	LGA	LCS	LCO	NGO
Company proposing the nuclear facility (C)	1	(0.0)	(2.6)	(2.0)	(2.0)	(0.0)	(3.2)	(3.5)
Nuclear Regulatory Commission (NRC)	1	1	(2.6)	(2.0)	(2.0)	(0.0)	(3.2)	(3.5)
Academia as technical experts (A)	1	1	0	(1.7)	(1.7)	(2.6)	(3.0)	(2.6)
Local Business Firms (LBF)	1	1	0	1	(0.0)	(2.0)	(2.8)	(3.2)
Local Government Agencies (LGA)	1	1	0	1	1	(2.0)	(2.8)	(3.2)
Local Citizens Supporting the facility (LCS)	1	1	1	1	1	1	(3.2)	(3.5)
Local Citizens Opposing the facility (LCO)	-1	-1	1	1	1	-1	1	(1.4)
National Groups Opposing the facility (NGO)	-1	-1	1	0	0	-1	1	1

*Relations are taken from Eq. (1) and are given in and below the diagonal while distances are taken from Eq. (2) and given above the diagonal in parentheses.

among allies are decreased. The average distance between those supporting the facility is 1.6 in Table 1.1 and has decreased to zero in Table 1.3⁴⁰. The average distance between the facility's opponents (while not defined as the preissue stage of Table 1.1) decreases from 1.7 to 1.4 in the latter two tables. (4) Also because of the changes in relations in the issue network, distances between opponents increases. In Table 1.2, the average distance between the facility's supporters (NRC, C, and LCS) and its opponents (LCO, NGO) is 2.5 while in Table 1.3 the distance has increased to 3.4.

Although the separation of aspects of conflict escalation into the three separate tables is crude and the numerical illustration is less than precise, the tables serve to demonstrate the two basic social parameters in the form of conflict escalation; mobilization and polarization. Subsequent to a precipitating event, neutrals are "mobilized" into the conflict with internal coordinating relations among allies being developed by partisan leaders who emerge within the opposing factions, and opponents are "polarized" in the sense that opposition relations develop between actors allied to the separate factions. Those actors allied to both sides of the conflict are neutralized (academia, local business, and local government). This mobilization and polarization within the issue network serves to increase the distance between opponents and neutralized actors (thereby "removing" them from the conflict) as the distance among allies is decreased.

1.3.4 The Content of Conflict Escalation in the Nuclear Power Issue

Recalling that the content of conflict is the substance of the communications exchanged among participants in the conflict, the basic social parameter of the content of conflict escalation is generalization. While the content of the issue network can not be stated with precision even equal to that available for stating the form of the network, some overall developmental trends in generalization can be discerned from available evidence on conflicts.

⁴⁰ In the preissue stage (Table 1.1), the company (C), Nuclear Regulatory Commission (NRC), academia (A), local business firms (LBF), and local government agencies (LGA) and local citizens supporting the facility (LCS) can be viewed as supporters, but in the subsequent two tables representing the stages when an issue is explicit, academic and local corporate support is neutralized so that only C, NRC, and LCS remain as supporters (in practice if not intent).

Although a conflict can begin over very specific precipitating events as disagreements, they usually generalize to direct antagonism between opponents. The process shows the following progression. Given any initial disagreement between two actors, the occurrence of the disagreement weakens any existing relation between the opponents thereby inviting other, pre-existing, disagreements to be raised. Further, in their efforts to mobilize neutrals to their cause, opponents have an incentive to expand their original disagreement to new problems that are perhaps more salient to the neutrals they wish to recruit. These two processes, suggested by Coleman (1957:10), together insure that the specific questions over which opponents disagree will multiply.

As the number of questions at issue multiplies, however, the content of the disagreement between opponents generalizes. If for no other reason than simplicity, the many specific problems being debated are replaced with some generalized "type" of problem. Instead of disagreeing over the safety of the emergency core-cooling system, the hazards of thermal pollution, the low level radiation emitted by a reactor, etc., opponents are disagreeing over the utility of nuclear power in general. This is a crucial step. There has been a shift in the content of the communication between opponents and among allies from a disagreement over one or more specific problems to a disagreement over something that does not exist in its own right but rather is an abstraction serving to represent the specific problems. Abstractions themselves become complex and are replaced with still more general abstractions. Disagreement over the utility of nuclear power grows to disagreement over the environment and differences in life styles: business versus the backpacker; corporate power versus the people⁴¹.

Opponents at this point are no longer disagreeing over specific questions but rather they now disagree over abstract beliefs. These beliefs, outside the original dispute, are not easily subject to change. They certainly are not subject to negotiation. By impugning the validity of one another's beliefs, opponents (quite reasonably unwilling to change their beliefs) develop emotional dislike for one another. As put by Simmel (1908:39):

⁴¹The environmental conservation question now can be easily romanticized as a confrontation between the righteous and the foolish; both economic (e.g., (495)) and aesthetic (e.g., (637), (837)) interests claiming righteousness.

"...the parties' consciousness of being mere representatives of supra-individual claims, of fighting not for themselves but only for a cause, can give the conflict a radicalism and mercilessness which find their analogy in the general behavior of certain very selfless and very idealistically inclined persons. Because they have no consideration for themselves, they have none for others either; they are convinced that they are entitled to make anybody a victim of the idea for which they sacrifice themselves."

One's opponent is no longer someone like yourself who has come to a different interpretation of a given set of facts, he is instead some manner of heretic. The original dispute is now a direct antagonism. It is now that the radical elements in factions can rise as partisan leaders to replace moderate leaders. This is particularly so in the aftermath stage of conflict if conflict has escalated to the direct antagonism state before confrontation occurs.

Still worse, the antagonism between opponents is now self-sustaining. As an abstraction, the disagreement between opponents is less subject to negotiation than to normative role definition. Opponents come to define one another as "types" of individuals differing on "types" of issues. Conflict is now self-sustaining since the opposition relations that developed over the original disagreement now serve to define opponents for one another as stereotypical "types" of individuals. The conflict can not be resolved without redefining the opponents' perceptions of one another. Unfortunately, these opposition relations polarizing the two factions and the support relations among allies within each faction serve to protect stereotypical images of the other faction even where the stereotypes are in error⁴². The social aspects of conflict have taken over the original dispute. The content of the conflict--the substance of the disagreement between opponents--is now being determined by mobilization and polarization within the issue network. Quite generally, a conflict's form when taken to its extreme becomes its content.

The nuclear power issue is particularly prone to a generalization of the content of conflict. Although the preissue stage of conflict is characterized by economic and legal concerns that can be expressed in specific, concrete

⁴²The classic statements here are Sherif (1935) and Festinger et al. (1950). More recent support is given in (256), (378), (449), (475), (619), (660), (695), (705), (739), and (768).

terms, the social and health concerns of the opponents of a facility tend to be more vague. Recall that the stage in conflict after opposition mobilization is for a facility's supporters to activate social relations with equally abstract statements of progress, prosperity, etc. Inherent in the concerns of the opposition groups, in other words, is a higher level of ambiguity than that typifying the preissue stage of communication. This poses serious problems for resolving community conflict in the nuclear power issue since there tend not to be concrete questions over which supporters and opponents differ. Rather they differ over comparatively abstract questions; questions that easily lend themselves to generalization and accordingly to serious social conflict.

1.4 Summary

The purpose of this chapter has been to identify the basic social parameters in the nuclear power issue as a community conflict. I have presented a composite picture--quite frankly tentative--of how the conflict in the nuclear power issue escalates outside the public hearing and is a distinctly local phenomenon. The issue is discussed in terms of two types of parameters in community conflict; form versus content of an issue network. The basic social parameters in the form of conflict escalation are mobilization of support relations within the issue network by each faction and polarization between factions by creating opposition relations in the issue network. As a result of these processes, the distance among allies in each faction decreases with conflict escalation and the distance between the factions increases. The basic social parameters in the content of conflict escalation is the generalization or abstraction of the points of disagreement between opposing factions. Once past a certain point in escalation, these social parameters take over the conflict in the sense that the conflict has a self-sustaining life of its own quite apart from the original questions over which the issue began.

CHAPTER TWO

CONDITIONS AFFECTING COMMUNITY IN THE
NUCLEAR POWER ISSUE2.1 Introduction

In the previous chapter, I discussed community conflict in the nuclear power issue as a single process of mobilization, polarization and generalization within an issue network. One might now seek to resolve conflict over a proposed nuclear facility by applying methods commonly suggested to reverse these three processes. Such action, however, would be premature. A wealth of evidence is available demonstrating that conflict occurs differently in different communities depending on the characteristics and structure of each community. In some communities conflict can escalate rapidly to a major confrontation while in others it never develops beyond a preissue stage. The use of conflict resolution techniques can accordingly depend on understanding how conflict is likely to escalate in a given community with specific characteristics and structure. My purpose in this chapter is to identify community characteristics and aspects of community structure that significantly affect the escalation of conflict in the nuclear power issue. Figure 2.1 presents the causal framework within which the chapter is organized. Mobilization and polarization within the issue network result in the generalization of the content of conflict as discussed in the previous chapter while these parameters in the form of conflict escalation are determined by three components of community structure. These components in turn are determined by one another as well as by community characteristics. Since community structure is itself affected by community characteristics, structural determinants of conflict are considered first.

2.2 Community Structure

There is a well developed literature in sociology and political science on communities as stratified systems of interconnected actors. Individuals and organizations as "actors" are connected to one another by a multitude of different types of relations: friendships, professional associations, business contacts, influences, kinships, etc. These relations do not occur in some random fashion, but rather are ordered or patterned so as to define the "structure" within which the community's residents are stratified. As given in Figure 2.1, three commonly

FIGURE 2.2. A CAUSAL MODEL OF THE CONDITIONS AFFECTING COMMUNITY CONFLICT

distinguished components of community structure are the community's "social structure," "power structure" and "political structure." A community's social structure is the differentiation of individuals and groups in terms of the social, economic and deference relations connecting them. The usual measure of social structure in comparative analyses concern differentiation; e.g., the mixture of races or ethnicities in the community, the absence of community-wide voluntary associations, the lack of linkages among organizations in the community, etc.¹ A community's power structure is the differentiation of individuals and groups in terms of their relative ability to transform valuable resources into influence over others in the community. Powerful actors are those who can realize goals despite constraint from others in the community. The usual measures of power structure in comparative analyses concern the centralization of power in the hands of an "elite" set of individuals and groups; e.g., the concentration of the reputation for power in the hands of a few individuals or groups, the occupation of the most important positions in the community by the same few individuals, the prominence of the same few individuals

¹It is important here to distinguish how social structure is conceptualized and analyzed within a community as a system of actors from measuring social structure across separate communities. The latter involves serious compromises in order to capture the former. Burt (1977a, 1977b) provides a general conception of social structure in terms of patterns of relations as "role-sets" among actors occupying "statuses" within a community as a system. References to readings on specific features of social structure are given there. Since relations between individuals and groups tend to be patterned by the social and economic attributes of actors, relations tending to occur between individuals and groups with similar social and economic attributes (e.g., see Laumann, 1966, 1973, as well as the experimental work cited in footnote six on cooperation and liking resulting from perceived similarity between two persons), much of the comparative work on community social structure measures differentiation in terms of mixtures of social and economic attributes of citizens (e.g., Aiken, 1969; Walton, 1970; Turk, 1977). Since resources in a community are usually concentrated in corporations, much recent work has measured differentiation in a community's social structure in terms of the density of linkages among organizations in the community (e.g., Purrucci and Pilisuk, 1970; Turk, 1970, 1973b, 1977; Warren et al., 1974; as well as; (11), (12), (104), (152), (467), (498), (627), (763)), or the extent to which voluntary associations (such as political parties, League of Women Voters, religious groups, etc.) have a high and heterogeneous membership within the community (e.g., Clark, 1968b; Turk, 1973b, 1977).

or groups in all major decisions reached in the community². Finally a community's political structure, or formal decision-making structure, is the differentiation of individuals in terms of their legal authority to determine community decisions. The usual measure of political structure in comparative analyses concerns the centralization of authority in the hands of a few key positions shielded from citizen demands; e.g., the level of "reform government" in a community as indicated by nonpartisan elections, at-large rather than district representation in the city council, and a city manager rather than an elected mayor³. The higher the level of reform government, then the more isolated legal authority for decision-making is from the average citizen; decision-making being more administrative than political.

²As with social structure, it is important here to distinguish between the conception and analysis of power within a community as a system of actors from the measurement of power structures in multiple separate communities. Again, the latter involves serious compromises in order to capture the former. Burt (1977c) provides a general conception of power structure in terms of differential possession of resources being transformed into patterns of influence through patterns of social and economic exchange relations. References through patterns of social and economic structure are given there. Among the readings on specific features of power on research on community power structures are; (41), (43), (48), (149), (150), (151), (197), (293), (337), (340), (382), (623), (789), (801). Three basic approaches have been taken to date in measuring power structures in comparative community research; the reputational approach in which informants are asked to name those individuals and groups in a community who are perceived as powerful, the positional approach in which those individuals and groups occupying powerful positions are located (e.g., mayor, industrialists, councilmen on key committees, etc.), and the decisional approach in which the participation of individuals and groups in major community decision is analyzed. These approaches are reviewed and compared in Freeman (1968), Aiken and Mott (1970), and Grimes, et al. (1976). Further readings on these approaches is available in a literature aimed at a wide range of audiences (e.g., (1), (8), (9), (18), (47), (49), (84), (85), (87), (91), (95), (96), (147), (148), (150), (151), (153), (154), (155), (157), (159), (176), (190), (191), (202), (204), (221), (245), (269), (273), (301), (330), (341), (342), (343), (389), (396), (417), (432), (452), (455), (465), (467), (504), (586), (607), (696), (714), (715), (741), (779), (787), (788), (789), (790), (791), (793), (794), (802), (803), (804), (816), (817), (826), (827)).

³Schnore and Alford (1963) present the original outline of an argument equating centralization of political structure with level of reform government. This argument is elaborated and further substantiated in research linking political centralization to community action (see Lineberry and Fowler, 1967; Crain et al., 1969:157-165; Turk, 1977:103-132). Further reading on political structure and public participation is given in; (9), (35), (39), (50), (92), (127), (150), (151), (159), (190), (191), (199), (236), (270), (279), (301), (348), (353), (401), (409), (415), (416), (433), (440), (458), (470), (474), (487), (496), (509), (510), (556), (579), (582), (617), (622), (630), (632), (671), (675), (696), (701), (713), (741), (787), (788), (790), (791), (793), (819), (834), (835).

These three components are interdependent⁴. Centralization tends to occur simultaneously in the political and power structure of a community; reform cities tending to have a small number of powerful actors in the city. Centralization in the power or political structure tends not to occur with differentiation in the social structure; a small number of powerful actors being unlikely in a community with conflicting voluntary associations for expressing partisan citizen demands. The two basic social parameters for the form of conflict escalation are affected quite differently by community structure.

Depending to a large extent on Olson's (1965:5-52) theory of collective action, a premise in much of the work on mobilization is that existing social relations between individuals to be mobilized are necessary to offset the natural tendency for each individual to let others mobilize to provide him with whatever good is being sought⁵. In other words, individuals and groups will have a natural inertia against being mobilized. However, this inertia is overcome by existing social relations. An individual becomes involved in his friend's disputes. An organization becomes involved in its members' disputes. In a differentiated social structure (where groups of individuals are segregated by existing stratification), mobilization should be more difficult than would be the case in an undifferentiated structure (where individuals have social relations to most other individuals). In a centralized power or political structure (where the powerful are insulated from citizen demands), mobilization of citizens should be more difficult than would be the case in a decentralized structure (where the powerful are related to clear constituencies). Evidence

⁴The reading cited in the above three footnotes presents evidence to this point in varying degrees depending on the extent to which a particular work simultaneously considered the social, power and political structure of communities. Particularly noteworthy for their comprehensiveness are some original comparative analyses (some recent examples are, e.g.,; Grimes et al., 1976; Turk, 1977) and secondary analyses of previously published work (e.g., (9), (159), (301), (787), (788), (790), (791) although the latter suffer from reliability and sampling problems (see Nelson, 1974; Clark, 1975a).

⁵This premise is particularly well articulated in theories of mobilization by Oberschall (1973:102-145) and O'Brien (1975:7-42).

bears these ideas out in that mobilization tends to be less likely, comparatively speaking, in communities with differentiated social structure, centralized power structure, or centralized political structure⁶.

Just the opposite occurs when the polarization parameter is considered. While existing relations facilitate mobilization, they inhibit polarization. An individual is unlikely to support a nuclear facility if his long standing friends are opposed to it. In fact, this is the basis for neutralizing actors in the conflict. An individual who finds some of his friends in support and some in opposition to a proposed facility will simply keep out of the conflict. A group or organization that finds half its membership in support and half in opposition to a proposed facility will simply be neutral in the conflict. This can be stated in stronger terms. Not only does the existence of relations between potential opponents have a negative effect on polarization in conflict, the absence of such relations (or worse, the existence of long standing opposition relations) facilitates polarization⁷. Two factions that are strangers or

⁶This community structure corresponds to a "mass society" imagery as described by Kornhauser (1959). Coleman (1957):18-23) is an early review supporting the proposition that social relations among citizens in a community facilitates mobilization. More recent support is quite diverse: (11), (12), (17), (18), (20), (27), (48), (59), (76), (104), (112), (145), (169), (171), (191), (208), (252), (253), (266), (305), (311), (350), (452), (475), (486), (504), (541), (548), (549), (555), (645), (692), (695), (836), including a considerable body of experimental work demonstrating that the cooperation between individuals in a competitive situation is increased if the individuals perceive similarities between themselves in terms of race ((57), (79), (80), (334), (683)), ethnicity (723), and (724) although not found in (772), or similar past experiences (21), (55), (99), (196), (203), (226), (227), (329), (434), (500), (589), (739), (755), (825), and/or if the individuals are connected by existing social relations with one another (e.g., (57), (62), (100), (388), (513), (581), (721), (727), (784)). There is also a sex effect, however, it is irrelevant to the macro level of discussion here (see review by Rubin and Brown, 1975:169-174).

⁷In addition to the literature cited in footnote six that demonstrates the facilitating effect of existing social relations between individuals on the subsequent mobilization of those individuals for coordinated action, there is a closely related literature demonstrating that the absence of such relations and/or the existence of opposition relations (so that factions are polarized prior to the initiation of conflict) facilitates the further polarization of factions in a conflict. This literature consists of community and other macro level research (e.g., (4), (5), (22), (59), (66), (187), (219), (220), (258), (263), (294), (302), (350), (436), (514), (548), (608), (628), (692), (698), (702), (768), (818), (836) as well as experimental research; e.g., (16), (21), (63), (80), (189), (215), (229), (242), (289), (320), (322), (352), (406), (407), (439), (485), (500), (583), (619), (620), (625), (660), (661), (719), (724), (784)).

have been in opposition previously, in comparison to two long standing friends, are most likely to become polarized in a conflict that pits them against one another⁸. Note that this effect insures a feedback effect from polarization; the development of initial opposition relations between two factions in an issue network leads to yet more intense opposition relations⁹. Since differentiation in a community's social structure, centralization of its power structure, and centralization of its political structure entail the decrease in relations among citizens, it is not surprising to find that such communities, again speaking comparatively, tend to be more likely to be polarized in conflicts¹⁰.

2.3 Community Characteristics

While the structure of a community is amenable to description in case studies of single communities, the large volume of data required is difficult to obtain when many communities are being compared. In response to this problem, more easily obtained census data as community characteristics are used as indicators of features of the community structure they cause (cf. Figure 2.1) and in some instances have been used in place of structure information to classify communities into types¹¹. Community characteristics in a general sense focus on the concept of "urbanization" as reflected in population size, population density (citizens per square mile), population heterogeneity as the variability of types of citizens (mixtures of ethnicities, races, occupations, level of

⁸ A caveat here is that the most intense polarization occurs between erst-while friends who feel that one has betrayed the other. This caveat, long recognized in metaphorical sociology (e.g., Simmel, 1904; 1908; Coser, 1956), is also found in recent experimental work (e.g., Swingle, 1966; Swingle and Gillis, 1968).

⁹ This point is emphasized in Coleman's (1957:13-14) and Azar's (1972) treatment of conflict escalation. Some experimental evidence is available to suggest that the passage of time itself during a discussion could account for this escalation in polarization ((518), (519), (520), (740)).

¹⁰ The most relevant evidence supporting this point in addition to the literature cited in footnote seven is on the determinants of conflict over water fluoridation (see Crain, et al., 1969:157-228); Turk, 1977:113-122; as well as; ((181), (279), (295), (567), (579), (606), (617), (799)).

¹¹ This work is reviewed and critiqued in Bonjean et al. (1969), Hadden and Borgatta (1965), and Berry (1972).

education, levels of income, etc.), and the age of the community as a measure of the length of time a community has had to become urban as well as the probable scope of functions the community government administers. These four community characteristics tend to occur together (older cities tending to be large, dense and heterogeneous) and together define what it means for a community to be urban following Wirth's (1938) classic journalistic account¹².

All four characteristics cause differentiation in a community's social structure. With population growth, citizens are separated from one another in the sense that not all individuals have relations with all other individuals. Fischer (1975) reviews literature demonstrating that population density leads to the development of separate subcultures in a community¹³. Given the fact that social relations tend to occur among socially similar individuals, measures of heterogeneity such as percent foreign born, percent nonwhite, variation in annual incomes, or economic diversification can be used as direct (although partial) measures of differentiation in a community's social structure¹⁴. Since these three characteristics increase over time, older communities are more differentiated than recently incorporated communities.

The four characteristics have just the opposite effect on the centralization of a community's power and political structure. More urbanized communities tend to have decentralized power and political structures. With the growth of the federal government, recently incorporated community governments have to serve fewer services to their citizens than did older communities. In comparison to new communities, old communities will have multiple city bureaucracies performing a wide range of citizen services and thereby constituting multiple centers of power and decision-making¹⁵. With increasing size, density and

¹²In addition to the work cited in footnote eleven, see the studies linking the social, power and political structure that are cited in footnote four.

¹³The creation of these subcultures means that urbanization leads to dense social relations within and individual identification neighborhoods within a community (see Kasarda and Bidwell, 1974; Hunter, 1975).

¹⁴This literature is given in footnote one.

¹⁵This argument is well articulated by Liebert (1974a, 1974b, 1976). Also see Clark's (1974c) comments on the extension of the argument to understanding municipal expenditures.

heterogeneity, subcultures will develop within a community thereby creating political constituencies each with their unique partisan demands on the community power and decision-making structure so that centralization is unlikely¹⁶.

Figure 2.2 summarizes the causal influences that have been discussed up to this point. Community age, population size, population density, and population heterogeneity together result in urbanization. Urbanization leads to increasing differentiation in the community's social structure while preventing centralization in the community's power and political structure. Mobilization in community conflict is decreasingly likely with centralization in the community's power and political structure and differentiation of the social structure. In contrast, polarization is increasingly likely under these same conditions.

Figure 2.2 makes clear the two manners in which community characteristics affect community conflict¹⁷. Urbanization works to increase differentiation in a community's social structure which in turn decreases the likelihood of

¹⁶ Support for this statement is given in the literature cited in footnotes four and eleven analyzing the correlations between community characteristics and community structure. With special reference to social structure, Kasarda and Bidwell (1974), Fischer (1975) and Hunter (1975) offer compelling arguments substantiating the hypothesis that urbanization entails social differentiation and by so doing creates cohesive "neighborhoods" or "subcultures."

¹⁷ Ostensibly, an argument can be made for a third manner in which community characteristics affect community decision-making. With increasing percentages of particular ethnicities in a community one could expect community decision-making to be in accord with the "values" of the dominant ethnicity. For example, Wilson and Banfield (1964, 1971) demonstrate that districts with predominantly Anglo-Saxon and to some extent Jewish residents tend to vote favorably for community-wide programs and to vote negatively for special interest programs when compared to districts with predominantly Negro, Irish, or Polish residents (for further work on this "ethnics theory" see; e.g., (31), (50), (153), (237), (244), (503), (631), (783)). Clark (1975b) demonstrates that those communities with high percentages of Irish residents have consistently higher percapita expenditures for municipal services than do communities with few Irish residents. These findings could be taken as support for a Downsean (1957) model in that a community or district characterized by modal "type" of citizen preference will community policies in accord with the preferences of this "type" no matter what political party is in power. Both Clark and the later article by Wilson and Banfield, however, demonstrate that these ethnic community characteristics operate by patterning the form of community government. This is the causal pattern given in Figure 2.1, however, the ethnicity arguments do emphasize the importance not only of the form of community structure but also the content; i.e., who occupies the dominant positions in the structure. This point is significant for the nuclear power issue and is raised in Section 2.4.

FIGURE 2.1. DETERMINANTS OF COMMUNITY CONFLICT

mobilization for conflict and increases the likelihood of polarization in conflict. At the same time, however, urbanization works to prevent centralization in a community's power and political structure both of which in turn decreases the likelihood of mobilization and increase the likelihood of polarization. In short, community characteristics of urbanization serve both to increase and to decrease the escalation of community conflict! The actual associations between the four community characteristics and conflict escalation in a particular issue will depend on the relative importance of the two manners in which urbanization affects mobilization and polarization. In the community conflicts over water fluoridation, for example, centralization of a community's political structure as reflected in a reform government was the most significant predictor of conflict over fluoridation and accordingly a rejection of water fluoridation by the community. Since urbanization prevents the centralization of a community's political structure, it is not surprising to find that size, density, heterogeneity and age are all negatively associated with community conflict over water fluoridation¹⁸. In contrast, the severity of rioting during the 1960's in particular communities is predicted by the degree of polarization of racial groups as indicated by segregation and relative deprivation. These conditions being features of differentiation in community social structure and increasing with community urbanization, it is not surprising to find that size, density, heterogeneity and age are all positively associated with severity of race riots¹⁹.

¹⁸ See the literature cited in footnote ten on the fluoridation controversy.

¹⁹ Support for this statement is given in Downes (1968, 1970) and Morgan and Clark (1973), however, community characteristics only predict the rioting in particular communities. Spilerman (1976) presents evidence supporting the hypothesis that rioting is a dynamic process in the sense that past rioting in a community and national events make deprivation prominent and accordingly lead to intense rioting. The concern here is merely with the association between urbanism and rioting rather than the relative magnitude of causal influence. Closely related to this point is the general question of mobilizing political participation among citizens. As an indication of mobilization, the percentage of eligible voters who actually turnout to vote and/or campaign tends to be a function of the lack of social differentiation in a community. Since urbanization entails increasing differentiation it is not surprising to find definitive support for a "decline-in-community" hypothesis; lower participation with higher urbanization (cf. Verba and Nie, 1972:229-247). Bonjean and Lineberry (1970) provide evidence that urbanization does not lead to higher voter turnout for the winning party and Black (1974) shows that more intense political campaigning is required to mobilize support in large communities in comparison to small communities. A contradiction here is the positive association between the age of a community and the voter turnout (e.g., Alford and Lee, 1968; Liebert, 1976: 113-24). A review of political participation determinants is given in Alford and Friedland, 1975).

2.4 The Nuclear Power Issue

The description of community conflict in the previous chapter allows the above propositions to be more explicitly stated for the nuclear power issue. While the absence of systematic comparative research imposes a severe constraint on what can be stated with certainty, some ostensibly reliable inferences can be made now. A first step is to link the nuclear power issue with other issues that have been extensively studied. Particularly similar to the nuclear power issue is the now well researched conflict over water fluoridation. In both the nuclear power issue and the water fluoridation issue the public is concerned about possible dangers of a technical question it does not understand. Academia is in both cases neutralized in the sense that while most technical expert opinion supports both nuclear power and water fluoridation, eminently qualified expert opinion can also be found to oppose both owing to the possible dangers each entails. Local government agencies tend to be in favor of both water fluoridation and nuclear power; health and welfare agencies for the former, zoning and commerce agencies for the latter. While initial support for water fluoridation is solicited on the grounds of specific economic (it is inexpensive), health (it decreases tooth cavities in children) and legal (it involves the legality of forcing a water additive on all citizens in a community) questions and initial support for a nuclear facility is solicited on the grounds of economic (it will provide inexpensive power and will increase the local tax base) and legal (it must meet safety and environmental standards) questions, opposition against both is mobilized on a social basis using more abstract concerns over health and possible dangers (water fluoridation being imposed on everyone and potentially causing birth defects in children; nuclear power potentially exposing residents to radiation). The major differences between the issues seem to be the considerable differences in the potential danger of the two and the more explicit economic interests of supporters in the nuclear power issue. While the former difference should only make the nuclear power issue more prone to conflict escalation, the latter difference should make the social and power structure of a community more important in the nuclear power issue than in the water fluoridation issue.

Consider first the probable polarization in conflict occurring in communities with centralized political structures. Recall that citizens opposed to a facility obtain support most often from elected local officials while a facility's supporters obtain support from local government agencies. Centralization in the political

structure is characterized by reformist features that isolate legal decision-making from citizen demands so as to make a city more similar to an administrative bureaucracy than an arena for political contest. Therefore, local governments will be most favorable to establishing a nuclear facility in the preissue stage when the community political structure is centralized. Unfortunately, it is in precisely these communities that the most extreme polarization will occur in the nuclear power issue. As in the fluoridation issue, it is to be expected that the most intense conflict over nuclear power will occur in communities with centralized political structures (i.e., reformist governments) and accordingly in nonurban communities (as reflected in low population size, low population density, low population heterogeneity, and municipal youth).

In combination with the form of a community's social and power structure, the distribution of the community's economic and social elite through the structure are important determinants of conflict in the nuclear power issue. Recall that support for a facility is based predominantly on economic interests. Opposition based on environmental concerns is in contrast likely to stem from social elites as the highly educated, politically liberal citizens. Where in the structure of a community does one observe the community's industrialists, bankers, business managers, etc.? Where in the structure does one observe the community's social notables; doctors, professors, prestigious old families, etc.? If the social elites are dominant in a centralized power structure, then one could expect vocal opposition to a nuclear facility even in the preissue stage. If the economic elite are dominant in a centralized power structure, then one could expect vocal support for a nuclear facility since economic interests would be prominent in the community. Power is a tenuous quality, however, and the more concentrated the economic elite are in a few sectors of the community (either in a central position, a peripheral position, or simply differentiated apart from the rest of the community), then the fewer social relations there will be between the economic elites and others in the community; particularly the social elites. When the economic elites are segregated in this manner--as is to be expected with increasing urbanization--polarization will be most extreme over a proposed nuclear facility since there are no existing social relations between the facility's probable supporters and opponents. Further, the mobilization of opposition to a facility is simplified since the economic elites supporting the facility can be treated as a common enemy to the individuals and groups

that social activists are trying to mobilize²⁰. Therefore, local citizen support for a proposed nuclear facility will be most vocal in the preissue stage when the economic elite dominate their community's power structure, however, to the extent that the economic elite are segregated from most citizens in the community--particularly the social elite--there will be extreme mobilization and polarization in the nuclear power issue. Since urbanization tends to separate the economic elite from the average citizen, the most intense conflict in the nuclear power issue should occur in relatively urban communities. This appears at first glance to contradict the earlier proposition that urbanization decreases the potential for conflict. In fact, it does not. Urbanization decreases the potential for conflict in a community only by decreasing the likelihood of centralized authority in the community. Accordingly, where such a political structure is absent, urbanization will increase a community's potential for conflict by increasing the likelihood of segregated--and therefore easily polarized--economic and social "neighborhoods" within a community.

Note that this discussion presents a counter-intuitive observation relevant to locating nuclear facilities. Where citizen opposition is vocal in a preissue stage (social elite are dominant), licensing problems can be anticipated as would be expected. This might lead to siting in communities where local citizen and government support for a nuclear facility is enthusiastic in the preissue stage. Such enthusiastic support, however, is most likely in communities where the economic elite are dominant and/or the political structure is centralized. It is in just such communities that one can expect the most extreme conflict escalation and consequent drawn-out licensing problems.

Under the assumption that conflict in the nuclear power issue will occur whenever it can occur, the above discussion indicates that the least intense conflict over a nuclear facility will occur in small, sparsely populated,

²⁰ The ease of mobilizing support against a mutual enemy is a key point discussed in research on coalition formation (see Stein's, 1976) review as well as: (209), (352), (492), (599), (610), (836)). Related to this point is the demonstration that coalitions tend to form among weak individuals against a powerful individual (e.g., (129), (140), (165), (167), (403), (429), (595), (777), (780)) although the effect may weaken in groups larger than three (see (678)).

homogeneous (in the sense of there being no clear economic or social elite groups), young communities with decentralized political structure (in the sense of having a nonreform government).

2.5 The Issue Network Implicit in Community Structure

Different communities clearly have different potential for becoming embroiled in conflict over a nuclear facility. One can imagine a continuum ranging at one end with communities which have a high potential for conflict in the nuclear power issue to the other end with communities which have a low potential for such conflict. The above discussion has reviewed research on community conflict and decision-making so as to locate communities on this continuum in terms of their social, power and political structure and indirectly in terms of their urbanization characteristics. In fact, the above discussion has indirectly located communities on a continuum of conflict potential in terms of the extent to which existing community structure resembles the polarized issue network given in Table 1.3.

Table 2.1 makes this assertion more explicit by comparing the issue networks implicit in communities which have a high versus a low potential for conflict in the nuclear power issue. A community with high potential for such conflict has a centralized political structure so local government agencies are isolated from other residents of a community. Note in the bottom half of Table 2.1, LGA have null relations with local business firms (LBF) and local citizens (LCS, LCO). Further, a community with high conflict has a differentiated social structure that segregates economic elites and social elites; the former tending to support a nuclear facility and the latter tending to oppose it. Note in the bottom half of Table 2.1, local citizens supporting a facility (the economic elite, LCS) are both internally organized and supportive of local business firms (LBF). Local citizens opposing the facility (the social elite, LCO) are both internally organized and have null relations to all other sectors of the community. When a community proposes a nuclear facility in this community, support relations will occur between the company (C) and some local citizens, local business firms, and local government while an opposition relation will occur with some other local citizens. A community with low potential for conflict in the nuclear power issue has a different structure as is given in the upper half of Table 2.1. Support relations exist among all groups in the community or at least there are no clear

TABLE 2.1
THE ISSUE NETWORK IMPLICIT IN COMMUNITY STRUCTURE*

FOR A COMMUNITY WITH LOW CONFLICT POTENTIAL [†]					
Local Participants in the Conflict	C	LBF	LGA	LCS	LCO
Company Proposing Facility	1	(1.4)	(1.4)	(1.4)	(2.0)
Local Business Firms	1	1	(0.0)	(0.0)	(1.4)
Local Government Agencies	1	1	1	(0.0)	(1.4)
Local Citizens in Support	1	1	1	1	(1.4)
Local Citizens in Opposition	-1	1	1	1	1
FOR A COMMUNITY WITH HIGH CONFLICT POTENTIAL [‡]					
Local Participants in the Conflict	C	LBF	LGA	LCS	LCO
Company Proposing Facility	1	(1.4)	(1.7)	(1.4)	(2.6)
Local Business Firms	1	1	(1.7)	(0.0)	(2.2)
Local Government Agencies	1	0	1	(1.7)	(2.0)
Local Citizens in Support	1	1	0	1	(2.2)
Local Citizens in Opposition	-1	0	0	0	1

*These tables are presented in the same format as Tables 1.1, 1.2, and 1.3 with distances above the diagonal as computed from relations using Eq. (2) and relations on and below the diagonal as given in Eq. (1).

[†]This is a young, small, sparsely populated community that is homogeneous (in the sense of having no clear economic or social elite groups) with a decentralized political structure (in the sense of having a non-reform government).

[‡]This is an old, large, densely populated community that is heterogeneous (in the sense of having clearly segregated economic and social elite groups) with a centralized political structure (in the sense of having a reform government).

cleavages between the four groups. Again support relations exist between the company proposing a facility and local citizens, local business and local government, while an opposition relation occurs between the company and some other local citizens.

The lower half of Table 2.1 is more similar to the polarized issue network in Table 1.3 than is the upper half of Table 2.1. In other words, the structure of a community with a high potential for conflict in the nuclear power issue is more similar to a polarized issue network in such conflict than is the structure of a community with low potential for conflict in the nuclear power issue. In a high conflict potential community, there are null relations between the probable combatants in the nuclear issue. When a nuclear facility is proposed, the community is quickly split into factions. In a community with low conflict potential, on the other hand, the existing support relations between probable combatants lessens the extent to which factions are cut off from each other. Note that the distance between local citizens opposing a facility and the company proposing it (C versus LCO) is 2.0 in the low conflict potential community while it is 2.6 in the high conflict potential community. Further, note that the average distance between the local citizens opposing the facility and the three groups likely to initially support the facility (LCO versus LBF, LGA, LCS) is 1.4 in the low conflict potential community while it is 2.1 in the high conflict potential community.

In short, communities prone to conflict escalation in the nuclear power issue are those in which an already polarized issue network is implicit in the structure of the community.

2.6. Summary

The purpose of this chapter has been to identify community characteristics and features of community structure that determine the three social parameters of conflict escalation. Since the generalization of content is determined by the mobilization and polarization of form within an issue network, this chapter focuses on the determinants of changes in form as conflict escalates. Within community structure three components are distinguished; social, power and political. Social structure has been studied in terms of differentiation while the power and political structure of communities has been studied in terms of

centralization. Community characteristics defining the urbanization of a community were given as population size, population density, population heterogeneity, and the age of the community. These characteristics serve to increase differentiation in the social structure and prevent centralization of the power and political structure. Intense conflict is most likely when the social structure is differentiated and the power and political structure is centralized. In the case of the nuclear power issue, these general propositions were used to conclude that the least intense conflict over siting a nuclear facility would occur in communities expressing neither intense support or opposition to the facility in the preissue stage where the community was small, sparsely populated, homogeneous (in the sense of there being no clear economic or social elite groups), young, and having a decentralized political structure (in the sense of having a nonreform government). The potential for conflict in a particular community is a function of the extent to which there is a polarized issue network implicit in the community's structure.

CHAPTER THREE

RESOLVING COMMUNITY CONFLICT IN THE NUCLEAR POWER ISSUE

3.1 Introduction

Given an understanding (within the limits of available research) of the stages, determinants and social parameters of community conflict escalation in the nuclear power issue, attention can be turned realistically to the problem of resolving such conflict. The purpose of this chapter is to outline and critique available conflict resolution techniques as they are relevant to the nuclear power issue. My position here is strictly one of an observer. In contrast to work on conflict which suggests optimum strategy for one party or the other toward the goal of "winning", I am concerned here only with having the parties in conflict reach some agreement equitable to both under the circumstances and preventing the conflict from escalating out of control by either party¹.

3.2 Limitations of Available Research

As I emphasized in the Preface, and as deserves reemphasis now, there is virtually no research comparing the relative efficacy of alternative community conflict resolution techniques. A variety of good reasons for this gap in available research can be advanced if one considers the amorphous nature of the participants, relations, and conditions involved in community conflict, however, these reasons are quite beside the point. What can be said based on available research? Some statements can be advanced based on the available research in other contexts², however, it should be emphasized that this chapter is working

¹The classic statements of strategy are Schelling (1960) and Boulding (1962). Rapoport (in (260)) provides a penetrating critique of this game theoretic approach to conflict when it is applied to conflict in the real world. A comprehensive review of psychological approaches to conflict resolution is contained in Rubin and Brown (1975). Fink (1968) and Deutsch (1973) seek to codify general propositions in the psychological tradition. Commentary review is given in Converse (1968) and a recent special issue of the JOURNAL OF SOCIAL ISSUES (Bonoma and Milburn, 1977). Swingle (1970) and Brickman (1974) are collections of some of the more central studies of conflict and its regulation. Ikle (1974), Burton (1969), Walton (1969) and Schwarz (1970) provide in depth discussion of conflict resolution in actual conflict situations.

²Even such guesses, however, are better than blind faith in resolving conflict as evidenced by their successful application in resolving a long standing environmental conflict over siting a dam in a wilderness area of Washington (see Webster, 1975a, 1975b).

in an area uncharter by articles in well established professional journals and its inferences are accordingly tentative. Available research on conflict resolution techniques has focused on relatively simple contexts; some in the real world, others in the laboratory.

In the real world, there are numerous works on negotiations between corporate groups; either between nations or between nations or between labor unions and business firms. While these works have the advantage of studying actual conflict among responsible adults, they have the disadvantage--at least in reference to community conflict--of studying clearly defined parties to a conflict. In contrast to negotiations between corporate groups, community conflict tends to involve unincorporated social groups whose membership need not unanimously agree to the terms of some agreement. In the nuclear power issue in particular, the public hearing context makes it possible for a small splinter group of extremists to hold up the licensing process even if all other parties to the conflict over a particular facility have agreed to some prior settlement. This point is discussed in detail below under the question of mobilization in the issue network.

In the laboratory, there is an extensive literature on negotiations between individuals--usually students ranging from kindergarten up through college. This is the source of evidence that is most extensively developed on conflict resolution and the one on which I must rely most heavily. Typical of this line of research is the prisoner's dilemma game in which two parties, A and B, each of whom is instructed to obtain a maximum number of "points", are placed in the laboratory such that they can not communicate. Each party has a choice between two options; one termed a cooperative choice, the other termed a competitive choice. The different choices entail different rewards in terms of "points" earned and are illustrated in Table 3.1. If both A and B take the cooperative move, then they both earn a low number of points. If one takes the cooperative move while the other takes the competitive move, then the one taking the competitive move earns a high number of points while the other loses a high number of points. If both take the competitive move, then they both lose a low number of points. A variety of modifications on the prisoner's dilemma game and a variety of games intended to capture the mixed motive of bargaining (i.e., the mixture of a motive to cooperative and a motive to compete) have been used in laboratory research, however an understanding of the prisoner's dilemma game is sufficient to illustrate the

essential aspects of laboratory research relevant to the purposes here³. Bargaining effectiveness in this research can now be measured in two manners; the extent to which the parties tend to make cooperative rather than competitive moves and the total number of points obtained by the two parties.

3.3 Basic Parameters of Conflict Resolution

Just as there are basic social parameters in the escalation of conflict, so there are parameters in its deescalation or resolution. In Chapter 1, I described the processes of mobilization, polarization and generalization within the issue network depicting a community conflict. I now want to describe techniques for containing and/or reversing these parameters. What the discussion here will demonstrate is that conflict techniques to the nuclear power issue are intended to reverse the social parameters of conflict escalation and compensate for deficiencies in a community structure so as to transform a community high in potential for conflict into a community with low conflict potential. Since the generalization of the content of conflict is determined by mobilization and polarization in the issue network as the form of conflict (see Figure 2.1), I shall begin the discussion at the end of the causal process with the content of conflict.

3.4 Addressing the Generalization of the Content of Conflict

Assume for the time being that there is an opposition relation between the parties in conflict. Chapter 1 described the process by which the content of conflict--the substance of the questions being debated between the parties--generalizes as conflict escalates. Initial differences over specific questions first multiply into differences over an increasing number of questions and secondly the questions themselves become more abstract. The generalization of the content of conflict thus involves changes in the complexity and multiplicity of the questions being debated. These two dimensions are presented in Table 3.2 as defining a fourfold table. Cell A of the table refers to bargaining situations where the content of conflict consists of a few concrete questions. Cell B of the table refers to a bargaining situation where conflict is over many concrete questions.

³See Rubin and Brown (1975:19-32) for more detailed discussion of the basic games used in psychology to study conflict in an experimental setting.

TABLE 3.1

REWARD MATRIX FOR A GAME OF PRISONER'S DILEMMA

Player B	Player A	
	Cooperative Move	Competitive Move
Cooperative Move	A and B each earn a low number of points	A earns a high number of points and B loses a high number of points
Competitive Move	B earns a high number of points and A loses a high number of points	A and B each lose a low number of points

Cell C refers to bargaining situations where conflict is over a small number of abstract questions. Cell D refers to bargaining situations where conflict is over many abstract questions. These four ideal types of content are differentially amenable to bargaining effectiveness. The most effective bargaining occurs when the content of conflict consists of a few concrete questions. This is cell A of Table 3.2. The generalization of the content of conflict consists of moving out of cell A and accordingly lowers the bargaining effectiveness for participants in the conflict. The differences in relative bargaining effectiveness under the four ideal typical contents in Table 3.2 can be attributed to two causes.

First, being able to debate more than a single question at a time gives opponents greater flexibility in exchanging concessions on particular points. One gives up some combination of demands in exchange for the other giving up some combination of demands. Both Ikle (1964:218-224) in his discussion of "package deals" and "tie-ins" and Fisher (1964:91-109) in his discussion of "fractionating" conflict emphasize the improved bargaining effectiveness of nations when they have multiple separate disagreements that can be juggled simultaneously in negotiations. Similarly, Froman and Cohen (1970) found greater bargaining effectiveness resulted when individuals were allowed to exchange concessions on multiple issues being simultaneously resolved than when issues had to be resolved one at a time. In analyzing bargaining behavior of students in a university class, Kelley (1966) found that there was a decided preference among participants to be able to negotiate the full set of their differences simultaneously rather than one at a time. In a related vein, Pilisuk et al. (1965, 1967) found that cooperative moves were significantly increased when the number of alternative choices in the prisoner's dilemma game was increased from two to twenty-one⁴.

A second reason for the differences in bargaining effectiveness under the four ideal typical contents in Table 3.2 stems from the extent to which the questions being debated are clearly understood by both parties. While there appears to be no association between measured I.Q. and bargaining behavior⁵, there is a

⁴In contrast to the Pilisuk et al. findings, Dolbear et al. (1969) increased choices from two to thirty in the prisoner's dilemma game and failed to find a significant change in cooperative moves.

⁵For example, see Fry (1965), Berkowitz (1968) and Wallace and Rothaus (1969).

TABLE 3.2
 IDEAL TYPICAL CONTENTS OF CONFLICT
 AND THEIR EXPECTED LEVELS OF BARGAINING EFFECTIVENESS*

Abstraction of Questions Being Negotiated	<u>Number of Questions Being Negotiated</u>	
	Low	High
Low	A (highest)	B (low)
High	C (low)	D (lowest)

*The generalization of the content in an issue network as described in Chapter 1 involves movement from cell A to cell D of the table.

significant tendency for cognitively noncomplex, dogmatic, individuals to be aggressively competitive in bargaining⁶. Assuming that this finding is due to the increased difficulty such individuals might have in empathizing with the opponent, it would be expected that as the content of conflict becomes abstract and accordingly difficult to understand, the tendency to compete rather than cooperative will increase. This appears to be the case. Ikle (1964:7-16) emphasizes that more lasting agreements between nations are likely if agreements are stated unambiguously. When the prisoner's dilemma game is presented in a complicated abstract form rather than a simplified concrete form, there are significantly more competitive moves between opponents (see Evans and Crumbaugh, 1966; Crumbaugh and Evans, 1967; Orwant and Orwant, 1970). In an innovative approach to linking trust and communication complexity, Suedfeld and Rank (1976) content analyzed archival records on communications from nineteen revolutionary leaders in order to test the hypothesis that leaders wishing to retain their positions of power after a successful revolution would need to replace the prerevolution abstract ideology with a postrevolution concrete, multifaceted view. The eight leaders who lost their positions failed to make the correct decrease in the abstraction of their communication while the eleven leaders who retained their positions did make their postrevolution communication more concrete.

This is not to say that an increasing number of concrete as opposed to abstract questions as the content of conflict always results in increased bargaining effectiveness. This would be a move from cell C to cell B in Table 3.2. Suedfeld and Tetlock (1977) found that international crises resulting in war rather than peaceful settlements were characterized by communications with many fine distinctions rather than global abstractions. They argue that maintaining a large number of fine distinctions in communications between opponents leads to an information overload in decision-making that can easily result in war. This argument is the same one used to explain the lower bargaining effectiveness associated with abstract content. Namely, when communication is poorly understood, competitive moves are more likely than cooperative moves. Abstracting a debate is one method of ensuring poor understanding. Yet a third method of ensuring poor understanding is to present multiple, concrete questions being debated via an inappropriate communication

⁶This point has been demonstrated using measures of machiavellianism (e.g., (737), (772)), authoritarianism (e.g., (67), (75), (275), (408), (689), (832)), cognitive complexity (e.g., (573), (584)), and tolerance for ambiguity (e.g., (226), (576), (737)).

channel. Chaiken and Eagly (1976) demonstrate that individuals have a difficult time understanding a complicated message when it is presented by videotape rather than in written form. It is not surprising, therefore, to observe that those individuals who obtained their information from a newspaper regarding an exchange of gunfire between police and a meeting of black separatists--an event fraught with important details of timing and participation such as who shot first and why--tended to be less likely to see the races as polarized by the event than did individuals who obtained their information from television (Warren, 1972).

Consider Table 3.2 in regard to the nuclear power issue as outlined in Chapter 1. The opponents of a nuclear facility are concerned about relatively abstract safety and environmental issues. They therefore have a natural tendency to communicate in terms of the content in cell C; a few abstract questions. The supporters of a nuclear facility are concerned about relatively concrete economic and legal issues. These issues, when explained in their full technical detail, can be highly complex in the sense of many fine distinctions being considered simultaneously. They therefore have a natural tendency to communicate in terms of the content of cell B; many concrete questions. In short (and as was argued in Chapter 1, but on different grounds), the natural content of communication between opponents in the nuclear power issue will tend to create competitive rather than cooperative relations between the supporters and opponents of a nuclear facility.

In order to transform this natural tendency to one of cooperation between the factions, communication will have to be deliberately translated from cells B and C of Table 3.2 into cell A. In other words, points being debated should be concrete questions rather than abstract principles. This means that the abstract safety and environmental concerns of a facility's opponents should be distilled into more tangible points. Secondly, more than one--but not too many--concrete questions should be considered simultaneously. This means that the myriad economic and legal concerns of a facility's supporters should be codified into a few concrete points. While not bearing directly on the question of how many questions should be considered simultaneously, research demonstrating an upper limit of five to seven pieces of information at a time for the average human mind suggests that a tentative range of between three to five separate questions being considered simultaneously would be optimum for bargaining effectiveness.

3.5 Addressing the Mobilization of Faction Support as the Form of Conflict

For the moment, continue with the assumption that there is an opposition relation between the factions in conflict. Chapter 1 described the process by which the form of conflict--the patterning of relations among the participants in the conflict--changes through mobilization. Each faction in the conflict seeks to recruit neutral actors to their own side and develop coordinating support relations among the actors within the faction. As discussed in Chapter 1, this process of mobilization facilitates the generalization of content so that faction ideology and stereotypical images of the opposition develop (see text and notes on pages 22-24.) Coordinating support relations within a faction provide a social environment of like-minded individuals able to protect one another from external influences that might create beliefs that deviate from the faction ideology. The development of internal coordinating support relations within a faction and the simultaneous development of group pressure to conform to faction ideology are two dimensions of mobilization that are presented in Table 3.3 as defining fourfold table. Cell A of the table refers to bargaining situations where there is both low group pressure to conform to a faction ideology and low coordination within a faction. Cell D is the exact opposite situation; high group pressure and high coordination. Cell B refers to bargaining situations where there is high coordination within a faction but low group pressure to support faction ideology. Cell C is the exact opposite situation; low internal coordination and high group pressure. As indicated in Table 3.3, these four ideal typical situations are differentially amenable to bargaining effectiveness. The process of mobilization involves movement from cell A to cell D of the table, however, the most effective bargaining occurs in cell B of the table and the least effective occurs in cell C. In contrast to the generalization of content, a process largely detrimental to conflict resolution, the mobilization of faction support within the issue network serves both to facilitate and inhibit conflict resolution.

The development of coordinating support relations among actors in each faction facilitates conflict resolution by making it possible for representatives to negotiate for factions. Without such coordinating relations, negotiation would have to involve all individuals and groups participating in a conflict. As the number of participants in negotiation increases, the probability of them agreeing

TABLE 3.3

IDEAL TYPICAL FORMS OF CONFLICT

AND THEIR EXPECTED LEVELS OF BARGAINING EFFECTIVENESS:

MOBILIZATION*

Group Pressure to Conform to Factional Ideology	Coordinating Support Relations Within Opposing Factions	
	Low	High
Low	A (low)	B (highest)
High	C (lowest)	D (moderate)

*Mobilization in the issue network as described in Chapter 1 involves movement from cell A to cell D of the table.

on any one question decreases exponentially⁷. For example, Marwell and Schmitt (1972) found that cooperative moves were significantly more difficult for three players to establish in the prisoner's dilemma game than for two players. The absence of coordinating relations among the opponents to a nuclear power facility are particularly problematic for the facility's supporters. Since any affected citizen can petition to intervene in public hearings on a facility's licensing, the absence of coordinating relations among the facility's opponents means that even if supporters reach some agreement with opponents prior to a hearing, licensing can still be delayed by some other opponents who do not feel bound by the agreement. After its defeat at the hands of citizen opposition groups over the Bodega Head nuclear power plant, for example, Pacific Gas and Electric negotiated with the Sierra Club over the proposed site of the next plant. A compromise was reached in which the utility agreed to build on a site other than their first choice since their first choice was a beautiful coastal area the Sierra Club wished to preserve. In exchange, the Sierra Club agreed not to intervene against the utility's plans to build a nuclear facility on an alternative location. The utility went on to gain the support of a number of other conservation groups and state agencies for the alternative location by negotiating with each group and agency separately. Despite the agreement, however, there were some who did not feel bound by the earlier negotiations. A citizen opposition group was formed to intervene in the public hearings and another licensing fight began⁸.

While this strategy appears useful in the nuclear power issue, it need not be useful equally in resolving all conflicts. In particular, where formal negotiations are held between coordinated factions and binding contracts are the end product of negotiation, it is in the interest of one faction to prevent the

⁷ Take even the extremely simplified situation where participants in negotiations are neutral on some issues; there is a .5 probability of any one individual being for the issue and a .5 probability of him being against the issue. Again simplifying the situation by assuming that one individual's stand on an issue is independent of every other negotiator's stand (a simplification since it ignores the fact that negotiators are bargaining against one another) the probability of all negotiators being simultaneously for the issue is the product of their individual probabilities of being for the issue. Thus, for two negotiators, the probability of them both being for the issue is $(.5)(.5) = .25$. For three negotiators the probability drops to $(.5)(.5)(.5) = .125$, for four negotiators it drops to .063, for five negotiators it drops to .031 and so on.

⁸ This example is discussed in Novick (1968:57-58).

mobilization of the other faction. This strategy, a variation on the old adage "divide and conquer", is termed "whipsawing" in negotiations between labor unions and business firms. In responding to the increasing centralization of separate business establishments within a single labor bargaining negotiation committee, labor unions having separate contracts with each establishment have attempted to pool their own resources in a single "coordinated" or "coalition" negotiation committee. As discussed by Schwarz (1970), this coordination is to the advantage of the labor union since they increase the crippling power of a strike against an entire business firm by being able to simultaneously strike at all its separate establishments. Accordingly, business management looks unfavorably on such "coordinated" negotiation and will usually strive to conduct separate negotiations with labor unions at each separate establishment. If a strike is called at one establishment the other establishments can still function so management is under much less pressure to give in to labor demands. The position of labor unions here is very similar to that of the idealized "weak" parties in a triad who have been shown to usually form a coalition against an idealized "strong" party in the triad⁹. In contrast to the nuclear power issue, however, the labor unions negotiating with separate establishments can be bound by clear contracts. Citizen groups intervening against a nuclear facility have no such limitation in negotiating with the NRC and the company proposing the facility. The NRC and the company are open to repeated intervention no matter what the result of prior negotiations. Although there is a clear difference in the power of the NRC and company proposing a facility in comparison to the power of local and national citizen opposition groups, especially where power is stated in terms of financial capabilities, the balance of power in terms of ability to impose bargaining costs on one's opponent is clearly in favor of the opposition groups.

Returning to Table 3.3, and in contrast to the above facilitating effects of mobilization, the development of group pressure to conform to factional ideology that is created by both mobilization and polarization inhibits conflict resolution. It does so in three manners; 1) by encouraging the systematic misperception of the opposing faction(s) in terms of stereotypical images, 2) by increasing the need

⁹This finding is supported by (129), (140), (165), (167), (403), (429), (595), (777), (780), although the effect may weaken in groups larger than three since (678) fails to support the finding for groups of four.

for negotiators to "save face" in the bargaining process, and 3) by limiting the bargaining flexibility of faction representatives¹⁰.

As discussed in Chapter 1, mobilization facilitates each faction's misperceptions of the opposing faction(s) in terms of stereotypical images. As discussed in Chapter 2, this effect is particularly strong if mobilization occurs--as it tends to--among individuals and groups already connected by social relations. Blake and Mouton (1961b) argue that conflict resolution is made difficult when negotiators identify with their faction because such identification inhibits negotiator ability to correctly perceive the position of the opposing side. In a penetrating discussion of the Arab-Israeli conflict, White (1977) shows how internal support within each faction serves to maintain systematic misperceptions of the opposition. Both sides see the other as a continuing aggressor. Both sides see the four wars as being initiated by the other side. Both sides fail to see the extent to which their own perceptions and actions in keeping with those perceptions are to a large extent producing the other side's perceptions and actions. Even if the content of conflict is restricted to a few concrete questions so that understanding is facilitated, bias is possible. Nisbett and Wilson (1977) show that global evaluations of a speaker determine the evaluation of specific attributes of the speaker. Further, subjects seemed not to be aware of this "halo effect."

White (1977) also points out the importance to Arabs of the return of "all" the territory occupied in 1967. Having staked honor and manhood on this word, it must be incorporated into any lasting agreement in order for the Arabs to save face. A second manner in which the factions created by mobilization inhibit conflict resolution is by heightening the extent to which faction representatives seek to save face by appearing strong and competent to their constituencies. B. R. Brown has pursued face-saving as an effect of audiences in the laboratory setting. When exposed to systematic exploitation by a preprogrammed opponent, and subsequently exposed to feedback from an audience of peers indicating that subjects either; 1) performed well in the negotiation because they played fairly, or 2) looked foolish and weak in the negotiation because they allowed themselves

¹⁰Rubin and Brown (1975:43-54) discuss the last two of these effects in terms of the presence of "audiences" in bargaining.

to be exploited, those subjects exposed to ridicule had a significantly higher tendency to retaliate with noncooperation in subsequent trials even if the retaliation involved "costs" in the sense of obtaining lower monetary income from their action. This observation of retaliation following public humiliation was replicated when controlling for the competence of the negotiator (Brown, 1970), and was increased if the negotiator had strong social relations to members of the audience (Brown and Garland, 1971). Face-saving efforts by negotiators with visible audiences have also been observed by Frey and Adams (1972) and Kogan et al. (1972). A further finding in Brown's (1968) study was that negotiators were sensitive to the level of public disclosure of the basis for their actions. Retaliation was highest where subjects were told that the audience would not be informed of the increased costs retaliation had imposed on bargaining effectiveness. In a related vein, Davis et al. (1976) found that mock injuries were significantly more likely to move away from a guilty verdict toward the end of deliberation if they were told that their deliberations would be made public in the sense of being queried by a panel of experts. When controlling for the strength of a group's basis for arguing a position in mock labor-management negotiations, however, Rabbie et al. (1974) found no significant difference in the subjects preferences for public or private negotiations.

A third manner in which group pressure to conform to factional ideology inhibits conflict resolution is by limiting negotiator flexibility. Specifically, there is a demand by the faction that its ideology be adhered to in the negotiations. Analyzing an open-ended problem, forty-six groups of executives and sixteen groups of college students were asked to come up with the "best" solution to the problem during a human relations training program (Blake and Mouton, 1961a). In the course of ten to twelve hours of discussion among members of each group separately, each group prepared a written statement with its solution. Separate groups were then brought together to negotiate the differences between their solutions. The authors found that sixty of the sixty-two groups refused to give up their own group's solution in favor of the opposition group's solution--although impartial judges found the solutions to be of varying quality. Loyalty was stronger than logic. Similarly, Horstein and Johnson (1966) found that negotiators with strong identification with their faction were more competitive in bargaining than were negotiators with weak faction identification. Vidmar (1971) found that discussion groups were more effective in resolving an issue than were negotiations between groups. Lamm and Kogan (1970) found that when two

factions composed of three individuals elected a representative to negotiate with the other faction, the elected representatives took longer to reach agreement than the individuals not elected as representatives. These audience inhibitions on negotiator bargaining flexibility are also noted by Gruder (1971) and Shure et al. (1965). The increased competition that visible audiences seem to inspire is likely to be increased if there is competition within the audience for the position of negotiator. McKersie et al. (1965) document the pressures exerted on labor and management negotiators by their respective constituencies in the sense that negotiators felt they could be replaced easily if they failed to obtain concessions from the opposition. More recently, Rabbie et al. (1974) show that negotiators tend to bargain more competitively if they represent factions in which there is high competition among faction members as opposed to cooperation among faction members.

To summarize the above discussion, conflict resolution is both inhibited and facilitated by mobilization in the issue network. On the positive side, there are strong incentives for each side in a conflict to facilitate the mobilization of the other side; bringing together the various opponents into coordinated factions so that their differences can be clearly addressed and efficiently resolved. On the negative side, there are known pressures on representatives of factions to appear competent and strong in advancing their faction's position and demands. Toward the end of conflict resolution therefore, there are strong incentives for each side in a conflict to be sensitive to the ostensible dignity of one another. Perceived insults, real or imagined, can be expected to bring emotional retaliation and thereby lower bargaining effectiveness.

3.6 Addressing the Polarization of Factions as the Form of Conflict

The final social parameter of conflict escalation--and the parameter that has been researched most extensively--is polarization in the issue network. As discussed in Chapter 1, polarization involves the development of antagonistic opposition relations between factions in conflict and a concomitant increase in the distance between the factions in the sense that actors in each faction have increasingly different relations; support relations developing within factions and opposition relations developing between factions (see pages 11 through 18).

It seems reasonable to expect that just getting opposing factions to communicate with one another will increase their bargaining effectiveness in comparison to the natural course of polarization. Indeed, research is available to document the finding that opponents who are isolated tend to be more competitive than those who are able to communicate with one another--everything else being constant¹¹. However, everything else is rarely constant. In particular, if communication between opponents is merely available (as opposed to compulsory), opponents tend not to use it. If communication is compulsory and threats are available to both factions, communication tends to lower bargaining effectiveness. The communication channel is used to transmit threats rather than concessions¹². In short, the absence of communication between opposing factions can significantly lower bargaining effectiveness but its presence need not increase effectiveness. Where opposing factions have antagonistic opposition relations with one another, the presense of free communication between the factions will lower bargaining effectiveness (cf. Deutsch, 1973:248; Rubin and Brown 1975:92).

More important than whether or not there is communication between opposing factions is the manner in which the factions actually conduct communication. Research on conflict resolution addressing the polarization of factions has considered both the development of opposition relations and distance between factions as determinants of the manner in which factions communicate with one another. These two determinants are discussed separately here.

3.6.1 Defining the Opposition Relation Between Factions

In order to increase the bargaining effectiveness of inter-faction communication by manipulating the opposition relation between them, research has considered; 1) the optimum level of hostility in the opposition relation, 2) the timing of demands and concessions to be communicated, and 3) the optimum level of equity between factions in terms of their power to determine the bargaining. These three variables are crudely measured as dichotomies of high versus low in Table 3.4 to create an eightfold table of bargaining situations.

¹¹For example, differences in bargaining effectiveness resulting from free communication between opponents versus no communication are demonstrated in; (73), (166), (226), (227), (583), (729), (815).

¹²The basic work here is summarized by experiments described in Deutsch (1973:229-244). Elaboration of this discussion is given in earlier work (e.g., (213), (214), (376), (435)).

The rows of Table 3.4 distinguish low versus high levels of hostility in the opposition relation between factions. In fact, this dichotomy condenses a continuum ranging from support relations as occur between allies within a faction to simple cooperation between factions, to simple competition between factions, and on up to the opposite extreme of hostility with threats between factions. The high hostility cells of Table 3.4 (cells, C, D, G and H) refer to bargaining situations in which opponents threaten one another and take available opportunities to benefit from one another's losses. The low hostility cells (cells A, B, E and F) refer to bargaining situations in which opponents offer concessions to one another and take available opportunities to help one another profit in the bargaining.

The second dimension of Table 3.4 concerns the extent to which each faction times its demands and concessions during bargaining with the demands and concessions of the other faction. The low responsiveness cells (cells A, C, E and G) refer to bargaining situations in which opponents pursue a course of bargaining without considering the opposition's actions. The high responsiveness cells (cells B, D, F and H) refer to bargaining situations in which opponents make demands and concessions that are contingent on the opposition's immediate demands and concessions.

The third dimension of Table 3.4 concerns the extent to which each faction has equal power to determine the bargaining outcome. The low equity cells (cells A, B, C and D) refer to bargaining situations in which one faction is more able than the other faction to determine the bargaining outcome. The high equity cells (cells E, F, G and H) refer to bargaining situations in which both factions are equally able to determine the bargaining outcome. The low equity cells refer to token bargaining where one faction's input is more for appearance's sake than for its actual impact on the bargaining outcome.

The nature of the opposition relation between factions prior to conflict can be in any one of the eight cells in Table 3.4. Therefore, conflict escalation can involve any combination of the eight cells. In terms of the issue network discussed in Chapter 1, however, opponents become activated so as to be able to determine the outcome of conflict, with low responsiveness to one another and low hostility to one another. This is cell E of the table. As polarization increases from the preissue to the preconfliction to the aftermath stages of conflict, the hostility between opponents increases, one or the other becomes more able to determine the

TABLE 3.4

IDEAL TYPICAL FORMS OF CONFLICT

AND THEIR EXPECTED LEVELS OF BARGAINING EFFECTIVENESS: POLARIZATION IN OPPOSITION RELATIONS*

Level of Hostility in the Opposition Relation Between the Factions	Level of Equity Between the Factions in Terms of Their Abilities to Determine the Bargaining Outcome			
	LOW EQUITY		HIGH EQUITY	
	Responsiveness of Factions to One Another's Concessions		Responsiveness of Factions to One Another's Concessions	
	Low	High	Low	High
Low	A (low)	B (moderate)	E (low)	F (highest)
High	C (lowest)	D (low)	G (lower)	H (low)

*Polarization in the issue network as described in Chapter 1 involves movement from cell E to cell C of the table.

outcome of conflict and so become a "victor", and by so doing the victor becomes insensitive to the demands of the vanquished. This ideal typical situation is represented by cell C of the Table. In an ideal typical sense, polarization in the issue network involves movement from cell E to cell C of Table 3.4. As indicated in the table, this movement decreases the effectiveness of bargaining. Table 3.4 will be useful here for organizing the extensive research on bargaining effectiveness as determined by the three dimensions in the table.

Statistically speaking, hostility in the opposition relation tends to elicit competitive rather than cooperative moves so bargaining effectiveness is lowered. This finding has already been discussed in Chapter 2 in regard to community structure and polarization. Existing opposition relations in a community facilitate the development of subsequent opposition relations. In regard to bargaining, the manner in which one faction bargains with the other will tend to elicit the same manner of bargaining from the other faction. This feedback effect of bargaining has been analyzed in a variety of manners. First, a cooperative approach is more effective in bargaining than is a competitive approach; opponents tend to obtain higher outcome values¹³. Second, continued cooperation by one bargainer tends to elicit cooperation from the other bargainer although in some cases this effect is negligible¹⁴. This seems to be particularly true when bargaining begins in a cooperative fashion. There is support for the idea of a "locking-in" effect whereby initial cooperation results in reciprocated cooperation and is subsequently "locked-in" as the dominant mode of bargaining between opponents. Using the prisoner's dilemma game or variations on it, there is a consistent tendency for significantly higher cooperative moves by opponents if the initial move is cooperative (e.g., see

¹³For example, see (16), (63), (189), (215), (289), (320), (406), (407), (485), (625), (661), (719), (785).

¹⁴The bulk of available research supports the finding that cooperation begets cooperation in return (e.g., (99), (142), (212), (323), (420), (425), (430), (559), (577), (721), (722), (726), (727), (732), (736), (822), (833)). However, there are studies that fail to find a significant difference in bargaining effectiveness given a deliberately cooperative bargaining strategy by one opponent (e.g., (573)). Kelly and Stahelski (1970a) provide one explanation for these contradictory findings by showing that subjects bargaining against a cooperative opponent were less able to indicate their opponent's preferences than subjects bargaining against a competitive opponent. In some situations, in other words, overcooperation could lead to a misperception of one another's preferences by opponents.

Pilisuk et al., 1965; Pilisuk and Skolnick, 1968; Oskamp, 1970; Michelini, 1971; Komorita, 1973). Similarly, other mixed motive games show that the initial move is crucial in determining subsequent moves to characterize bargaining; the subsequent moves being cooperative if the initial move is cooperative (e.g., Deutsch et al., 1967; Sermat, 1967; Brown, 1968; Deutsch et al., 1971). A third consideration here is the use of promises to cooperate versus threats of retaliation and competition. While the use of threats does tend to elicit more compliance with initial requests from one's opponent than is the case if promises are used, overall cooperation between opponents and the likelihood of a mutually favorable bargaining outcome are greater if promises rather than threats are used by opponents¹⁵. For example, Rubin et al. (1973) concluded an experiment in which subjects were "workers" and given a series of anagrams to decode as a task where the experimenter was to play the role of a "supervisor." Anagrams were either "difficult" or "simple" to decode. The supervisor's pay for having workers decode a difficult anagram was twice that of having a simple anagram decoded. The supervisor could send each workers one of three types of messages; a "threat" message that said the worker's fee would be reduced by forty percent if simple anagrams were decoded, a "control" message that simply asked the worker to decode difficult anagrams without specifying any costs or benefits for such behavior, or a "promise" message that said the worker's fee would be increased by forty percent if difficult anagrams were decoded. Rubin et al. found that subjects chose to work on difficult anagrams most when promises were sent, least when threats were sent and an intermediate amount when the control message was sent. In other words, cooperation was higher when no message was sent than when the subjects were threatened. It was higher still when promises were made to the subjects. This consideration of promises versus threats is related to the finding that competitive moves are lower if there are unambiguous costs associated with competitive rather than cooperative moves¹⁶. This work usually involves a comparison of cooperation when subjects play for real as opposed to imaginary money. For example, Gallo (1966) found that subjects in a mixed motive game with real and large payoffs (up to sixteen dollars) were up to five times more likely to cooperate than subjects playing the same game but with

¹⁵ Review of the use of threat in experimental situations is provided by Tedeschi et al. (1971), Deutsch (1973:179-281) and Rubin and Brown (1975:278-288). Recent critiques of that use are given by Tedeschi et al. (1977) and Milburn (1977). For more detail illustration, see (138), (215), (280), (346), (347), (402), (602), (697), (700)

¹⁶ While there is a preponderance of support for the finding that the idea of losing real money as opposed to imaginary money elicits cooperative moves from subjects (e.g., (16), (287), (290), (291), (377), (405), (478), (676)), there are some experiments that fail to find any significant differences in the cooperative moves by subjects playing for different levels of reward (e.g., (38), (276), (561), (564)).

imaginary payoffs. Where costs for competitive moves are ambiguous, in contrast, the reward for cooperation might not be sufficient to create cooperative moves between opponents. In investigating the effect of real versus imaginary rewards, Gumpert et al. (1969) found that subjects playing for imaginary dollars cooperated more than those playing for real dollars. The reward for cooperation was ambiguous, however. Subjects playing for imaginary dollars were given four dollars and told they could keep the money no matter what happened in the experiment. Subjects playing for real dollars were given ten dollars, told to keep the money in their pockets and "to attach great importance to winning or losing this money" but were not told that they could keep the money obtained during the experiment. While the subjects playing for imaginary money had a clear reward for their behavior, those playing for real money did not.

Given the fact that the hostility in an opposition relation by either faction will tend to elicit similar hostility from the other faction, there are still other considerations to bear in mind. Cooperation for its own sake will not always lead to reciprocated cooperation. Again speaking in a statistical sense, cooperation in the sense of making concessions to one's opponent tends to elicit competition if it is not contingent on the opponent's demands and concessions. Consistently pacifistic or "turn the other cheek" bargaining strategies that involve unwavering cooperation and concessions to an opponent tend to elicit competitive moves from the opponent¹⁷. The pacifist is exploited. A variety of studies support the finding that acting as if your concessions are contingent on the other's demands is more likely to elicit cooperation than simply being cooperative¹⁸. Not surprisingly, the best bargaining outcomes resulting from the manipulation of one bargainer's cooperation tends to occur when cooperation is low initially and gradually increases over the course of bargaining; more concessions being made at the end of

¹⁷The ineffectiveness of pacifist bargaining strategies in experiments is documented and discussed by Shure et al. (1965), Deutsch et al. (1967), Meeker and Shure (1969), Bixenstine and Gaebelin (1971), Ofshe (1971), and Druckerman et al. (1972) to name but a few. Fitzgerald (1975) provides theoretical justification for this finding.

¹⁸The higher bargaining effectiveness of acting as if concessions were contingent on the opposition's demands rather than merely acting cooperatively is documented by a variety of studies in addition to those rejecting the pacifist strategy (footnote seventeen); (51), (242), (288), (323), (395), (425), (485), (560), (668), (732), (822), (823).

the bargaining than at the beginning of the bargaining¹⁹. A series of experiments discussed in Deutsch (1973:314-347) serve to illustrate these empirical generalizations. Subjects were placed in a mixed motive game against bargainers who were the experimenter's accomplices. Subjects were confronted with a pegboard divided into two areas; a resource area and an allocation area. The game consisted of a series of trials in which the subject selected a peg from the resource area and placed it in the allocation area. By strategically selecting pegs from the resource area, the subjects could increase their initial thirty cents to some higher amount of money that they could keep after the experiment. A subject's resources consisted of five types of pegs and two types of markers. Black pegs earned the subject six cents regardless of the peg the other player chose. White pegs earned the other player seven cents and the subject nothing. Blue pegs earned the subject one cent unless the other player simultaneously chose a blue peg whereupon both players received nine cents. An orange marker indicated an attack. If the subject chose an orange marker, then the number of red pegs he had was compared to the number of green markers the other player had. If the numbers were equal, neither player profited. The subject won six cents for every red peg he had in excess of the number of green pegs his opponent had. The subject lost six cents for every red peg he had less than the number of green pegs his opponent had. The beige marker indicated disarmament. If the subject chose a beige marker, it meant that he had destroyed all the red pegs he had accumulated up to that point in the game. The experimenter's accomplices were instructed to play in one of four basic strategies. The pacifist or "turn the other cheek" strategy consisted of consistently using blue pegs except that white pegs were used in response to the subject's use of the orange marker. In other words, the pacifist strategy consisted of never threatening the subject and always reciprocated an attack by the subject with a concession in the form of a payment. The "nonpunitive" strategy consisted of responding with a blue peg if the subject used a blue or green peg or a beige marker, responding with a green peg if the subject used the orange marker, responding with a white peg if the subject used a white peg and responding with a black peg if the subject used a black peg. In other words, the nonpunitive strategy consisted of always acting self-protectively rather than with counter

¹⁹ Demonstration of significantly higher bargaining effectiveness when one starts tough and gradually relaxes rather than being consistently conciliatory is given by several studies, e.g., (64), (142), (146), (225), (335), (362), (428), (666), (839), (840).

threats or counterattacks when the subject attacked and reciprocating cooperative moves by the subject. In contrast, the "deterrent" strategy consisted of threatening the subject when he acted noncooperatively and attacking the subject when he attacked. This strategy involved using a blue peg if the subject used a blue or white peg or the beige marker, responding with a red peg if the subject used a black, green or red peg, and responding with an orange marker if the subject used an orange marker. Finally, Deutsch considered varieties of a "reformed sinner" strategy that consisted of the accomplice choosing red pegs and orange markers for the first fifteen trials, the beige marker on trial sixteen, then a nonaggressive strategy for the remainder of the trials. In other words, the reformed sinner strategy consisted of an unwavering beligerence in the beginning of the game and a drastic shift to cooperation for the remainder of the game. These four strategies conform to some extent with the cells of Table 3.4. The match of strategies to cells is given in Table 3.5. The pacifist turn the other cheek strategy contains a low amount of hostility and low responsiveness to the subject as an opponent. The deterrent strategy contains high hostility and high responsiveness to the subject as an opponent. Finally, the reformed sinner contains high hostility in the beginning of the game and a subsequent response to the subject as an opponent by a dramatic shift to cooperation. In fact the deterrent strategy is a little more responsive than the pacifist strategy, and the reformed sinner strategy is a little less responsive than the nonpunitive strategy, however, for the purposes here Table 3.5 is of adequate accuracy. According to the above discussion from which the levels of bargaining effectiveness in Table 3.4 are derived, the lowest bargaining effectiveness should be in the responsive, hostile cell of Table 3.5; viz., the deterrent strategy. The highest bargaining effectiveness should be in the responsive, nonhostile cell; viz., the nonpunitive strategy. The other two cells should be of intermediate bargaining effectiveness. These are the results obtained in the Deutsch experiments. The lowest payoffs for subjects and accomplices together were obtained when the deterrent strategy was used. The highest payoffs for accomplices and the second highest payoffs for subjects were obtained under the nonpunitive strategy. The highest payoffs for subjects were obtained when the pacifist strategy was employed. Not surprisingly, this strategy yielded the accomplices their lowest payoffs. The pacifists were exploited. The reformed sinner strategies yielded the greatest changes in payoffs. Both subjects and accomplices received the lowest payoffs in trials during the hostility stage of the reformed sinner strategy and subsequently received the

TABLE 3.5

EXPERIMENTAL BARGAINING STRATEGIES AS THEY FIT INTO TABLE 3.4*

Level of Hostility in the Opposition Relation Between the Factions	Responsiveness of Factions to One Another's Concessions	
	Low	High
Low	PACIFIST	NONPUNITIVE
High	DETERRENT	REFORMED-SINNER

*The pacifist strategy refers to cells A and E of Table 3.5, the nonpunitive strategy to cells B and F, the deterrent strategy to cells C and G, while the reformed-sinner strategy refers to cells D and H. Accordingly, the highest bargaining effectiveness should occur under the nonpunitive strategy and the lowest bargaining effectiveness should occur under the deterrent strategy (cf. Table 3.4).

highest joint payoffs of all strategies after the accomplice switched to the cooperative stage of the strategy. After a variety of modifications on this basic experimental game, Deutsch found that the effectiveness of the nonpunitive strategy varied least. In none of the other experiments was the nonpunitive strategy less effective in eliciting cooperation and reducing aggression than the other strategies.

While the Deutsch experiments bring together and support findings from a variety of other studies, among the questions left unanswered is the timing of responses to one's opponent. The above discussion emphasizes the importance of timing demands and concessions so they appear responsive to the opponent's demands and concessions. But what of the time dimension? Is it better to respond slowly or quickly? Available research suggests rapid response. Drawing attitude objects (things or conditions about which one can have an opinion) from attitude questionnaires and news type photos, Tesser and Conlee (1975) found that the longer subjects had to think about the attitude object, the more extreme their opinions on the object became. When this finding is considered in combination with the increasing polarization of factions that tends to occur with conflict escalation over time as discussed in Chapter 1, it seems reasonable to suggest that the longer one opponent waits to respond to the other's demands or concessions, the more polarized the two opponents will become and the lower bargaining effectiveness will be. Corroborating this suggestion are a variety of experiments demonstrating that significantly higher cooperation between opponents tends to occur when there are time limits on bargaining than when there are no time limits; increasing cooperation occurring as the deadline for bargaining approaches²⁰. This time effect remains uncertain, however, since there is also evidence demonstrating the significant increase in cooperation elicited by a slow to respond opponent (Bixenstine and Gahelein, 1971).

Closely related to the issue of being responsive to an opponent's demands and concessions is the extent to which opponents are equally able to determine the outcome of bargaining. This is the third dimension in Table 3.4. Once again speaking

²⁰The increasing cooperation elicited by time limits on bargaining is substantiated in experiments by Kelley (1966), Komorita and Brenner (1968), Komorita and Barnes (1969), Pruitt and Drews (1969), Benton et al. (1972), Pruitt and Johnson (1970) and Hamner (1974). Friend et al. (1977) specifically focus on the effects of the duration of bargaining on the formation of coalitions.

in a statistical sense, bargaining effectiveness tends to be lower when either when either opponent feels that they are at a disadvantage in ability to determine the outcome of bargaining. This finding can be attributed to two causes²¹. First, when there is a difference in the "power" of opponents, the more powerful tends to exploit the less powerful in the sense of being nonresponsive to the demands and concessions of the less powerful opponent. This "power" difference effect is observed when the greater power results from basic feelings of control (Rubin and Brown, 1975:175-176), from bargaining on one's own territory (Rubin and Brown, 1975:82-88), from possessing more "resources" relevant to the bargaining than does one's opponent (Rubin and Brown, 1975:221-228)²², or from having a higher "status" than one's opponent (Rubin and Brown, 1975:214-215); the higher status person exercising ostentatious nondeference toward the lower status person and expecting bargaining payoffs in keeping with the status difference between himself and his opponent²³. This power difference effect has been discussed at a macro level in terms of attempts by established institution to "coopt" social groups opposed to the institution goals by incorporating the groups into the institution without changing the original goals. For example, Etzioni-Halevy (1975) describes the manner in which "establishment" institutions in Israel absorb conflict groups so that conflict is neither suppressed nor allowed to bring about substantial changes in the structure of decision-making. Of special relevance to the nuclear power issue, Levenson and Miller (1976) demonstrate that "liberals" tend to become political activists when they perceive an increase in control by powerful others. In other words, competitive moves by "liberals" are elicited when they perceive an

²¹ There is an additional support for the proposition that cooperation is significantly higher when opponents believe there will be equal payoffs although there is some evidence to the contrary (see review by Rubin and Brown (1975:218-220). For details see experiments by Kelley et al. (1967), Komorita and Barnes (1969), Tedeschi et al. (1969), Deutsch and Lewicki (1970), Swingle (1970), Holmes et al. (1971), Swingle and MacLean (1971), McClintock et al. (1973), Sheposh and Gallo (1973).

²² For details, see experiments by Hornstein (1965), Grant and Sermat (1969), Komorita and Barnes (1969), Thibaut and Gruder (1969), Tedeschi et al. (1969), Deutsch and Lewicki (1970), Kelly et al. (1970), Pepitone et al. (1970), Swingle (1970).

²³ For details, see experiments by Deutsch and Krauss (1960, 1962), Hornstein (1965), Brown (1968), Grant and Sermat (1969), Schlenker et al. (1970), Faley and Tedeschi (1971). Harsanyi (1962a, 1966) provides a theoretical analysis of the effects of status differences on bargaining behavior.

increase in control by powerful others; others usually taken to be the opponents of "liberals." Second, opponents are more likely to cooperate in both reaching and abiding by agreements if they each feel they had a hand in making the agreements. Bass (1966) and Druckman (1967, 1968) demonstrate that discussion sessions between opponents before negotiation begins can result in more cooperative bargaining than is the case when there is no prenegotiation communication between opponents. Wortman et al. (1976) demonstrate that subjects randomly assigned to experimental treatments who later "accidentally" found out that other subjects could choose their experimental treatment were significantly negative toward the experiment. The authors conclude that choice lessens the impact of random assignment and reduces the problem of subject reactivity to treatment. Thibaut et al. (1974) simultaneously considered the extent to which subjects participate in making rules and the extent to which they benefit from adhering to rules to the same extent as the "rulemaker." When subjects and rulemakers are to benefit equally from adherence to rules, subjects were found to be more likely to adhere to rules when they participated in formulating the rules. In contrast, when only rulemakers are to benefit from subjects adhering to rules, subjects were found to be less likely to adhere to rules when they participated in formulating the rules. This finding is related to the observation by Swingle (1970) that weak subjects tended to exploit more powerful opponents if the more powerful opponent failed to use his power to punish noncooperation. At a more macro level of analysis, a common reason given by citizen groups for rising in protest against some policy is their lack of input into the making of the policy and their lack of benefit from the policy²⁴. These findings suggest that the greater cooperation between opponents that is elicited by equal ability to determine bargaining outcomes is linked to an equal profit by both opponents from the bargaining (see footnote twenty-one). If either opponent feels that he has had a bargaining outcome imposed on him or

²⁴ A variety of case studies as well as editorials have decried the absence of citizen input into policy making and recommended methods by which citizen preferences could be taken into account before policy is determined (e.g., (27), (35), (70), (92), (127), (268), (270), (348), (351), (353), (367), (401), (470), (509), (510), (556), (582), (608), (630), (632), (671), (701), (741), (813), (819), (834), (835)). As documented by the literature cited in Chapter 1, the lack of meaningful input is a common complaint voiced by citizen groups opposed to a proposed nuclear facility.

feels that he will derive less profit than his opponent by adhering to the bargaining outcome, then noncooperation can be expected. Thus, Table 3.5 predicts higher bargaining effectiveness when there is high equity in bargaining (cells E, F, G and H) than when there is inequity in bargaining (cells, A, B, C and D).

Table 3.4 serves to summarize the above discussion within the scope of this report. Whatever the other conditions of a controversy over a nuclear facility, the optimum bargaining strategy to be used by both the supporters and opponents of the facility is what Deutsch termed a nonpunitive strategy. Threats and attacks should be met with defensive moves rather than counterthreats and attacks. Cooperative moves should be quickly reciprocated. Further, and especially when bargaining is initiated, cooperative moves should be characteristic of one's bargaining (without being over-cooperative to the point of adopting a pacifist strategy). Demands should be structured over the course of bargaining so that the largest demands occur early in the bargaining. This allows for the appearance of increasing cooperation over the course of bargaining in the sense that increasing numbers of concessions and decreasing demands are made as the bargaining progresses. These points have the purpose of keeping the level of hostility between opponents low and maintaining a responsiveness to one another's demands and concessions. In regard to the level of equity in bargaining between a nuclear facility's supporters and opponents, there is already data available for the nuclear power issue. The public hearings were a deliberate attempt to give affected citizens ability to determine the process of establishing a facility. As reviewed in Chapter 1, however, citizens do not feel that they are actually affecting the establishment of facilities other than by increasing the costs of a facility through licensing delays to the point where it is no longer economically feasible. These findings have led to exploitation of a powerful opponent in the laboratory situation, so it should not be surprising to find competitive rather than cooperative moves characterizing the orientation of citizen opposition groups toward the supporters of a nuclear facility. According to the literature reviewed here, this competitive orientation would be changed to a cooperative orientation if; 1) citizen groups felt that they would benefit from the nuclear facility as much as the company proposing the facility (equity in payoffs), and 2) citizen groups had input into the decision to establish a nuclear facility before development proceeds to the stage of requiring a construction permit (equity in bargaining). These conditions are

far easier to state than to implement. As discussed in Chapter 2, the economic benefits of a nuclear facility do appeal to some types of communities but by no means to all communities. As discussed in Chapter 1, local citizen opposition groups do not exist in the preissue stage of the nuclear power issue so it would be impossible to include them in preissue negotiations. A likely alternative to including local citizen groups in the preissue stage of the nuclear power issue would be to include their representatives. The "leading" citizens of the community could be consulted. The local government officials could be included in preliminary plans for a nuclear facility. As discussed in Chapter 2, however, local civic and government representatives need not be representative of citizen preferences in a community. This is particularly likely where the community's economic elite are segregated in the social structure and/or the political structure is centralized as tends to be the case under a reform government.

3.6.2 Defining the Distance Between Factions

The bargaining strategies covered in the previous section are concerned with manipulating the direct interaction between opponents in a conflict. A different approach is through the manipulation of the interaction of opponents with other actors in and outside the conflict. This second approach is particularly useful if the opposition relation between factions in conflict has become highly emotional since actors with more neutral relations to both factions can be brought into the conflict to lower the level of hostility in the bargaining process. The general purpose of this second approach is to lessen the "distance" between opponents as discussed in Chapter 1 (cf. Eq. 2), by emphasizing the extent to which both factions relate in the same manner to actors not directly involved in the inter-faction conflict. The reasoning behind lessening distance between factions so as to increase bargaining effectiveness is indirect. First, cooperation is more likely between friends than between enemies²⁵. Second, friendships and social attractions

²⁵ Although this effect is often mixed with other independent variables, the cooperation eliciting effect of existing friendship relations is demonstrated in several experiments (e.g., (57), (62), (100), (388), (513), (581), (721), (727), (784)), as well as experiments demonstrating the competition eliciting effect of the absence of such relations (e.g., (16), (21), (63), (80), (189), (215), (229), (242), (289), (320), (322), (352), (406), (407), (439), (485), (500), (583), (619), (620), (625), (660), (661), (719), (724)), and the cooperation eliciting effect of a knowledge of one's interdependence with the opponent (e.g., (293), (327), (552), (693)).

are more likely between people who have similar relations to others, than between people who have dissimilar relations to others²⁶. In other words, friendships and social attractions are more likely between people separated by low rather than high "distance." Therefore, cooperation is more likely between people separated by low rather than high distance. In order to increase the bargaining effectiveness of inter-faction communication by manipulating the distance between them, research has considered; 1) making more salient the existing relations involving both factions, as well as 2) creating similar relations by introducing into the conflict situation additional actors as "third parties" who have identical relations to both factions. Both of these strategies serve to increase the similarity of the relations involving both factions thereby decreasing the possible distance between the factions.

The cooperation eliciting capacity of low distance between opponents is illustrated by experiments in which opponents are paired in terms of shared relations to others. Common rudimentary methods of pairing opponents here are in terms of sex, race and nationality. Each of these social categories involves differences in the manner in which individuals have relations with others so that distance is lower between individuals in the same category than between individuals in separate categories. Further, each of these social categories is highly visible so that opponents who fall into the same category immediately perceive the low distance between themselves compared to opponents who fall into separate categories. In other words, two women will perceive lower distance between themselves than will a man and a woman. Two negroes will perceive lower distance between themselves than will a Negro and a Caucasian. Two people of Mediterranean ethnicity will perceive lower distance between themselves than will an individual of Mediterranean ancestry versus an individual of Swedish ancestry. Thus, high cooperation occurs between opponents of the same rather than of different race²⁷, nationality²⁸, and sex²⁹.

²⁶For example, see the work by Laumann (1966, 1973) as well as the experimental work in (196), (203), (352), and (456). This effect is also introduced in some of the experimental work on the cooperation eliciting effect of friendship relations cited in footnote twenty-five.

²⁷For example, see (57), (79), (80), (334), and (683).

²⁸For example, see (723), and (724) although the nationality effect was not observed in (772).

²⁹Sex is an often mentioned variable in social psychology so it often appears in combination with other independent variables in the experiments cited here. For a review of basic sex effects, see Rubin and Brown (1975:169-174).

While these findings argue for bargainers being of the same race, nationality or sex, they do little for planning efficient conflict resolution since they are completely determined a priori to any conflict resolution efforts. There are experimental treatments more subject to manipulation, however, that involve making salient the shared relations of opponents.

For example, cooperation increases if opponents believe they will share a common course of action in the future. Marlowe et al. (1966) had subjects play the prisoner's dilemma game against the experimenter's confederate who was playing with a strategy of making a cooperative move on eighty percent of the trials. Some subjects were told that they would meet their opponent after the game to discuss the game. Other subjects were not told that they would meet their opponents. Those who anticipated future interaction were significantly less exploitive of their opponents than those who did not expect to meet their opponents. Slusher et al. (1974) had subjects play one trial of the prisoner's dilemma game and were told that this would be the first of three trials. Again, some subjects were told that they would meet their opponents after the game and would continue to play against the same opponent. The other subjects were told that they would have different opponents who they would not meet. Those subjects who expected to meet and play against the same opponents in the future made more cooperative moves than those who believed they would not have future interaction with their opponents. These cooperation eliciting effects of anticipated future interaction have also been observed by Gruder (1971). The effect is reversed if the subject feels exploited in the initial bargaining, however. Swingle (1969), Gruder (1971) and Michelini (1971) found that when subjects play against an aggressive, exploitive other, they will be more competitive and have a more negative image of their opponent if they anticipate future interaction with their opponents than if they do not anticipate future interaction.

Similarly, cooperation increases if opponents are led to believe that they share common past actions and attitudes with their opponents. Krauss (1966) presented subjects in a mixed motive game with a personality profile of self ratings by the opponent. Those subjects who believed that they were playing against opponents with profiles similar to their own were significantly more cooperative than those playing against opponents with profiles different from their own. Hall and Williams (1966) had groups of subjects view a portion of

the film 12 ANGRY MEN and then discuss among themselves the order in which they expected jurors to switch their initial guilty votes to not-guilty. Half of the groups were composed of members who had previously interacted with one another and the other groups were strangers to one another. The groups who had interacted previously, in comparison to the groups of strangers, reached more creative and more accurate group decisions. Harrison and McClintock (1965) had subjects play prisoner's dilemma where control subjects had never seen one another before and experimental subjects had played a reaction time game previously. The experimental subjects tended to make more cooperative moves than the control subjects even if the prior game had resulted in losing eighty-five percent of the reaction time trials. High versus low similarity conditions in other experiments manipulating past and current experiments have similarly demonstrated the cooperation eliciting effect of a high similarity condition (Bass, 1966; Druckman, 1967, 1968; Pruitt, 1968; Tornatzky and Geiwitz, 1968; Michielini, 1971; Allen and Wilder, 1975; Terborg et al., 1976).

Yet another method of lessening the distance between opponents is to emphasize an actor in the conflict situation who has common opposition relations to both opponents. This is the well known phenomenon of erstwhile enemies becoming allies in order to fight in a common cause. Stein (1976) reviews this literature. A classic experiment to demonstrate this effect was reported by Deutsch (1958, 1973: 202-203). Two subjects who were to play the prisoner's dilemma game with one another were first asked to take an "intelligence" test. This test was taken in the company of a third person also taking the test who was told by the experimenter to act in a conspicuously obnoxious and irritating manner. The two subjects were then asked to play ten trials of prisoner's dilemma while the experimenter's confederate played one of a variety of roles ranging from profiting by predicting the winner of each trial to merely observing the game. The cooperative moves of the two subjects exposed to the obnoxious third party were then compared to cooperative moves by subjects who had never been exposed to a third party in their playing. The number of cooperative moves was significantly higher between opponents who shared common exposure to the obnoxious third party.

The most practiced method of lessening the distance between opponents, however, is to introduce a new actor into the conflict situation. The new actor as a "third party" to the conflict has neutral relations to both opponents and can serve

a variety of functions ranging from an "intermediary" who carried messages between opponents, to an "expert" who provides "facts" on the issue being debated between opponents, to a "mediator" who guides the bargaining process so as to efficiently arrive at a solution acceptable to both opponents, to an "arbitrator" who weighs the arguments of the opponents and delivers a "just" solution to the conflict³⁰. The role of expert is a difficult one to play here. As discussed in Chapter 1, academia has been neutralized as an expert in the nuclear power issue since the issue is sufficiently vague to allow both sides in the issue to find academic support for their views. Similarly, Raulet (1961) describes the problems health professionals had in keeping neutral in the water fluoridation issue. In merely seeking to present facts to the public, health professionals were subject to charges that they were acting politically by presenting only one side of the issue. This problem is further exacerbated in the nuclear power issue by the fact that the experts for both sides in the issue are usually "hired" consultants and accordingly viewed as nonobjective experts by the opposing faction. The role of mediator is perhaps most common. Mediator agencies now exist for resolving a wide range of conflicts (e.g., the Federal Mediation and Conciliation Service, the National Mediation Board, the Office of Environmental Mediation, see Baumgartner et al., 1975; Webster, 1975a, 1975b). A variety of methods proposed by academics have been outlined for mediation such as the "analysis of options" approach in which participants in a conflict are treated as actors pursuing interdependent goals within a game theoretic framework so that optimal solutions under the circumstances can be identified (see e.g., Bain et al., 1971; Hipel et al., 1977), or the "controlled communication" approach in which participants in a conflict are advised of the social factors in conflict escalation so that they can avoid unnecessary problems in resolving their difference (see Burton, 1969; and supporting experimental evidence in Erickson et al., 1974, which demonstrated that third parties could elicit higher cooperation between opponents by suggesting that they strive to resolve all their differences in a package deal as opposed to resolving their differences one at a time, and Ross et al., 1975, which demonstrated that the most effective method of disabusing subjects of erroneous stereotypical perceptions is by explaining the social process through which such perceptions are established), or the closely related intergroup techniques for conflict resolution that bring together groups of representatives of opposing factions together with social scientists as mediators intended to explain the social implications of actions taken by either side (see Cohen et al. 1977). These academic mediation techniques are generally

³⁰ Theoretical discussion of third party intervention toward the end of resolving conflicts is given in a variety of sources (e.g., Burton, 1969; Walton, 1969; Fisher, 1972; Young, 1972; Baumgartner et al., 1975; Rubin and Brown, 1975:54-64; Walker, 1977).

intended to emphasize to both factions in conflict the social aspects of conflict and its resolution as have been discussed previously in this report. With the extensive reliance on the Nuclear Regulatory Commission and the Federal courts, third party intervention in the nuclear power issue is most often characterized by the arbitrator role. Supporters and opponents of a proposed facility make their argument before a third party that subsequently delivers a just solution, although the feeling among citizen groups opposed to a facility is that this third party has a bias toward the establishment of facilities (see Chapter 1). Nevertheless, available research suggest that bargainers prefer the arbitrator role for third parties. Using an unusually varied pool of subjects (undergraduate psychology students, community residents and law students), Lator et al. (1976) compared subjects' preferences for different styles of third party intervention. Five styles were compared. The "autocratic" style involved opponents submitting their preferences to a third party who then made a decision on which preferences would be retained. The "arbitration" style involved opponents explaining and supporting their respective positions before the third party who then made a decision. The "moot" style involved opponents arguing their respective positions before the third party then to one another and then all three would make a decision. The "mediation" style involved opponents arguing their respective positions before the third party who then suggested one or the other set of preferences be retained, whereupon the two opponents decided which set of preferences would be retained. Finally, the "bargaining" style involved no third party at all. Subjects selected the arbitration style of third party intervention as being the most preferable. In descending order of preference the other styles were; moot, mediation, autocratic, and last, bargaining. The preference for arbitration was particularly strong if there were time pressures on the subjects to reach their decision. In a closely related experiment, Bartunek et al. (1975) compared the effects of third party fair settlement between opponents, a "process" style that involved the third party instructing opponents how to paraphrase their demands, and a "passive" style that involved the third party merely calling breaks during the bargaining. For those subjects who felt accountable to a constituency, the greatest bargaining effectiveness between opponents (measured as the number of agreements, the average joint profit, and the speed of conflict resolution) occurred in the content style. In other words, the greatest bargaining effectiveness occurred when

the third party acted as an arbitrator. The lowest effectiveness occurred in the passive or bargaining style. In both subject preferences and bargaining effectiveness, the arbitrator style is better than the passive style.

To some extent the greater effectiveness of the arbitrator style of third party intervention results from a faith in the fairness of others as third parties. Baker (1974) shows that when placed in the role of third parties, individuals do have a tendency to maintain or create equity between opponents bargaining with one another. Also, Eisenberg et al. (1976) show that subjects are particularly likely to be influenced by a third party's suggested settlement when the settlement falls within a range of settlements perceived to be equitable.

To a greater extent, however, the clear ordering of the arbitrator over the passive style of third party intervention suggest that third parties are functioning as face-saving devices. Several studies have demonstrated this function by showing a higher number and level of concessions by opponents when there is a third party to negotiations in comparison to the concessions made when no third party is available (e.g., Krauss and Deutsch, 1966; Meeker and Shure, 1969; Podell and Knapp, 1969; Pruitt and Johnson, 1970; Pruitt, 1971; Vidmar, 1971; Johnson and Tullar, 1972). As quoted from Pruitt and Johnson (1970:246) by Rubin and Brown (1975:58) in their review; "Mediation provides the negotiator with a face-saving device whereby he can retreat without feeling that he has capitulated. Presumably, this face-saving results from throwing the blame for one's own concessions onto the mediator." Thus, the more directly responsible for final settlement the third party is (without taking over the decision-making process altogether), then the more concessions opponents can make to one another. More than either the mediator, expert or passive intermediary styles, the arbitrator style of intervention involves the third party taking responsibility for the final agreement between opponents. Thus, there would be a preference for, and higher bargaining effectiveness under, the arbitrator style just as has been observed by Bartunek et al. (1975) and Lator et al. (1976). This also explained the Bartunek et al. finding that only subjects accountable to a constituency had a preference for the arbitrator style of intervention. Nonaccountable subjects did not bargain most effectively under the arbitrator style. Recalling the earlier discussion of the effects of audiences as constituencies for bargainers (pages 56 to 58), the presence of constituencies make it more difficult for negotiators to make concessions to one another. Thus, it would be when negotiators felt pressure from constituencies that third parties as face saving devices would be most likely to

improve bargaining effectiveness by allowing negotiators to make concessions without appearing weak to their constituencies.

Compared to the research on the direct interaction between opponents as the key to conflict resolution, the research on manipulating the distance between opponents is quite small. Nevertheless, it is growing and does suggest two points. First, whenever possible, opponents should be made to feel as if they have a common pattern of relations to others; actors in and out of the conflict situation itself. Common destinies and common past actions for opponents should be emphasized to them both. Recognition of their common relations serves to elicit a cooperative rather than competitive orientation between opponents. Second and especially where conflict has escalated to the point of antagonist dislike between opponents, third parties can be an effective method of conflict resolution particularly when the arbitrator style of intervention is employed and the third party is recognized as neutral in the conflict. The third party allows faction representatives to make concessions to one another without appearing to have given in to the disliked opposition.

3.7 Summary

The purpose of this chapter has been to outline and critique available conflict resolution techniques as they are relevant to the nuclear power issue. Within the scope of this report, some issues have been quite simplified. This fact is corroborated by the existing textbook length treatments of points that have been raised. These more detailed treatments are referenced in the text and footnotes. I have focused on conflict resolution techniques as they address the three basic social parameters of conflict escalation discussed in the previous two chapters. In addressing the generalization of content, available research suggest that points being debated should be concrete questions rather than abstract principles and that more than one--but not too many--concrete questions should be considered simultaneously. This content corresponds to cell A of Table 3.2. In addressing the mobilization of faction support there are incentives for opponents to facilitate the opposition mobilization so that representatives can be brought together to reach binding settlements yet each faction must then be sensitive to the ostensible dignity of one another since perceived insults, real or imagined, can be expected to bring emotional retaliation and thereby lower bargaining effectiveness (cf. cell B of Table 3.3). In addressing the polarization of factions,

research has considered manipulations of both the direct interaction between opponents as well as the distance between opponents. The availability of communication channels between opponents need not improve bargaining effectiveness although the absence of such channels usually lowers bargaining effectiveness. In order to make optimum use of available communication channels, research has suggested that opponents should be made to feel they have a significant hand in determining the bargaining outcome, should be responsive to one another's demands and concessions, and should bargain with a low level of hostility as captured in what Deutsch termed the "nonpunitive" strategy. This bargaining strategy corresponds to cell F of Table 3.4. Further, the use of third parties can be of help in maintaining this strategy by allowing opponents to make concessions to one another without appearing to give in to one another.

CHAPTER FOUR

SUMMARIZING PRINCIPLES FOR
RESOLVING COMMUNITY CONFLICT IN THE NUCLEAR POWER ISSUE4.1 Introduction

Within the limits of this report, the preceding chapters have presented detailed discussion of the social parameters of conflict escalation in the nuclear power issue, its stages and the determinants of escalation from one stage to the next, as well as a diverse literature on methods of conflict resolution. Basic points for each chapter have been summarized in a section at the end of each chapter so there is no need to repeat those summaries here (see Section 1.4, 2.6, and 3.7). The purpose of this brief concluding chapter is to bring together the points raised in the previous chapters under some broad principles for resolving community conflict in the nuclear power issue.

4.2 Conflict Situations

One of the points repeated in the report is the fact that conflict is nonuniform across communities and nuclear facilities. There are different types of situations in which conflict over a nuclear facility can occur. Table 4.1 presents six ideal typical conflict situations that have been distinguished in Chapters 1 and 2. Chapter 1 separates three stages of conflict escalation. The preissue stage (cells A and B of Table 4.1) consists of interactions among the NRC, the company proposing a nuclear facility, technical experts, and to varying extents local business and government representatives (cf. Table 1.1). The proposed nuclear facility becomes a controversy, or an explicit issue, within a community with the occurrence of a precipitating event. Such an event in the nuclear power issue consists of three conditions occurring simultaneously; 1) an announcement that a nuclear facility is being or will be constructed, 2) publicity of the potential dangers of such a facility, and 3) a perception on the part of some citizens that they could prevent the construction of the facility by mobilizing in opposition to it. The precipitating event marks the beginning of the pre-confrontation stage of escalation in which local citizens mobilize for and against the facility, national opposition groups are drawn into the conflict, and local business and government actors in addition to academia are neutralized (cf. Tables 1.2 and 1.3). After the conflict has moved through some decision-making process

and a decision on the facility has been obtained, the conflict moves into its aftermath stage. If escalation has continued to a point of inter-faction hostile antagonism during the preconfrontation stage, the aftermath will be characterized by an increase in antagonism and potentially extra-legal action. Otherwise, the conflict will disintegrate leaving its trace on the social structure of the community but eliciting no further action from local citizens. The columns of Table 4.1 distinguish communities with a high versus a low potential for conflict in the nuclear power issue as discussed in Chapter 2. As summarized in Table 2.1, communities with a high potential for conflict have implicit in their structure a polarized issue network. Such communities will be old, large, densely populated cities that are heterogeneous (in the sense of having clearly segregated economic and social elite groups) with a centralized political structure (in the sense of having a reform government). Different aspects of conflict resolution are relevant to the six different conflict situations in Table 4.1.

4.3 Principles

Abstracting the literature reviewed in the report to yet a higher level of generality, five broad principles for resolving community conflict in the nuclear power issue can be suggested. The conflict situations in which these principles are relevant are listed in each cell of Table 4.1. There are no principles listed for the aftermath stage in communities with low conflict potential (cell E) since the conflict should be resolved by usual political decision-making procedures in the community.

4.3.1 Avoid Situations with High Conflict Potential

Given the less than perfect prediction of conflict escalation and resolution in the social sciences, the optimum method of resolving conflict is to avoid it in the first place. In the preissue stage of conflict this involves selecting communities with a low potential for conflict over those with a high conflict potential. Note that consultations with local citizen "representatives" will not be an accurate method of distinguishing the two ideal typical communities (cf. pages 36-38). In the preconfrontation stage, the avoidance of conflict involves careful attention to the consequences of one's actions on the opposition perceptions and actions. Knowing the social parameters of conflict as given in Chapter 1 should sensitize each faction to the potential conflict eliciting consequences of their actions. As emphasized in White's (1977) analysis of the Arab-Israeli

conflict, much of the conflict is self-perpetuating as a result of both sides failing to recognize that much of the opposition perception and action is determined by their own actions. This first principle is predominantly a preissue stage activity except in the high conflict potential communities where it also should be a preconfrontation stage activity.

4.3.2 Facilitate the Mobilization of the Opposition

While this need not ameliorate conflict in all types of controversy it should help conflict resolution in the nuclear power issue in two manners. First, as discussed in Section 3.5, bringing together the various concerned parties in the nuclear power issue is essential to reaching a definitive settlement of the issue. Second, facilitating mobilization can correct deficiencies in a community's structure that are eliciting conflict. Recall from Chapter 2 that two features of a community's structure are particularly likely to elicit conflict over a nuclear facility: 1) the segregation of economic and social elite groups in a community; and 2) the separation of citizens from the individuals with political decision-making authority in a community. Facilitating the opposition's mobilization in a high conflict community would involve bringing together the economic and social elites to form local citizen discussion groups in conjunction with those individuals having decision-making authority. In this manner, facilitating the opposition's mobilization creates a support relation between opponents the absence of which is a primary determinant of conflict escalation. Thus, this second principle is predominantly a preconfrontation stage activity except for high conflict potential communities where it should also be a preissue stage activity.

4.3.3 Pursue a Nonpunitive Bargaining Strategy

The evidence reviewed in Chapter 3 consistently demonstrates high bargaining effectiveness--for both opponents--when they pursue a nonpunitive bargaining strategy. When confronting one's opponent, therefore, the optimum strategy is to; 1) respond to threats and attacks with defensive moves rather than counter-threats or counterattacks, 2) quickly reciprocate cooperative moves, and especially when bargaining is first initiated, 3) make cooperative moves characteristic of one's bargaining (without being overcooperative to the point of adopting a pacifist strategy). Further, demands should be structured over the course of bargaining so that the largest demands occur early. This allows greater flexibility in making concessions as the bargaining progresses. It is crucial that the opposition be

made to feel that they have some significant impact on one's bargaining behavior. This third principle is concerned with the preconflict stage of conflict, particularly with communities of high conflict potential.

4.3.4 Focus the Bargaining on a Few Concrete Questions

The evidence reviewed in Section 3.4 demonstrates that the generalization of the questions being debated between opponents only serves to inhibit conflict resolution. Points being debated should be concrete questions rather than abstract principles. Avoid tying questions being debated into "bigger" questions. This facilitates clear communication between opponents. Also, more than one but not too many concrete questions should be considered simultaneously. More than one question at a time should be considered so as to allow opponents flexibility in making concessions. Not too many questions at a time should be considered so as to keep the discussion within the limits of understanding. Three to five questions at a time seems reasonable. This fourth principle is concerned with the preconflict stage as was the third principle. Again, it is particularly important to adopt this principle in communities with high conflict potential since it is in such communities where suspicion will be high.

4.3.5 Use Third Parties to Handle Inter-Faction Antagonism

Where conflict has escalated to the point of direct antagonism between factions, the most efficient method of resolving the conflict is to bring in a trusted neutral actor as a third party to the conflict. The difficulty for either faction in controlling conflict when it reaches this level of escalation is discussed in Chapter 1 and the use of third parties is discussed in Section 3.6.2. The third party allows both factions to make concessions without appearing to have given in to the opposition. This fifth principle is by and large concerned with the aftermath stage of conflict in the sense that the usual decision-making procedures have failed to resolve the conflict. It is thus concerned with high conflict potential communities.

4.4 Summary

The purpose of this chapter has been to bring together the points raised earlier under some broad principles for resolving community conflict in the nuclear power issue. Five principles have been distilled from the preceding three chapters. The conflict situations in which each principle is most relevant have been presented in Table 4.1. Detailed discussion of each principle and conflict situation has been given in the first three chapters.

TABLE 4.1

IDEAL TYPICAL CONFLICT SITUATIONS
AND RELEVANT CONFLICT RESOLUTION PRINCIPLES*

Stage of Conflict Escalation	Community Potential for Conflict	
	Low	High
Preissue	A (1)	B (1,2)
Preconfrontation	C (2,3,4)	D (1,2,3,4)
Aftermath	E	F (5)

*Principles are given by number in parentheses.

CHAPTER FIVE

ANNOTATED BIBLIOGRAPHY

5.1 Introduction

This bibliography represents the bulk of the literature reviewed in order to write the preceding report. The bibliography represents a selection of literature relevant to the report in that dated and overlapping, repetitive work has been kept to a minimum except where particularly relevant to the priorities of the report. Keeping to a reasonable level of reliability, work that has not been refereed has been ignored. In other words, we have by and large ignored unpublished papers, papers presented at professional meetings, dissertations, etc. Also, edited collections of readings, while included here and cited in the report occasionally for particular papers they contain, are not annotated. We have reviewed basic work in four areas; conflict resolution, the nuclear power controversy, environmental pollution as it concerns community conflict, and community power in decision-making. We have ignored academic boundaries in obtaining the literature reviewed. Work is drawn from all the social sciences as they relate to the report's priorities.

5.2 Methodology Used to Generate the Bibliography

In order to generate the interdisciplinary literature referenced in this bibliography, three search processes have been employed; computer searches, reviews of key professional journals, and reviews of citations in key works.

Computer files on public affairs, environmental issues and pollution abstracts were searched for works on nuclear power, conflict, and community decision-making. Additionally, the SOCIAL SCIENCE CITATION INDEX file was searched for all work citing a set of early studies of community conflict and decision-making. These computerized searches insured that the report would be exposed to unusual and/or specialized sources of information relevant to the report.

At the same time that computer searches were being conducted, as well as after those searches were completed, professional journals which published works particularly relevant to the report were systematically reviewed beginning in

1965 to 1970 and continuing up through the present. This search insured that the report would have exhaustive coverage of the most relevant journals. The journals covered in this manner were; AMERICAN BEHAVIORAL SCIENTIST, AMERICAN INSTITUTE OF PLANNERS JOURNAL, AMERICAN JOURNAL OF SOCIOLOGY, AMERICAN POLITICAL SCIENCE REVIEW, AMERICAN SOCIOLOGICAL REVIEW, ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCES, CITY, COMMUNITY HEALTH, DAEDELUS, DESIGN & ENVIRONMENT, ENVIRONMENT & BEHAVIOR, JOURNAL OF CONFLICT RESOLUTION, JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT, JOURNAL OF ENVIRONMENTAL SYSTEMS, JOURNAL OF HUMAN ECOLOGY, JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, JOURNAL OF SOCIAL ISSUES, POLICY SCIENCES, PUBLIC ADMINISTRATION REVIEW, PUBLIC HEALTH REPORTS, PUBLIC INTEREST, SOCIAL PROBLEMS, SOCIAL FORCES, SOCIAL SCIENCE QUARTERLY, and URBAN AFFAIRS QUARTERLY. In order to fill in details on specific controversies where needed, the NEW YORK TIMES was reviewed.

Considerable work could be overlooked if the above two processes were the sole basis for locating literature. As a means of filling in the gaps left by the above two processes, a third search process was employed. The reference sections of those works deemed to be key works were searched so as to locate additional citations. This third process brought under our scrutiny a wide range of additional articles and monographs.

Together, the three search processes yielded a comprehensive literature on the topics addressed in the report.

5.3 Using the Bibliography

Since references are often mentioned in more than one section of the report, we decided against organizing the bibliography by subject matter. In the interest of simplicity, the bibliography is organized alphabetically by author's last name. References are numbered sequentially. The report cites references in two manners; 1) by entry number (e.g., a reference to (2) refers to the second entry in the bibliography), or 2) by standard social science format (e.g., Ebbin and Kasper (1974:22) refers to page twenty-two of the work published by Ebbin and Kasper in 1974). Where books are being referenced to make a particular point, page or chapter citations are given. Articles are listed here with journal name, volume number, and issue number of issue month. The report serves as a subject index for the bibliography.

5.4 References

1. Abell, P. 1977. "Many faces of power and liberty: revealed preference, autonomy, and teleological explanation." *SOCIOLOGY* 11(1).

2. Abelson, P. H. 1968. "Nuclear power--rosey optimism and harsh reality." *SCIENCE* 161(July).

This paper briefly chronicles rising difficulties in putting nuclear generating facilities "on-line." The author contends that improved design and quality control will surmount technical problems.

3. Abelson, R. P. et al. (eds.) 1968. *THEORIES OF COGNITIVE CONSISTENCY: A SOURCE-BOOK*. Chicago: Rand-McNally.

4. Abt Associates. 1971. *FACTORS AFFECTING POLLUTION REFERENDA*. Report 16110EXW in the Water Pollution Control Research Series, Environmental Protection Agency. Washington, D.C.: Government Printing Office.

Forty bond referenda for water pollution control projects were analyzed; twenty that passed and twenty that failed. The best predictor of whether or not a bond passed was the absence of opposition groups. Such groups were able to cast doubt in the mind of the undecided voter. In the absence of organized opposition, bonds were unlikely to fail. Other factors tending to lead to the defeat of bonds were; large numbers of criticisms raised during the campaign, increased taxes (as opposed to user surcharges) as the means of repaying the bond, high tax rate in the community, population growth, amount of money requested by the bond, low level of poverty in the community, and the existence of a pollution problem in the community.

5. Abudu, M. J. G., W. J. Raine, S. L. Burbeck and K. K. Davidson. 1972. "Black ghetto violence: a case study inquiry into the spatial pattern of four Los Angeles riot event-types." *SOCIAL PROBLEMS* 19(3).

6. Adam, R. 1975. "Interest-groups in American education." *COMPARATIVE EDUCATION* 11(2).

7. Adrian, C. R. 1968. "Decision costs in coalition formation." *AMERICAN POLITICAL SCIENCE REVIEW* 62(June).

Eight types of decision costs are distinguished in the paper. When these costs are summed, membership in the winning coalition can be predicted.

8. Agger, R. E., D. Goldrich, and B. E. Swanson. 1964. *THE RULERS AND THE RULED: POLITICAL POWER AND IMPORTANCE IN AMERICAN COMMUNITIES*. New York: John Wiley.

This book examines four communities over a five year period to determine the relationship between community power structures and "political regimes." Different patterns of influence were found in each community, and these patterns were altered over time. Included was a review of the existing community power literature and an appendix which specifies possible models for future research.

9. Aiken, M. 1969. "Community power and community mobilization." *ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE* 385(September).

This study reviewed thirty-one previous studies to determine the relation of community mobilization (measured as the level of citizen participation in four H.U.D. programs) to decentralized decision-making structures of community power. Significantly greater numbers participated in community decision-making where power was more diffused through the community.

10. _____. 1975. "Urban social-structure and political competition: comparative study of local politics in 4 European nations." URBAN AFFAIRS QUARTERLY 7(1).

11. Aiken, M., and R. Alford. 1970. "Community structure and innovation: the case of public housing." AMERICAN POLITICAL SCIENCE REVIEW 64(Sept.)

In this study the authors reject earlier models of community systems and offer an interorganizational model that emphasizes the structural relations that are conducive to policy innovation. The authors find support for the hypothesis that the greater the number of power centers and the greater the interface about organizations in the community, the higher the probability that coalition groups will form around innovative issue arenas.

13. Aiken, M. and P. E. Mott (eds.) 1970. THE STRUCTURE OF COMMUNITY POWER. New York: Random House.

14. Albrecht, S. L. 1976. "Legacy of the environmental movement." ENVIRONMENT AND BEHAVIOR 8(2).

This paper reviews the development of environmentalism as a social movement. The author discusses the various effects of this social movement on: the political structure, social changes in the society, corporate public relations, and individual life styles.

15. Alexandre, A. 1975. "Local politics and decision-making--hypothesis-generating case study." BRITISH JOURNAL OF POLITICAL SCIENCE 5(January).

16. Alexander, C. N., Jr. and H. G. Weil. 1969. "Players, persons, and purposes: situational meaning and the prisoner's dilemma game." SOCIOMETRY 32(2).

This experiment manipulated payoffs (points or pennies) and checklists of adjectives which described behavior (cooperative or competitive). As expected, the pennies-competitive condition induced more competitive subject behavior, and the points-cooperative condition induced cooperative behaviors. But certain interaction patterns became apparent that indicated changing meanings of the situation by condition suggesting that the experimenter was not truly "controlling" the experiment as assumed.

17. Alford, R. R. 1968. "Sources of local political involvement." AMERICAN POLITICAL SCIENCE REVIEW 62(December).

Examining who participates in the decision-making process, it was found that social status and level of organizational activity best predicted participation. Related less strongly were sense of civic duty and political efficacy, or political alienation and environment. No effect on participation was found by examining length of residence, geographic mobility, or strength of subjective attachment to the community.

18. _____. 1969. BUREAUCRACY AND PARTICIPATION: POLITICAL CULTURES IN FOUR WISCONSIN CITIES. Chicago: Rand McNally.

This research examines political decision-making structures and levels of public participation. Singled out in the analysis are the effects of the social and economic structures and the types of public policies output. Where public participation is high and the decision-making structure is highly bureaucratized, greater numbers of professional public service agents and greater levels of federal and state support can be predicted.

19. Alford, R. R. and R. Friedland. 1975. "Political participation and public policy." ANNUAL REVIEW OF SOCIOLOGY VI. Palo Alto: Annual Reviews.

20. Alford, R. R. and E. C. Lee. 1968. "Voting turnout in American cities." AMERICAN POLITICAL SCIENCE REVIEW 62(September).

21. Allen, V. L. and D. A. Wilder. 1975. "Categorization, belief similarity, and intergroup discrimination." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 32(6).

In an experiment involving the distribution of rewards between categorized ingroups and outgroups, it was consistently found that the ingroup was favored in the distribution of rewards and even more so if the members of the ingroup held similar beliefs. It was concluded that even arbitrarily formed categories lead to intergroup discrimination.

22. Almy, T. A. 1973. "Residential location and electoral cohesion--pattern of urban political conflict." AMERICAN POLITICAL SCIENCE Review 67(3).

This research employs the ecological approach to interpret the relation between residential location and electoral cohesion. Examining referendum outcomes in eighteen cities, the author found that: residential location significantly influenced cohesion within social-classes, and disagreements between social classes. In addition, interclass disagreements were related more to the geographical distribution of class groups and to class solidarity.

23. Alston, R. M., and D. M. Freeman. 1975. "The natural resources decision-maker as political and economic man: toward a synthesis." JOURNAL OF ENVIRONMENTAL MANAGEMENT 3(3).

24. Althoff, P., and W. H. Grieg. 1974. "Environmental pollution control policy-making--an analysis of elite perceptions and preferences." ENVIRONMENT AND BEHAVIOR 6(3).

The present research considers the roles of industrialists, elected public officials, and appointed public officials in developing environmental policy. Each group was sampled and interviewed, and findings indicate general agreement that the locus for control over policy should be placed at the state level. Significant differences were found between groups in preferences and perceptions of solutions for pollution control.

25. _____. 1977. "Environmental pollution control--two views from the general population." ENVIRONMENT AND BEHAVIOR 9(3).

The article reports the results of an attitude survey in Kansas. The data indicated respondents were concerned with environmental issues, but were not trusting of industrial/governmental capacities to solve pollution. While only moderately dedicated to protecting the environment, respondents indicated general willingness to a personal commitment to take action on pollution problems.

26. American City. 1969. "Standardization will end nuclear energy growth." AMERICAN CITY 84(July).

27. Amir, S. 1972. "Highway location and public opposition." ENVIRONMENT AND BEHAVIOR 4(4).

This is a case study of the emergence of an organized opposition group who succeeded in stopping the construction of the Hudson River Expressway. A Citizens' Committee was formed as a "spontaneous" reaction to passage of enabling legislation. Opponents filed suit and permanent injunction was issued. The issue was resolved when the U. S. Supreme Court refused to consider the case.

28. _____. 1974. "Group issue analysis of a planning controversy." *TRAFFIC QUARTERLY* 28(2).

29. Anderson, R. O. 1973. "Energy and environment need not be in conflict." *CATALYST FOR ENVIRONMENTAL QUALITY* 3(2).

30. Anderson, W. A. 1973. "The reorganization of protest." *AMERICAN BEHAVIORAL SCIENTIST* 16(3).

This paper reports on the development of ethnic organizations formed out of the urban disturbances of the 1960's. A typology of groups and the functions served by these organizations are presented. The successes and failures of these group-types are evaluated.

31. Antunes, G., and C. M. Gaitz. 1975. "Ethnicity and participation: a study of Mexican-Americans, blacks, and whites." *AMERICAN JOURNAL OF SOCIOLOGY* 80(5).

This research found support for the hypothesis that differential rates of community participation by ethnic groupings are explicable in terms of the mechanism of compensation (i.e., seen as a response to racism and perceived powerlessness).

32. Arbuthnot, J. 1977. "The roles of attitudinal and personality variables in the prediction of environmental behavior and knowledge." *ENVIRONMENT AND BEHAVIOR* 9(2).

This study seeks to identify the level of knowledge and concern about pollution issues. Surveying users of a recycling center, conservative church members, and students, the data indicated that education, knowledge and positive attitudes towards the environment predicted recycling behavior, whereas environmental knowledge was predicted by personality, exposure to books, and positive attitudes. The author concludes that public commitment can be increased by increasing educational information dissemination programs.

33. Armagnac, A. P. 1969. "World's biggest atom power plant; Brown's ferry nuclear plant." *POPULAR SCIENCE* 195(September).

34. Arnold, D. E. et al. 1968. "Cornell scientists see thermal pollution of Cayuga Lake by planned nuclear power plant." *THE CONSERVATIONIST* 23 (August-September).

This discussion examines the effects of thermal pollution on the eutrophication (aging) process on Cayuga Lake. The authors conclude that design modifications--such as cooling towers--are required.

35. Arnstein, S. R. 1969. "A ladder of citizen participation." *AMERICAN INSTITUTE OF PLANNERS JOURNAL* 35(4).

The author presented a typology of citizen participation designed to be used in identifying the actual impact of the public's participation in the decision-making process. Of eight hierarchical levels of power, the two lowest--manipulation and therapy, involve nonparticipation. The middle three: informing, consultation, and placation represent varying degrees of tokenism. Only at the top three levels: partnership, delocated power, and citizen control, do citizens have the opportunity to directly exercise their power.

36. Ashby, E. 1976. "Towards an environmental ethic." NATURE 262(5564).

This paper sees the cost-benefit ratio for determination of Environmental Impact Statements to be biased towards quantifiable concerns at the expense of non-quantifiable values and aesthetic concerns.

37. Ast, D. B. 1974. "History of water fluoridation and its current status in world." PUBLIC HEALTH REPORTS 3(4).

38. Axelrod, S. and J. G. May. 1968. "Effects of increased reward on the two-person non-zero-sum game." PSYCHOLOGICAL REPORTS 23(1).

This experiment found an insignificant relation between the amount of money as payoffs and the level of collaborative responses of the subjects.

39. Azar, E. E. 1972. "Conflict escalation and conflict reduction in an international crisis: Suez, 1956." JOURNAL OF CONFLICT RESOLUTION 16(2).

This analysis posits examination of crises as dynamic interactions among actors engaged in conflict. An "upper critical threshold" was identified beyond which conflict can no longer be contained. Each party to conflict viewed the dynamic differently; that is, one side to the conflict perceived the crisis at the threshold, the other party construed the interaction as still contained by normal relations.

40. Babcock, R. F. 1975. "On land use policy." AMERICAN SOCIETY PLANNING OFFICIAL MAGAZINE 41(5).

In this discussion, the author notes that the escalation of public concern over environmentalism has led to increased reliance on technical experts by public administrators and courts. It was recommended that arbitration panels composed of experts review impact statements and translate the jargon for more informal decision making.

41. Bachrach, P., and M. S. Baratz. 1962. "The two faces of power." AMERICAN POLITICAL SCIENCE REVIEW 56(December).

This paper addresses the failure of Dahl's "pluralist approach" to differentiate between critical and non-critical decisions. The authors argued that critical decisions involving changes in the "rules of the game" were not processed in the same manner as those decisions that leaders construed as being "safe." They concluded that a revised model of decision-making must be able to account for not only the overt processes but also the covert manipulations of decisions or threatening issues.

42. _____. 1963. "Decision and non-decisions: an analytical framework." AMERICAN POLITICAL SCIENCE REVIEW 57(September).

This research addresses the failure of models on decision-making processes to consider non-decisions as a critical determinant in the process. The authors argue that those in power are in a position to anticipate, adjust, accommodate, and thus, prevent raising issues injurious to their position. While the authors agree that the model is subject to analytical treatment, they acknowledge the difficulties in going beyond a post hoc framework.

43. _____. 1970. POWER AND POVERTY: THEORY AND PRACTICE. New York: Oxford University Press.

This work presents a model of the political process concentrating on the conflict over reallocation of values. Prior to the period of urban racial disorders, power was characterized by nondecisions which effectively limited minority input. Following that period, federal intervention caused a reallocation of power resources that led to significant institutional and ideological changes.

44. Badr, M. M., and D. D. Badger. 1972. "Economics of public and private sharing of water pollution abatement costs." *ROCKY MOUNTAIN SOCIAL SCIENCE JOURNAL* 9(3).

This paper discusses who should pay for environmental clean-up costs. Under macroeconomic theory, that sector producing the pollution should bear the primary financial burden. In contrast, microeconomic theory suggests that the burden be split such that the public and the private sector must pay for abatement through taxation, but that the private sector seek to pass these costs on through higher prices to consumers.

45. Bain, H., N. Howard, T. L. Saaty. 1971. "Using the analysis of options technique to analyze a community conflict." *JOURNAL OF CONFLICT RESOLUTION* 15(2).

This paper presents a theory of conflict resolution through analysis of options. By this formulation, an option is stable for all parties in interaction when each party's actual position is such that any further improvement of this position would yield sanctions from other players. Applying this framework presented to a historical case, a set of options were identified that would allow various compromises. The implications of using this same theoretic model in other contexts were discussed.

46. Baker, K. 1974. "Experimental analysis of third-party justice behavior." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 30(2).

This experiment demonstrated that third parties function to reduce inequities or maintain equity, thus insuring fair exchange and continued group functioning. Equity levels decreased as the costs to the third party increased. When one party in conflict was inequitably disadvantaged by the other, the injured party received greater favor by the third party.

47. Baldwin, D. A. 1971. "The costs of power." *JOURNAL OF CONFLICT RESOLUTION* 15(2).

This paper examines power in terms of the costs of possible alternatives foregone when a decision is made. The research objective involves identification of the influence techniques employed and opportunity costs. A discussion developed the conditions for maximizing power and minimizing costs.

48. Banfield, E. C. 1961. *POLITICAL INFLUENCE*. Glencoe: The Free Press.

The book focuses on the decision-making structure of Chicago by analyzing issue outcomes. Power is exercised by the mayor and the Democratic party apparatus. Action on issues was shown to take place when political risks were minimized. The patterns of influence were not stable and continuous, but rather varied according to the issue. The author argues that this is evidence of the lack of a ruling elite.

49. _____. 1965. *BIG CITY POLITICS*. New York: Random House.

Examining political structure in nine large cities, the author identified six dimensions around which power is organized. The search questions involves: determination of the relations between interest groups and influentials; characteristics of the economy and populations; types of governmental organization; operations of these organizations; processes of issue determination; and methods of electing officials.

50. Banfield, E. C. and J. Q. Wilson. 1963. *CITY POLITICS*. Cambridge: Harvard University Press.

This monograph is a classic description of the political aspects of communities. The authors distinguish six basic political forms of governance; the machine, factions and factional alliances, reform, nonpartisanship, the council-manager form, and master planning. They discuss the major roles available to

individuals participating in the political process (city employees, voters, civic leadership, businessmen, organized labor, negroes, and the press), and the manner in which these roles actually work. A basic idea initiated in this monograph is what came to be termed the "ethos theory" that two citizen approaches to politics should be distinguished; the interest of the whole (associated with middle-class Anglo-Saxon Protestants) and the interest of personal loyalties (associated with working-class individuals).

51. Baranowski, T. A., and D. A. Summers. 1972. "Perception of responses alternatives in a prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 21(1).

This experiment found that if subjects perceived alternatives as either demanding cooperation or noncooperation, then overall cooperation was high and reciprocated cooperation was high.

52. Barker, M. L. 1974. "Information and complexity--the conceptualization of air pollution by specialist groups." ENVIRONMENT AND BEHAVIOR 6(3).

This research assesses the competence of professionals and specialists for evaluating environmental policy. It is concluded that lack of interdisciplinary cooperation does not stem from differences in scientific jargon between field of specialization, but rather results from differences in the "mode of thought."

53. Barrett, E. A., and A. J. Cawley. 1972. "Dayton school system--case study of community response to levy failure." URBAN EDUCATION 7(3).

54. Bartunek, J. M., A. A. Benton, and C. B. Keys. 1975. "Third party intervention and the bargaining behavior of group representatives." JOURNAL OF CONFLICT RESOLUTION 19(3).

This study reports on the experimental findings on the effects of different strategies employed by third party negotiators. Principal measures of types are content, process, and passive behavioral conditions. Profit in each condition was operationalized as a function of the third party being in a position of high or low accountability.

55. Bass, B. M. 1966. "Effects on the subsequent performance of negotiators of studying issue or planning strategies alone or in groups." PSYCHONOMIC MONOGRAPHS 80(Whole No. 614).

This study examines how prenegotiation provides information for subjects that structures the behavior later on and provides for resolution of conflicts in reduced negotiations times by reducing the negative effects of group commitments.

56. Baumgartner, T., W. Bucker, and T. Burns. 1975. "Relational control--the human structuring of cooperation and conflict." JOURNAL OF CONFLICT RESOLUTION 19(3).

This analysis examines the ways in which an agent can intercede to generate conflict or cooperation between two actors. The range of strategies influencing parties to potential conflict include controlling interaction, organizational access, costs and rewards, and manipulating culture and ideology. The agent as third party exercises relational control by divide and rule tactics or by tactics which will facilitate cooperation.

57. Baxter, G. W., Jr. 1973. "Prejudiced liberals?" JOURNAL OF CONFLICT RESOLUTION 17(1).

Experiment using prisoner's dilemma game shows that cooperative moves decrease with competitive opponents of the same race as other player.

58. Bazell, R. J. 1971. "Reaction on morningside heights: denial of reactor permit." SCIENCE 174(November 5).

59. Beals, A. R., and B. J. Siegel. 1966. DIVISIVENESS AND SOCIAL CONFLICT. Stanford: Stanford University Press.

This is an analysis of conflict in two rural communities, one in New Mexico, the other in India, based on the idea of factional dispute, i.e., unexpected conflicts between social organizations. The authors discuss the manner in which factional disputes arise in the two communities due to internal strains (frustrated systematic expectations by members of a system) and external stresses (changes in a system's environment that pose new problems for the system's members).

60. Behrens, C. 1967. "Permit process a bottleneck." SCIENCE NEWS 92(16).

This article is critical of delays in permit processing due to time spent reassuring the public that a nuclear power reactor is safe. Industry proponents argue that with standardized designs, individual review time should be minimized. But an AEC spokesman indicated that much of the delay is caused by hastily prepared permit applications submitted by the industry.

61. Benjamin, R. A. 1975. "Images of conflict resolution and social control: American and Japanese attitudes toward the adversary system." JOURNAL OF CONFLICT RESOLUTION 19(1).

Utilizing a comparative approach, the author seeks to account for value differences regarding the role of defense counsel for the respective judicial systems. The Japanese respondents viewed the function of defense counsel in an administrative "counsel as coach" role whereas American respondents supported the due process "protect the client" role.

62. Benton, A. A. 1971. "Productivity, distributive justice and bargaining among children." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 18(1).

This experiment tested the socialization experience of the sexes and found that where more boys sought self-serving allocations, girls favored more equal allocations and agreed to equitable solutions more often than boys.

63. Benton, A. A., E. R. Gelber, H. H. Kelley, and B. A. Liebling. 1969. "Reactions to various degrees of deceit in a mixed-motive relationship." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 12(1).

This study found that beyond a certain point of deceit, doubting no longer increases. The author concludes the best strategy is perfect honesty which eliminates costly doubting.

64. Benton, A. A., and H. H. Kelley, and B. Liebling. 1972. "Effects of extremity of offers and concession rate on the outcomes of bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 24(1).

The central finding in this experiment was that the most effective strategy was that extreme initial demands induced extreme counter-demands. Extreme initial demands followed by concessions was the most effective negotiation strategy for securing monetary gains.

65. Berger, J. J. 1976. "NUCLEAR POWER: THE UNVIABLE OPTION. Palo Alto: Ramparts Press.

66. Berkowitz, N. H. 1968. "Alternative measure of authoritarianism, response sets, and prediction in a two-person game." JOURNAL OF SOCIAL PSYCHOLOGY 74 (Second half).

This experiment found that a subject's authoritarianism scores were positively associated with acquiescence

67. Berkowitz, L. 1972. "Frustration, comparisons, and other sources of emotion arousal as contributors to social unrest." JOURNAL OF SOCIAL ISSUES 28(1).

This essay draws on selected research findings to demonstrate support for conceptualizing social unrest as a form of response to the stimulus of social comparisons. This frustration-aggression hypothesis suggests that in the presence of situational cues, certain prior learning, and lack of perceived constraints against aggression, a person who feels deprived may act impulsively rather than toward goal-directed violence.

68. Bernstein, S. J., R. Ferber, A. I. Bernstein. 1973. "The problems and pitfalls of quantitative methods in urban analysis." POLICY SCIENCES 4(1).

This essay describes the nature of the problems associated with quantitative analysis of urban models. These problems are identified as: technical difficulties in conception formulations and measurement criteria; the administrative dilemma involving interpreting the findings; selecting programs from options and balancing these against political realities; and finally the difficulty of translating the findings to a public distrustful of "numbers from city hall."

69. Berry, B. J. L. (ed.) 1972. CITY CLASSIFICATION HANDBOOK. New York: Wiley Interscience.

70. Berry, D., and G. Steiker. 1974. "The concept of justice in regional planning; justice as fairness." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 40(6).

This research determined that consideration should be given to the distributional losses that are attendant in policy choices. The author presented a strategy for measuring costs of alternative plans. Focusing on the claims of parties in conflict and on the ability to measure claims in commensurate units, and on the objectivity of the decision-makers, two approaches are identified. Under the "maximum" approach, the costs to each party are identified with considerations of fairness leading to decisions which favor the poorer or less powerful unit. In situations where competing claims are measurable in commensurate units, fairness would be indicated by calculable division of costs borne by each party.

71. Betts, C. A. 1966. "Power to burn: Peach Bottom, Pennsylvania." SCIENCE NEWS 89(June 4).

72. Bibbo, P.P., M. M. Peacos. 1976. "Hot side, precipitators for cat crackers ease waste heat recovery, pollution abatement conflict." COMBUSTION 47(9).

73. Bixenstine, V. E., and J. Douglas. 1967. "Effects of psychopathology on group consensus and cooperative choice in a six-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 5(1).

This experiment found that pathology-free subjects communicated more and cooperated more than pathology-indicative subjects who behaved similarly to a control group not allowed to communicate.

74. Bixenstine, V. E., and J. W. Gahelein. 1971. "Strategies of 'real' others in eliciting cooperative choice in a prisoner's dilemma game." JOURNAL OF CONFLICT RESOLUTION 15(2).

This experiment found that the "others" slow to cooperate, slow to compete strategy produced very high cooperative levels in subjects compared to four other strategies.

75. Bixenstine, V. E. and E. F. O'Reilley. 1966. "Money versus electric shock as payoff in a prisoner's dilemma game." *PSYCHOLOGICAL RECORD* 16(3).

This experiment found no differences between use of electric shocks or money payoffs. Males were significantly more cooperative than females, suggesting women are not as tolerant to shock and retaliate into competitive behaviors.

76. Black, G. S. 1974. "Conflict in the community: a theory of the effects of community size." *AMERICAN POLITICAL SCIENCE REVIEW* 68(3).

This research seeks to document the hypothesis that the size of a community affects the character of conflict within a community. Specifically, small communities or communities with decentralized governmental units were shown to encourage public participation, and, at the same time, this participation was shown to promote severe conflict. These findings support a rationalistic model of analysis over the Simmel/Coser model of intra-group conflict.

77. Blake, L. A. and J. S. Mouton. a:1961. "Loyalty of representative to ingroup positions during intergroup competition." *SOCIOMETRY* 24(2).

This study found that where representatives of two groups interact in bargaining negotiations in which compromise is seen as defeat by members of the representative's group, then representatives will refuse compromise and accept deadlock.

78. _____. b:1961. "Comprehension of own and of outgroup positions under intergroup competition." *JOURNAL OF CONFLICT RESOLUTION* 5(3).

79. Blanchard, F. A., L. Adelman, and S. W. Cook. 1975. "Effect of group success and failure upon interpersonal attraction in cooperating inter-racial groups." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 31(6).

This experiment found that group success was significantly related to greater intra-group attraction. Race was not seen as affecting this relation.

80. Blanchard, F. A., R. H. Weigel, and S. W. Cook. 1975. "The effect of relative competence of group members upon interpersonal attraction in cooperating inter-racial groups." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 32(3).

This experiment found that competence was associated with attraction. Less competent blacks were seen as less attractive than low competent whites.

81. Blumenthal, R. 1975. "In tourist trade, no sign is a bad sign." *NEW YORK TIMES* (May 23).

82. Boffey, P. M. 1969. "Radioactive pollution: Minnesota finds AEC standards too lax." *SCIENCE* 163(March 7).

83. Bonacich, P., G. H. Shure, J. P. Kahan, R. J. Meeker. 1976. "Cooperation and group size in the N-person prisoner's dilemma." *JOURNAL OF CONFLICT RESOLUTION* 20(4).

The present experimental analysis focuses on the relation of group size and cooperation necessary to receive "public goods." The intuitive expectation of a negative relation was shown to be false. Intervening conditions, for example, the number of noncooperators, can influence payoff success.

84. Bonjean, C. M. 1963. "Community leadership: a case study and conceptual refinement." *AMERICAN JOURNAL OF SOCIOLOGY* 68(May).

This research utilizes a reputational approach to the study of community power. Forty-five influentials were interviewed and sixteen leaders identified. A typology of leadership was developed that included the "Visible Leaders" as those individuals identified by both "knowledgeables" in the community and other leaders; "Concealed Leaders" were identified by leaders but not "knowledgeables"; and "Symbolic Leaders" were identified by "knowledgeables" but not leaders. In this case study one central

leader coordinated the action of the other leaders.

85. _____. 1964. "Class status and power reputation." *SOCIOLOGY AND SOCIAL RESEARCH* 49(October).

In this study, the author's earlier (1963) typology of leaders is utilized to determine the relation between visibility and power against status and class. It was concluded that the visible leaders retained high status and class ratings plus power; concealed leaders possessed power but were low on class or status; and symbolic leaders were not necessarily capable of exercising power but their high status or class provided a perception.

86. Bonjean, C. M., H. L. Browning, and L. F. Carter. 1969. "Toward comparative community research: a factorial analysis of United States counties." *SOCIOLOGICAL QUARTERLY* 10(Spring).

This article develops an analytical framework for identifying important community characteristics. Using the universe of U.S. counties for a data base, eight primary factors were found out of seventy-nine variables. These factors distinguished counties in terms of variations by "sociometric status."

87. Bonjean, C. M. and L. F. Carter. 1965. "Legitimacy and visibility: leadership structures related to four community systems." *PACIFIC SOCIOLOGICAL REVIEW* 8(Spring).

This study employs the reputational technique and the comparative approach to the study of community power. Examining the responses of "knowledgeables" in four communities, it was found that power structures varied in terms of visibility and legitimacy. The community characteristics that predicted a covert power structure included low organizations, differentiation and high rates of population growth, low-income groups, and dependent groups.

88. Bonjean, C. M., T. N. Clark, and R. L. Lineberry (eds.). 1971. *COMMUNITY POLITICS*. New York: Free Press.

89. Bonjean, C. M. and R. L. Lineberry. 1970. "The urbanization-party competition hypothesis: a comparison of all United States counties." *JOURNAL OF POLITICS* 32(2).

Using data on 3101 counties, the following hypothesis is tested: urbanization of community involves changes in the community conducive to the existence of competitive party systems. The hypothesis is rejected for party competition in the 1960 presidential election.

90. Bonoma, T. V. and T. W. Milburn. 1977. "Social conflict: another look." *JOURNAL OF SOCIAL ISSUES* 33(1).

This is an introduction to a special issue on social conflict. The purpose of the issue is to reassess where conflict research has been and comment on where it may be going in the future given the social issues of the 1970's.

91. Booth, D. A., and C. R. Adrian. 1963. "Election and community power." *JOURNAL OF POLITICS* 25(February).

This paper reports a case study on a midwestern manufacturing community with a non-partisan, decentralized power structure dominated by a coalition of business, industrial and financial leaders plus a group of lawyers. The analysis focused on the impact of a newcomer (a disc jockey) who exploited an issue during an election that challenged the existing power structure. The author concludes that relations of power do not display the solidarity and stability usually predicted.

92. Borton, T. E., K. P. Warner. 1971. "Involving citizens in water resources planning--the communication-participation experiment in the Susquehanna River Basin." ENVIRONMENT AND BEHAVIOR 3(2).

This paper identifies community participation techniques and sets forth a framework for evaluating citizen input into water resources planning. The findings support the necessity for educating the public with adequate information and adequate opportunities for input into the decision-making process.

93. Boulding, K. E. 1962. "CONFLICT AND DEFENSE. New York: Harper & Row.

Although primarily concerned with international conflict, this well-known monograph contains ideas relevant for conflict in general. Conflict is discussed in game theoretic terms where the actors in conflict can be individuals, groups and organizations. There is a strong emphasis on the appropriate parameters for describing conflict in general rather than hypotheses concerning particular substantive types of conflicts.

94. _____. 1977. "The power of nonconflict." JOURNAL OF SOCIAL ISSUES 33(1).

Addressing the problem of violence reduction, the author argues for the expansion of the dialectic notion of violence--non-violence into a trialetic that includes nonconflict. This later form would not be useful in two types of violence: malevolent cult violence; or the violence of extermination. But where violence is a recognizable potential as in a threatening situation, non-conflict can result from habitualized behaviors. In this respect, conflict becomes a profitless outcome, particularly where established reciprocated trade relations and other peaceful activities are imprinted into the system of interactions.

95. Bouma, D. H. 1970. "The issue-analysis approach to community power: a case study of realtors in Kalamazoo." AMERICAN JOURNAL OF ECONOMICS AND SOCIOLOGY 29(July).

This case study of the decision-making process utilizes survey data to relate the impact of groups and organizations on referenda outcomes. The important finding is that the leadership determined through the reputational approach was not able to secure passage of the referendum and that one group could successfully challenge the power of the perceived community leaders.

96. Boyd, W. L. 1976. "Community status and conflict in suburban school politics." SAGE PROFESSIONAL PAPER IN AMERICAN POLITICS SERIES 3(0402).

97. Boyle, R. H. 1969. "Nukes are in hot water; thermal pollution caused by hot water from nuclear plants." SPORTS ILLUSTRATED 30(January 20).

In this essay, the author is critical of the AEC and the nuclear power industry's failure to accept thermal "enrichment" as thermal pollution. Harmful effects of heated discharged water are detailed. Additional criticism is leveled at the AEC, governmental legislature and regulatory bodies for restricting public participation in the decision-making processes.

98. _____. 1971. "Nuclear power--letters." NEW YORK TIMES MAGAZINE (March 21).

This letter is critical of the Lapp article for underestimating the effects of thermal pollution on wildlife. The writer quotes one observer who saw "thousands upon thousands" of dying fish discharged from the cooling pipe of the Hudson River Indian Point No. 1 nuclear generating facility. Lapp in his retort issues a qualified apology insisting that recent legislation will allow strict enforcement standards to protect waterways.

99. Braver, S. L. and B. Barnett. 1976. "Effects of modeling on cooperation in a prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(2).

This experiment found that modeling affected the subsequent behaviors of subjects. After observing either a cooperative or competitive game, higher levels of cooperation were induced by the viewing subjects. The highest levels of cooperation were found in those subjects who played against an unfamiliar other after both were shown a competitive game.

100. Brehm, J. W. and M. Mann. 1975. "Effect of importance of freedom and attraction to group members on influence produced by group pressures." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(5).

This experiment found public and private influence was greatest when the importance of freedom was low and the attraction of group members was high. High importance of freedom and high group attraction had a "boomerang" effect on private opinions and a lesser effect on public opinion.

101. Breton, R. 1972. "Socio-political dynamics of October events." CANADIAN REVIEW OF SOCIOLOGY AND ANTHROPOLOGY 9(1).

102. Brickman, P. (ed.). 1974. "SOCIAL CONFLICT: READINGS IN ROLE STRUCTURES AND CONFLICT RELATIONSHIPS. Lexington: D. C. Heath.

103. Bridgeland, W. 1975. "War on poverty program--its conflicts and collapse." URBAN LIFE 4(1).

This paper examines the demise of the War on Poverty. Failure was blamed on the lack of clear-cut goals and ineffective communication and coordination between the E.O.C. and the O.E.O.

104. Bridgeland, W. M. and A. J. Sofranko. 1975. "Community structure and issue specific influences: community mobilization over environmental quality." URBAN AFFAIRS QUARTERLY 11(2).

In this research the authors distinguish between a community structure perspective and the more issue-specific factors approach (such as the centrality of the issue to the community) to the study of community mobilization. The data indicated that neither approach sufficiently explained variations in mobilization.

105. Brief, A. P., A. L. Delbrecq, A. C. Filley, and G. P. Huber. 1976. "Elite structure and attitudes--empirical analysis of adoption behavior." ADMINISTRATION AND SOCIETY 8(2).

106. Briggs, M. J., and M. L. Moss. 1973. "Community decision-making and energy exploration: the Pacific Palisades conflict." UNIVERSITY SOUTHERN CALIFORNIA SEA GRANT REPORT USC-SG 7(December).

107. Brinton, C. 1965. "THE ANATOMY OF REVOLUTION. New York: Vintage Books.

This book is a classic comparative analysis of four revolutions: the English, American, French and Russian. Of particular interest here are the discussions of the types of individuals involved in a revolution and the transfer of control from moderates to extremists in a revolution.

108. Brown, B. R. 1968. "The effects of need to maintain face on interpersonal bargaining." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 4(1).

This experiment found that the greater a subject was humiliated, the greater the severity of retaliation, even where retaliation involved sacrificing outcomes.

109. _____. 1970. "Face-saving following experimentally induced embarrassment." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 6(3).

This experiment found that people were more likely to engage in face-saving behavior than accept embarrassment, even where costs had to be incurred.

110. Brown, B. R. and H. Garland. 1971. "The effects of incompetency, audience, acquaintanceship, and anticipated evaluative feedback on face-saving behavior." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 7(5).

In one experiment, it was found that the greater the incompetency, the more efforts at face saving. In a second experiment holding incompetency constant, it was found that close friends present increased face-saving efforts.

111. Budowski, G. 1976. "Tourism and environmental conservation: conflict, coexistence, or symbiosis?" ENVIRONMENT AND CONSERVATION 3(1).

112. Bullock, C. S. and H. R. Rodgers. 1976. "Coercion to compliance--southern school districts and school desegregation guidelines." JOURNAL OF POLIICS 38(4).

This research indicates that coercion was greatest in those school districts where the costs of desegregating were the highest and the rewards lowest. Other important predictors of the level of coercion required to extract compliance were the proportion of blacks in the community and the preferences of decision makers.

113. Burden, W. D. and H. Foster. 1969. "Those atomic power plants." LIVING WILDERNESS 33(Spring).

114. Burnham, D. 1974. "AEC files show effort to conceal safety perils." NEW YORK TIMES (November 10).

115. Burt, R. S. 1976. "Positions in networks." SOCIAL FORCES 55(1).

116. _____. A:1977. "Positions in multiple network systems, part one: a general conception of stratification and prestige in a system of actors cast as a social topology." SOCIAL FORCES 56(1).

Extending the conception of positions in networks, (Burt, 1976) to the case of a multiple network system, network analysis is reviewed and used to cast a general conception of stratification and prestige in a system of actors. The status/role-set duality is preserved by defining these concepts as features of positions occupied by actors. A logical isomorphism is developed between unobserved variables in structural equation models and jointly occupied statuses in stratification models.

117, _____. b:1977. "Positions in multiple network systems, part two: stratification and prestige among elite decision-makers in the community of Altnestadt." SOCIAL FORCES 56(2).

The conception of stratification and prestige given in Burt (1977a) is used to describe the form and content of stratification among elites in a West German community. Also described is the manner in which the possession of resources by the elite is associated with elite prestige.

118. _____. c:1977. "power in a social topology." SOCIAL SCIENCE RESEARCH 6(1).

Recent developments in network analysis are used to algebraically bring together three aspects of being powerful; the bases of power as resource possession, the manifestations of power as the structure of influence relations among actors in a system, and the processes of power as the methods by which actors transform

the possession of resources into influence. Three models are used to describe the distribution of power among a system of community elites and compared in terms of each models' ability to predict the extent to which each elite is able to determine the outcome of issues that have confronted the community. Predicting seventy percent of elite differences in ability to determine issue outcomes, the best model of power is that using exchange relations among elites as the process by which possession of resources is transformed into influence.

119. Burton, J. W. 1969. CONFLICT AND COMMUNICATION. New York: Free Press.

This monograph describes a method of dealing with conflict through the use of "controlled communication" and describes one illustrative application of the method to the interactions of representatives of three countries. The method of controlled communication is based on the hypothesis that conflicts of interest are subjective and that experience and knowledge change interest thereby changing relations between opponents. The purpose of the method is to eliminate misperceptions that opponents have of one another by introducing relevant theoretical and empirical knowledge. Although no bargaining occurs, preconditions of agreement can be established. In the course of the example application, it was found that the fact of the conflict became less prominent in the discussions as the problem to be solved became more clearly defined. Scholars, as third parties in the method, were useful as sources of information and as a method of allowing opponents to distance themselves from their conflict so as to view it more objectively. Scholars were not useful as third parties when they sought to interpret or explain the communication between opponents.

120. Business Week. 1968. "Atom power plant in hot water: Florida Power and Light's Biscayne Bay." BUSINESS WEEK (June 29).

121. _____. A:1969. "GE's nuclear grant warms up: Oyster Creek Plant, Tome's River, New Jersey." BUSINESS WEEK (May 17).

122. _____. b:1969. "AEC goes public on nuclear safety." BUSINESS WEEK (September 20).

Reporting on the first of a series of AEC hearings on nuclear safety, this article notes that opponents to construction have assembled sophisticated technical data that raises questions about the safety level of current radiation emission standards, and about which there is no scientific consensus.

123. _____. A:1970. "Con Ed loses its nuclear punch." BUSINESS WEEK (July 4).

This article reports on the shutting down of Consolidated Edison's reactor due to mechanical difficulties. The article notes that environmental groups have been critical of the plant's operation and that the N. Y. State Attorney General has filed suit to cease operations due to large fish kills on the Hudson River.

124. _____. b:1970. "Bottleneck for the nuclear genie." BUSINESS WEEK (December 5).

125. _____. a:1971. "Nuclear power loses a battle in court." BUSINESS WEEK (July 31).

This reports on the decision of the U. S. Court of Appeals to uphold environmentalist claims that the construction of the nuclear power plant at Calvert Cliffs, Maryland, should be halted for consideration of environmental impact. The court found that AEC regulations formed from the 1969 National Environmental Policy Act did not provide fulfillment of the Act's requirements for consideration at each stage of the licensing process.

126. _____. 1976. "The states get super tough." BUSINESS WEEK (March 8).

127. Caldwell, L. K. 1968 . "Environmental policy: new directions in federal action." ENVIRONMENTAL POLICY (July/August).

This symposium argues that public responsibility must be incorporated into public law if the variability and quality of the environment is to be maintained. Coordination of national goals and policies may necessitate creation of super departmental agencies. The authors point out that a concentrated research effort is required to adequately develop technical methods and identify alternatives in planning and policy.

128. _____. 1974. "Environmental policy as a catalyst of institutional change." AMERICAN BEHAVIORAL SCIENTIST 17(5).

This thesis concentrates on environmental policy as an instrument for institutional change. Existing institutional arrangements are seen as inappropriate for handling conflict generated by an issue that was essentially non-existent prior to 1960. Furthermore, institutions are organized to respond to specific individuals and/or organized interest groups, whereas environmental policy affects entire populations. Since changes in the environment are incremental, institutional policy must be changeable at each increment. This leads to an influx of new actors into the controversy as policies change. It is noted that the analysis of quality of life demands an interdisciplinary approach that is not in evidence in modern institutions which are often highly specialized. The result of these institutional shortcomings indicates that normative patterns of conflict resolution are ineffectual. Compromise, bargaining, and negotiation are replaced by confrontation or, optimally by a technical problem-solving approach.

129. Caldwell, M. D. 1971. "Coalitions in the triad: introducing the element of chance into the game structure." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 20(3).

This experiment found that in the condition where the subject was told that the coalition would win, the high power players formed a greater number of coalitions, even with lower payoffs, thus earning fewer total points.

130. _____. 1976. "Communication and sex effects in a five-person prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(3).

This experiment found that providing information to subjects on the nature of their interdependence and scoring maximization strategies did not affect the level of cooperation. Availability of sanctions was shown to increase cooperation.

131. Cantor, J. H. 1976. "Individual needs and salient constructs in interpersonal perception." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(3).

This experiment tested subject's perceptual dimensions and needs and found that subject's values and standards of behaviors were infused into their appraisal system of others.

132. Caplow, T. A. 1956. "A theory of coalitions in the triad." AMERICAN SOCIOLOGICAL REVIEW 21(4).

133. _____. 1968. TWO AGAINST ONE: COALITIONS IN TRIADS. Englewood Cliffs: Prentice-Hall.

134. Cartee, C. P., N. O. Murray, D. C. Williams, 1975. "A case study of estuarine pollution and local agency interactions." NTIS REPORT PB-243 516, (June).

135. Chaiken, S. and A.H. Eagly. 1976. "Communication modality as a determinant of message persuasiveness and message comprehensibility." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(4).

This experiment found greater persuasion and equal comprehension by subjects when an easy message was viewed on videotape than when subjects heard the same message on audiotape and the least in written form. Nonverbal expressions of confidence by the speaker did not account for the difference between audiotaped and videotaped conditions.

136. Changing Times. 1967. "Atomic power plants for your town? Nuclear electricity is practical but there are problems." CHANGING TIMES 21(April).

This article points to the growing number of nuclear power plants and addresses the economic advantages and the disadvantages of discovering, processing, and disposing of fuel.

137. Chelminshi, R. 1975. "Lake Baikal saved from industrial pollution by citizen action in the USSR." SMITHSONIAN 6(8).

This paper discusses the controversy generated by the Soviet decision to build a cellulose plant on the shores of Lake Baikal. Different views by scientists of the proposed plant's impact on the lake's environment led to compromise. While construction was finally allowed, the design of the plant filtration system was altered into the world's most expensive and most effective type of design.

138. Cheney, J., T. Harford, and L. Solomon. 1972. "The effects of communicating threats and promises upon the bargaining process." JOURNAL OF CONFLICT RESOLUTION 16(1).

This experiment found that when subjects were allowed freedom to choose, they exerted influence through promises and offers of reward rather than warnings and threats.

139. Chertkoff, J. M. 1966. "The effects of probability of future success on coalition formation." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 2.

In contrast to the hypothesis of coalitions among weak actors being preferred, this experiment supports the hypothesis that weak actors will prefer coalition with powerful others if such action definitely improves probability of coalition success.

140. _____. 1971. "Coalition formation as a function of differences in resources." JOURNAL OF CONFLICT RESOLUTION 15(3).

This experiment rejects the hypothesis that one reason for the failure of the minimum winning coalition theory is the preference for coalitions involving the fewest formation steps.

141. _____. 1975. "Sociopsychological views on sequential effects in coalition formation." AMERICAN BEHAVIORAL SCIENTIST 18(4).

This paper expands theories on coalition formation to include the sequential or serial effects of interactions in interdependent events. Over a series of experimental trials it was shown that past experiences at bargaining and the accumulated "scores" are important considerations in patterning behavior. Defections from existing coalitions will occur where potential exists for better payoffs if the new coalition is perceived as stable, and if there is little guilt or fear of negative labelling.

142. Chertkoff, J. M. and M. Conley. 1967. "Opening offer and frequency of concession as bargaining strategies." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 7(2).

In this experiment, it was found that extreme opening offers were related to bargaining success and that frequent concessions produced even more concessions.

143. Chertkoff, J. M. and J. K. Esser. 1977. "A test of three theories of coalition formation when agreements can be short-term or long-term." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(4).

This experiment tested bargaining theory, the weighted probability model, and the minimum winning coalition theory and found bargaining theory best supported by the evidence. However, the theory must be qualified as it was found that the parity and equality norms were not weighted equally across all situations. Furthermore, the equality norms were shown to affect the stronger member much less than the weaker member.

144. Christian Century. 1963. "Build the first one in Washington." CHRISTIAN CENTURY 80(December 4).

145. Christopherson, J. A. 1976. "Structural analysis of transaction systems--vertical fusion or network complexity?" JOURNAL OF CONFLICT RESOLUTION 20(4).

This research compared a theory of imperialism with a theory of structural relations among a global network. Employing data on trade and diplomatic contacts, the analysis was supportive of the network conceptualization. Findings indicated that "each actor utilizes different networks for different issues."

146. Cialdini, R. B., J. E. Vincent, S. K. Lewis, J. Catalan, D. Wheeler, and B. L. Darby. 1975. "Reciprocal concessions procedure for inducing compliance: the door-in-the-face technique." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(2).

This experiment found that presenting subjects with an extreme favor and following up rejection with a small favor, induced greater compliance than when subjects were asked to do the smaller favor only. The advantages of using this rejection-then-modification approach were discussed.

147. Clark, T. N. a:1967. "Power and community structure: who governs where and when?" THE SOCIOLOGICAL QUARTERLY 8(Summer).

In this article the author adapts Parson's and Bale's structural functional variables to conceptions of community power. From the adaptation-goal attainment-integration-latent pattern maintenance framework, thirty-four propositions were derived that explained variations in community influence.

148. _____. b:1967. "The concept of power: some overemphasized and underrecognized dimensions--an examination with special reference to the local community." SOUTHWESTERN SOCIAL SCIENCE QUARTERLY 48(December).

In this analysis of community power, fifteen dimensions of power are developed. To balance the analysis, the author suggests that power involves action. Power also involves negative decisions, non-decisions, and inaction. The author concludes that the stratification of power in a community may be best understood by analysis of resources and influence.

149. _____. (ed.). a:1968. COMMUNITY STRUCTURE AND DECISION-MAKING: COMPARATIVE ANALYSES. San Francisco: Chandler.

150. Clark, T. N. b:1968. "Community structure, decision making, budget expenditures, and urban renewal in 51 American communities." AMERICAN SOCIOLOGICAL REVIEW 33(4). (Reprinted with errata in C. M. Bonjean et al., 1971).

This paper argues for expansion of the analytical framework of community power to include not only the inputs into the decision-making process, but also policy outputs. Studying 51 communities using the "ersatz decisional method", the authors found that decentralized decision-making was positively related to economic diversification and population size, and negatively related to centralized, reform type power structures. In addition, decentralized decision-making was positively related to policy outputs as measured by budget expenditures and urban renewal programs.

151. _____. a:1972. "The structure of community influence." In. H. Hahn. (ed.). PEOPLE AND POLITICS IN URBAN SOCIETY. Beverly Hills: Sage.

In this comparative examination of community power and decision-making, patterns of leadership were developed. Types of business and form of political structure were found to be related to community characteristics and policy outputs.

152. _____. b:1972. "Structural functionalism, exchange theory, and the new political economy: institutionalization as a theoretical linkage." SOCIOLOGICAL INQUIRY 42(2).

In this discussion the limitations of current theoretical approaches are examined and a synthesis offered. The institutionalization theorem considers that value and normative change is linked to imbalances in material exchanges.

153. _____. 1973. "Citizen values, power, and policy outputs: a model of community decision-making." JOURNAL OF COMPARATIVE ADMINISTRATION (February).

In this study of fifty-one communities, a model of community decision-making is generated out of relations among community characteristics, public values, types of resources, level of centralization of power and decision-making, and policy outputs. Principal conclusion indicated that values were related to social sectors, and that patterns of leadership were related to public value patterns and policy outputs.

154. _____. a:1974. COMPARATIVE COMMUNITY POLITICS. New York: Sage/Halsted Press.

155. _____. b:1974. "Community autonomy in the national system: federalism, localism, and decentralization." In T. N. Clark (ed.). COMPARATIVE COMMUNITY. New York: Sage/Halsted Press.

This paper presents 48 propositions that can be used to examine the nature of local community autonomy. The author found four primary factors relevant: devolution, resource, localism, and local political power. The interrelations of these concepts are developed.

156. _____. c:1974. "Theories of policy outputs, and assessing measurement error: comments on Liebert." SOCIAL SCIENCE QUARTERLY 55(3).

157. _____. a:1975. "Community power." ANNUAL REVIEW OF SOCIOLOGY 1. Palo Alto: Annual Reviews.

158. _____. b:1975. "The Irish ethic and the spirit of patronage." ETHNICITY 2(2).

This article establishes a patronage ethos as a necessary feature of analyzing community decision-making. Cities with large proportions of Irish residents relative to other communities tend to have above average per capita municipal budgets. Using a variety of data bases, the author rejects the Downsean hypothesis of citizen demand for public services and develops the patronage hypothesis in which personal loyalties are rewarded by politicians.

159. Clark, T. N., W. Kornblum, H. Bloom, and S. Tobias. 1968. "Discipline, method, community structure, and decision-making: the role and limitations of the sociology of knowledge." *AMERICAN SOCIOLOGIST* 3(3).

160. Cloud, W. 1965. "Is atomic industry risking your life?" *POPULAR SCIENCE* 186 (June).

161. Cobb, R., J. K. Ross, and M. H. Ross. 1976. "Agenda building as a comparative political process." *AMERICAN POLITICAL SCIENCE REVIEW* 70(1).

162. Cohen, B. L. 1974. "Perspectives in the nuclear debate." *BULLETIN OF THE ATOMIC SCIENTISTS* 30(6).

163. Cohen, M. D., J. G. March, and J. P. Olsen. 1972. "Garbage can model or organizational choice." *ADMINISTRATIVE SCIENCE QUARTERLY* 17(1).

164. Cohen, S. P., H. C. Kelman, F. D. Miller, M. L. Smith. 1977. "Evolving inter-group techniques for conflict resolution: an Israeli-Palestinian pilot workshop." *JOURNAL OF SOCIAL ISSUES* 33(1).

This essay presents an alternative strategy for the legalistic, conflict-expressive approach to conflict resolution. The analytics, problem solving approach involves a third party who is responsible for moderating the workshop. The workshop provided for resolution based on intergroup level intervention and explicit focus on developing inputs into the policy process.

165. Cole, S. G. 1969. "An examination of the power-inversion effect in three-person mixed-motive games." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 11(1).

This experiment found that the "strength is weakness" effect is replaced by the "strength is strength" effect in a probabilistic coalition formation situation. The former effect was retained where non coalition-formation was allowed.

166. _____. 1972. "Conflict and cooperation in potentially intense conflict situations." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 22(1).

This experiment found that providing access to alternative cooperative forms of behavior was not enough to reduce conflict. The elements of trust, goal compatibility, and channels of communication must be provided to avoid conflict.

167. Cole, S. G. and J. L. Phillips. 1967. "The propensity to attack others as a function of the distribution of resources in a three person game." *PSYCHONOMIC SCIENCE* 9(4).

In triads composed of one strong and two weak members, the weak members consistently formed a coalition against the strong member.

168. Coleman, J. S. 1957. *COMMUNITY CONFLICT*. New York: Free Press.

Using metaphors taken from Simmel and case studies of community controversies published up to that time, this monograph is a classic description of the parameters of community conflict. The focus is on the relations that bind participants in a conflict to another.

169. _____. a:1971. *RESOURCES FOR SOCIAL CHANGE*. New York: John Wiley-Interscience.

This research develops models for converting assets through the identification of input resources, arenas of action, and output resources. The author presents as evidence the example of blacks in the U. S. who as a group are shown to exchange the few resources possessed for other types of resources.

170. _____. b:1971. "Community disorganization and conflict." In R. K. Merton and R. Nisbet (eds.), CONTEMPORARY SOCIAL PROBLEMS. New York: Harcourt Brace Jovanovich.

Using current topics, the author discusses some of the ideas he treated in his earlier monograph (Coleman, 1957).

171. _____. 1973. THE MATHEMATICS OF COLLECTIVE ACTION. Chicago: Aldine.

This monograph outlines a general theory of collective action based on the idea that each member participating in action has interests and resources and will use his control of resources to achieve his interests. Drawing on the general equilibrium model in economics, individuals exchange control of resources with one another such that each individual is best able to control his interests.

172. Collins, R. 1975. CONFLICT SOCIOLOGY. New York: Academic.

173. Commoner, B. 1969. "Myth of omnipotence: the hidden costs of nuclear power." ENVIRONMENT 11(March).

174. _____. 1976. THE POVERTY OF POWER. New York: Alfred A. Knopf.

175. Commoner, B., H. Boksenbaum, and M. Corr (eds.) 1975. ENERGY AND HUMAN WELFARE-- A CRITICAL ANALYSIS. New York: MacMillan.

176. Conn, P. H. 1973. "Social pluralism and democracy." AMERICAN JOURNAL OF POLITICAL SCIENCE 17(2).

177. Conservationist. 1968. "Conrell scientists see thermal pollution of Cayuga Lake by planned nuclear power plant." CONSERVATIONIST 23(August).

178. Converse, E. 1968. "The war of all against all." JOURNAL OF CONFLICT RESOLUTION 12(4).

This is a review by the managing journal editor of the articles appearing in the JOURNAL OF CONFLICT RESOLUTION between 1957 and 1968. After outlining what she calls a "control paradigm" the author reviews content areas appearing in the journal: international wars, violence, international systems, power, international bargaining, utility, national decision-making, rationality, conflict within and between consensus, third parties, and guilt.

179. Coppock, R. 1977. "Decision-making when public opinion matters." POLICY SCIENCES 8(2).

180. Coser, L. A. 1956. THE FUNCTIONS OF SOCIAL CONFLICT. New York: Free Press.

181. _____. 1967. CONTINUITIES IN THE STUDY OF SOCIAL CONFLICT. New York: Free Press.

182. _____. 1972. "Introduction." JOURNAL OF SOCIAL ISSUES 28(1).

This essay comments on the state-of-theory on social conflict and collective violence in the context of the intellectual history of concern over these issues. The author argues for a balanced approach to the analysis of society that considers both order and disorder, and where society is not seen as simply a "war of all against all" or as a "frictionless utopian vacuum" but as something in between.

183. Costaglioli, F. 1971. "Nuclear power--the information communication predicament." VITAL SPEECHES OF THE DAY 37.

In this statement on the role of the media in the education of the public on the issues of nuclear power, the author is critical of the distorted, negatively biased reporting. To prepare the public for deciding related issues, the author suggests formation of an independent information dissemination organization.

184. Costantini, E., and K. Hanf. 1972. "Environmental concern and Lake Tahoe--a study of elite perceptions, backgrounds and attitudes." ENVIRONMENT AND BEHAVIOR 4(2).

Employing a reputational approach, community leaders were identified and interviewed with respect to their level of environmental knowledge and concern. Major findings demonstrate that those with a high level of concern for the environment are more liberal, support aesthetic and rural values, are better educated, and are more likely to be part time residents and holders of high offices.

185. Cowan, E. 1974. "Scientists opposed to nuclear power accuse AEC of misleading the public about solar energy." NEW YORK TIMES (April 23).

186. Craig, J. G., and E. Gross. 1970. "The forum theory of organizational democracy: structural guarantees as time-related variable." AMERICAN SOCIOLOGICAL REVIEW 35(1).

Rejecting the model proposed by Lipset involving a set of factors or conditions in an organization, the author offers a "forum theory of internal democracy" which better accounts for shifting patterns of participation in organizations. In this conception, the organization provides the mechanism of a forum for "the occasion of the opportunity for controlled conflict." In such organizations the degree of internal democracy is influenced by the degree to which the organization is open to internal conflict groups and external groups contending for leadership and control.

187. Crain, R. L., E. Katz, and D. B. Rosenthal. 1969. "THE POLITICS OF COMMUNITY CONFLICT: THE FLUORIDATION DECISION. Indianapolis: Bobbs-Merrill.

In this classic study of how communities make collective decisions, the authors use comparative information on multiple communities, some gleaned from interviews with informants in each community, to analyze the conflict that arose over the fluoridation of community water supplies. The authors reject the alienation hypothesis of why individuals oppose fluoridation as an answer to the central question of why fluoridation referenda were often defeated. The basic determinant of a community's reaction to the fluoridation issue, they feel, is the community's political decision-making structure. The decision to offer the choice of fluoridation to the voter via a referendum served only to legitimate the question of whether or not fluoridation was safe. The higher the public participation on the issue, the more likely that the referendum will be defeated--despite the fact that opponents enter the conflict as disorganized, politically naive individuals. The important factors leading to a referendum being passed are: low levels of controversy, experienced leadership of high status supporting the proposal, active support from major health organizations, and from organizations not exclusively connected with health; particularly the mayor's office. It is communities with high centralization of decision-making, low political party competition, and low reform government characteristics that accept fluoridation.

188. Crain, R. L. and D. B. Rosenthal. 1967. "Community status as a dimension of local decision-making." AMERICAN SOCIOLOGICAL REVIEW 32(December).

Seeking to understand why some communities can implement decisions efficiently and effectively, this research studied outcomes in eight issue areas (bond referenda, school desegregation, urban renewal, fluoridation, "good-government" referenda, black registration, contested elections, and civil rights movements). It was found that high rates of participation found in middle-class cities diffused authority to the point where the decision-making structure was immobilized. This relation did not hold in those cities at the very top of the middle-class distribution where high levels of citizen participation were more stable and predictable.

189. Crawford, T., and J. B. Sidowski. 1964. "Monetary incentive and cooperation, competition instructions in a minimal social situation." PSYCHOLOGICAL REPORTS 15(1).

This experiment found that subjects told to cooperate score higher points than subjects told to be competitive. The monetary incentive displayed no significant effects.

190. Crecine, J. P. 1969. GOVERNMENTAL PROBLEM SOLVING: A COMPUTER SIMULATION OF MUNICIPAL BUDGETING. Chicago: Rand-McNally.

In this work a computer model of municipal budget patterns is developed. Extra-local factors were found less predictive of budgetary outputs than local factors such as the relationships between the mayor, city-council, and agency/departmental heads.

191. Crenson, M. A. 1971. THE UN-POLITICS OF AIR POLLUTION. Baltimore: John Hopkins University Press.

This is an analysis of the preconflict stage of decision-making using air pollution as an example issue. Using case study material (the air pollution issue in Chicago, Illinois and Gary, Indiana and a citizen survey in St. Louis, Missouri) as well as comparative data on fifty-one communities, the author shows that an important feature of community power is an ability to keep issues from ever becoming conflicts subject to explicit negotiation and decision-making, i.e., an ability to define the scope of issues. The extent to which air pollution is an issue in a community is associated with other types of issues that are areal (e.g., a government reorganization, water pollution and sewage disposal, mass transit, crime, etc.) and associated with the absence of issues that are segmental (e.g., business and industrial development, poverty and welfare, etc.). Where the community power is centralized, in particular where either political party is powerful at the same time that industry is powerful, air pollution tends not to be an issue. Where power is more dispersed, air pollution is an issue to the extent that the actual pollution level is high. As air pollution becomes an issue, it brings new actors into the decision-making process. For example, industry's reputation for power--effective in the early stages of issue development for suppressing the issue in a high-pollution community--becomes irrelevant after the issue has reached a significant level of public intensity.

192. Crumbaugh, C. M. and G. W. Evans. 1970. "Presentation format other-person strategies, and cooperative behavior in the prisoner's dilemma." PSYCHOLOGICAL REPORT 20(Part 1).

This experiment found that subjects presented with the nonmatrix format cooperated more than those using the matrix form. Subjects playing against an initially hostile other displayed more noncooperation than those playing with a neutral partner.

193. Curlin, J. W. 1975. "Preservation of environment." Presented at Energy Awareness Symposium, Knoxville, February 27.

194. Curtis, R., and E. Hogan. a:1969. PERILS OF THE PEACEFUL ATOM. Garden City: Doubleday and Company.

195. _____. b:1969. "Myth of the peaceful atom." NATURAL HISTORY 78(4).

196. Daher, D. M. and P. G. Banikiotes. 1976. "Interpersonal attraction and rewarding aspects of disclosure content and level." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(4).

This experiment focused on who gets attracted to whom. It was found that similarities of level and content of self-disclosure were significantly related to attraction.

197. Dahl, R. A. 1961. WHO GOVERNS? DEMOCRACY AND POWER IN AN AMERICAN CITY. New Haven: Yale University Press.

This case study of the decision-making process used a multiplicity of techniques to ascertain the factors influencing policy outputs. From these factors a typology of power structures was created which served as the basis for a formal theory of pluralistic political processes.

198. Dahrendorf, R. 1959. CLASS AND CLASS CONFLICT IN INDUSTRIAL SOCIETY. Stanford: Stanford University Press.

199. David, S. M. and P. E. Peterson (eds.). 1973. URBAN POLITICS AND PUBLIC POLICY. New York: Praeger.

200. Davies, J. C. III, and B. S. Davies. 1975. THE POLITICS OF POLLUTION: Indianapolis: Bobbs-Merrill.

The development of the pollution issue, the major actors who shape pollution policy, and the pragmatic aspects of implementing pollution policy are discussed. Particularly relevant here is the discussion of public opinion and interest groups (Chapter 4) as well as state and local government (Chapter 7).

201. Davis, J. H., G. Stasser, C. E. Spitzer, and R. W. Holt. 1976. "Changes in group members' decision preferences during discussion: an illustration with mock juries." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(6).

This experiment found that subjects in a mock jury who were informed that they would be held publicly accountable move away from a guilty verdict much faster than private juries.

202. Davis, M., and M. G. Weinbaum. 1969. "Metropolitan decision processes: an examination of case studies." AMERICAN POLITICS RESEARCH SERIES. Chicago: Rand McNally.

This book examines thirty-two case studies of large cities to determine the process of decision-making on selected, "important" issues. From the patterns of interactions found in reviewing this literature, the authors employ a process analysis to formulate a series of hypotheses for future analysis.

203. Davison, M. L., and L. E. Jones. 1976. "A similarity-attraction model for predicting sociometric choice from perceived group structure." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(5).

This experiment using R.O.T.C. students found support for the similarity-attraction hypothesis. Even though subjects indicated preference for higher status friends, they chose those in similar subgroup affiliations.

204. Debnam, G. 1975. "Non-decisions and power--2 faces of Bachrach and Baratz." AMERICAN POLITICAL SCIENCE REVIEW 69(3).

205. Delatiner, B. 1975. "LILCO proposal arouses Sound Avenue residents." NEW YORK TIMES (June 22).

The article reports on the developing conflict in Riverhead, Long Island over proposals to widen a road of historical interest for accessing construction of a nuclear power plant.

206. Derlega, V. J., J. Wilson, and A. L. Chaikin. 1976. "Friendship and disclosure reciprocity." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(4).

This experiment concluded that reciprocity of self-disclosure was more likely if the pairs of subjects were strangers than if the pairs were close friends. Among strangers the level of reciprocity was a direct function of the intimacy of the initial disclosure.

207. deRueck, A. and J. Knight (eds.) 1966. CONFLICT IN SOCIETY. London: J & A Churchill.

208. deSwann, A. 1973. COALITION THEORIES AND CABINET FORMATION. San Francisco: Jossey-Bass.

This monograph brings together theories of coalition formation based on the concept of self-interested rational action (minimal winning coalitions, minimum size coalitions, minimum member coalitions, minimum policy range coalitions, and policy distance theory) and tests the theories against data on cabinet formations in Europe and Israel. Clear support is provided for the need to consider policy preferences in the formation of coalitions in addition to resources needed to win a conflict.

209. Deutsch, M. 1958. "Trust and suspicion." JOURNAL OF CONFLICT RESOLUTION 2(4).

This research found that trust between two actors increased if a disliked third party is introduced. The author identified situational characteristics that increased trust: communication of intention prior to a trust commitment; communication of mutually acceptable responsibilities and minimal sanctions for violation; violations of trust must be met with exercise of power.

210. _____. 1973. THE RESOLUTION OF CONFLICT: CONSTRUCTIVE AND DESTRUCTIVE PROCESSES. New Haven: Yale University Press.

The author presents a summary of his theoretical and empirical work on conflict resolution. Discussed are cooperative and competitive processes, group formation, intergroup conflict, threats, promises, influence, strategies for inducing cooperation and a general essay on factors influencing conflict resolution. The emphasis is on psychological concepts and experimental research.

211. Deutsch, M., D. Canavan, and J. Rubin. 1971. "The effects of size of conflict and sex of experimenter upon interpersonal bargaining." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 7(2).

This experiment found that the greater the size of conflict, the greater the difficulty in finding mutually beneficial solutions. Additionally, male subjects were more competitive when playing against a female than against a male.

212. Deutsch, M., Y. Epstein, D. Canvan, and P. Gumpert. 1967. "Strategies of inducing cooperation: an experimental study." JOURNAL OF CONFLICT RESOLUTION 11(3).

In this experiment five strategies were tested to determine the effectiveness of each in inducing cooperation. In the altruistic condition, the subject exploited the confederate. The nonpunitive strategy produced more cooperation than the aggressive deterrent strategy.

213. Deutsch, M., and R. M. Krauss. 1960. "The effect of threat upon interpersonal bargaining." JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY 61(2).

Experiments are discussed in support of the hypothesis that ability to threaten opponent leads to competitive moves in the acme-bolt game.

214. _____. 1962. "Studies of interpersonal bargaining." JOURNAL OF CONFLICT RESOLUTION 6(1).

A series of experiments on use of communication and threat are discussed. Both opponents having threat capacity makes it difficult to reach mutually profitable agreement despite available communication.

215. Deutsch, M., and R. J. Lewicki. 1970. "'Locking-in': effects during a game of chicken." JOURNAL OF CONFLICT RESOLUTION 14(3).

In this experiment, it was found that adolescent boys resisted the temptation to make irrevocable commitments to positions if they knew they were to repeat the encounter with partners with the same capacity. "However, when they are prompted to be competitive, some of their prudence, and also some of their money, is lost." Possession of the means to commit when not reciprocated lead to destructive behaviors.

216. Diener, E. 1976. "Effects of prior destructive behavior, anonymity, and group presence on deindividuation and aggression." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(5)

This experiment found that of three indicators of deindividuation, only arousal produced significant increases in aggression; group presence was inversely related; and anonymity was unrelated to aggression.

217. Donaldson, L. and R. Lynn. 1976. "Conflict resolution process--2-factor theory and an industrial case." PERSONNEL REVIEW 5(2).

218. Doob, L. W. and W. J. Folitz. 1974. "The impact of a workshop upon grass-roots leaders in Belfast." JOURNAL OF CONFLICT RESOLUTION 18(2).

219. Downes, B. T. 1968. "Social and political characteristics of riot cities: a comparative study." SOCIAL SCIENCE QUARTERLY 49(3).

220. _____. 1970. "A critical reexamination of the social and political characteristics of riot cities." SOCIAL SCIENCE QUARTERLY 51(2).

This study extends and refines Downes (1968) by including more cities and modifying the severity of rioting scale. Both the occurrence and the severity of rioting are considered and are found to be positively correlated with the community's population size, population density (persons per square mile) and population heterogeneity (per cent of the population that is non-white). The severity of rioting is positively associated with growth in nonwhite percentage of the population, median age of population, per capita deaths, per capita unemployment, and the number of councilmen.

221. Downes, B. T., K. R. Greene. 1973. "Politics of open housing in three cities--decision maker responses to black demands for policy change." AMERICAN POLITICS QUARTERLY 6(2).

This research concentrates on decision-making and public policy formulations. Studying the deliberation process over the open-housing issue, the authors identified two major phases of policy formation. First, demands were transformed into issues, and second, the issue was transformed into public policy.

222. Downs, A. 1957. AN ECONOMIC THEORY OF DEMOCRACY. New York: Harper & Row.

This classic monograph proposes that the electoral process be viewed as the efforts of competing political parties to maximize their utility. The basic hypothesis is that for an electorate distributed around a single preference point (in a normal distribution), competing parties will modify their platforms so as to appeal to the "median voter" as the single point preferred by the most voters. Thus, competing parties will always be identical on basic points in their platforms.

223. _____. 1972. "Up and down with ecology--the 'issue-attention cycle.'" THE PUBLIC INTEREST 28(Summer).

In this essay the author suggests a process whereby publicly identified issues go through an "issue-attention cycle." Whether or not the issue is cycled depends on certain characteristics: if the problem is directed on a certain minority, if a majority of a powerful minority is benefiting from the suffering caused by the problem, and if the issue does not have any "intrinsically exciting qualities--or no longer has them." The first conditional characteristic indicates that most people will not be affected by the problem; the second condition obviates the necessity for fundamental changes in institutions and behaviors required to solve the problem, and the third condition predicts that saturated media attention will cause the public to lose interest in solving the problem.

224. Dreher, C. 1964. "Atomic power: the fear and the promise." NATION 198(March).

225. Druckerman, D., K. Zechmeister, and D. Solomon. 1972. "Determinants of bargaining behavior in a bilateral monopoly situation, opponent's concession rate and relative defensibility." BEHAVIORAL SCIENCE 17(6).

This experiment found behavior was most affected by manipulating concession rates. As sellers became increasingly "soft", buyers became increasingly "tough". Size of initial concession by the seller was unrelated to bargaining behaviors.

226. Druckman, D. 1967. "Dogmatism, prenegotiation experience, and simulated group presentation as determinants of dyadic behavior in a bargaining situation." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 6(3).

This experiment found that group loyalty induced compromises. Similarly, low dogmatism scores were associated with propensity to compromise.

227. _____. 1968. "Prenegotiation experience and dyadic conflict resolution in a bargaining situation." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 4(4).

This experiment found that prenegotiation with opposition member facilitated conflict resolution. Intra-team prenegotiation increased likelihood of deadlocking negotiations.

228. _____. 1971. "The influence of the situation in interplay conflict." JOURNAL OF CONFLICT RESOLUTION 15(4).

This essay reviews the experimental findings of social-psychological research on the effects of situational variations on inter-party conflict. Broadly conceived, the situation has been shown to enhance or moderate other effects on conflict and impacts on the subject's "definition of the situation." Situational factors were shown to account for variance in conflict behaviors and served as "manipulable sources of conflict."

229. Duncan, D. L. 1976. "Differential social perception and attribution of intergroup violence: testing the lower limits of stereotyping of blacks." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(4).

This experiment found that different perceptions of intergroup violence were a function of race. Whites labeled as more violent acts committed by blacks than the same act committed by whites. White violence was attributed to situational variables whereas black violence was seen as a personal disposition.

230. Dunlap, R. E. 1975. "The impact of political orientation on environmental attitudes and actions." ENVIRONMENT AND BEHAVIOR 7(4).

This study looks at student attitudes and behaviors related to environmental issues. Findings indicate that affiliation with the Democratic Party and Liberal ideology predicts support for pro-environmental policies and actions.

231. Ebbin, S. and R. Kasper. 1974. CITIZEN GROUPS AND THE NUCLEAR POWER CONTROVERSY. Cambridge: MIT Press.

Based on a one year study of three cases involving the construction and licensing of nuclear power plants, this report examines the conflict between the need for accurate facts on the issue and the right of citizens to participate in determining their own society. It is argued that the currently used adversary system of public hearings is ineffective in resolving this conflict. Recommendations for alternatives to public hearings are made.

232. Ecologist. 1971. "Ressenheim-Easter Monday." ECOLOGIST 1(12).

This article reports on the rise of French and British environmental groups and details the organizational strategy for opposing the construction of nuclear power facilities and disposal of outdated radioactive equipment and liquid wastes.

233. Eipper, A. W. 1970. "Pollution problems, resource policy and the scientist." SCIENCE 169(July 3).

234. Eipper, A. W., C. A. Carlson, and L. S. Hamilton. 1970. "Impacts of nuclear power plants on the environment." LIVING WILDERNESS 34(Autumn).

235. Eisenberg, M. A., M. E. Patch. 1976. "Prominence as a determinant of bargaining outcomes." JOURNAL OF CONFLICT RESOLUTION 20(3).

This study examines interaction when a dispute between two parties is mediated by a third "prominent" party. The experimental findings indicated prominence had an effect on the resolution outcome only in a condition where both parties in dispute determined the proposed solution to be fair and when communication was restricted.

236. Elsingner, P. K. 1973. "The conditions for protest behavior in American cities." AMERICAN POLITICAL SCIENCE REVIEW 67(1).

This research examines the relation between the "political environment" (i.e., the political structure, responsiveness of government organizations, social structure, and social stability) and protest behavior. The research question formulated was whether a closed political system generated more conflict or whether an open system produced more conflict as a function of frustration deprivation. Findings were mixed in many areas examined. A curvilinear pattern developed whereby disproportionate protests occurred in cities with mixed open and closed characteristics. While more protests occurred in cities with mayors, those cities also had at-large elections, thus protests are negatively related to ward systems. The author concluded that the frustration hypothesis was the most promising approach for future research.

237. _____. 1974. "Racial differences in protest participation." AMERICAN POLITICAL SCIENCE REVIEW 68(2).

Examining survey data, this paper documents the intergroup differences in the perceptions of blacks and whites on the legitimacy of protest politics as a mechanism of influence. Examining intra-group differences, both black and white protestors were shown to be more affluent and more integrated into the community than non-protestors.

238. Environment. 1969. "Cooling it in Minnesota." ENVIRONMENT 11(May).

239. _____. 1970. "New river: sixteen nuclear power plants on the Great Lakes." ENVIRONMENT 12(January).

240. _____. 1971. "Another SST? Questioning the development and proliferation of the so-called liquid metal-cooled fast breeder reactor." ENVIRONMENT 13(July).

241. Erickson, B., J. G. Holmes, R. Frey, L. Walker, and J. Thibaut. 1974. "Functions of a third party in the resolution of conflict: the role of a judge in pre-trial conferences." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(2).

This experiment concluded that resolution of conflict could be facilitated if the parties in conflict handled resolution of multiple issues as a package set and if a prenegotiation information exchange of issue orientations occurred.

242. Esser, J. K. and S. S. Komorita. 1975. "Reciprocity and concession making in bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(5).

This experiment found support for norms of reciprocity. It was shown that when concessions were not reciprocated in bargaining situations, then future concessions were fewer and smaller. This effect was magnified when the norm violation occurred between two competitive subjects.

243. Etzioni, A. 1967. "Mixed-scanning: a 'third' approach to decision-making." PUBLIC ADMINISTRATION REVIEW (December).

This essay was critical of the rationalistic approach and the incrementalist approach to the analysis of decision making and suggested an alternative, mixed-scanning approach. This approach takes into account the lack of complete knowledge about available resources, and includes considerations of the long-run alternatives. The author combined the rationalistic approach's consideration of the higher order policy-making process with the incrementalist approach's focus on preparing for fundamental decisions.

244. Etzioni-Halevy, E. 1975. "Patterns of conflict generation and conflict 'absorption'." JOURNAL OF CONFLICT RESOLUTION 19(2).

This research focuses on the ways in which conflict is generated and attenuated. Examining the history and background of labor and ethnic conflict in Israel, the author concludes that ideology serves not only to legitimize interests, but also functions to establish the patterning of conflict on ambiguous cases. Also considered is the reaction to conflict by the social agencies. Patterns of conflict absorption arise "by which the conflict may be neither suppressed, nor yet allowed to bring about any substantial changes in the social structure." Some of the responses to conflict pressures include: "symbolic reassurances"-devices for attenuating demands and for depleting the aggrieved party's ranks; partial responsiveness; and maintenance of the Establishment itself such that the basic framework of the society remains relatively unchanged.

245. Eulau, H. 1976. "Understanding political life in America--contribution of political-science." SOCIAL SCIENCE QUARTERLY 57(1).

246. Evans, G. W. and C. M. Crumbaugh. 1966. "Effects of prisoner's dilemma format on cooperative behavior." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 3(4).

This experiment found that subjects playing a prisoner's game in nonmatrix form were significantly more cooperative than subjects who played in matrix form.

247. Faber, H. a:1976. "Adirondack wilderness is focus of land-use controversy." NEW YORK TIMES (August 23).

248. _____. b:1976. "Con ed picks 2 mid-Hudson areas as possible sites for a power plant." NEW YORK TIMES (November 18).

Protest by residents and environmentalists is generated by Consolidated Edison's announcement of two selected sites along the Hudson River for nuclear or coal powered plants.

249. _____. c:1976. "Upstaters weighing impact of proposals for Con Ed's Plants." NEW YORK TIMES (November 21).

Their concerns over the safety issues and environmental impact of proposed nuclear or coal power plants are expressed by affected Hudson Valley residents.

250. Faley, T. and J. T. Tedeschi. 1971. "Status and reactions to threat." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 17(2).

This study found greater compliance to threats from high status sources than low status sources. The greater the threat credibility and magnitude of punishment, the greater the compliance. The power of the source of threats was shown to be a function of the credibility of his threats.

251. Faulkner, B. H. 1975. "Engineers confront EPA and PL 92-500; or, adrift on bureaucratic seas on the S. S. Red Tape." PROFESSIONAL ENGINEER 45(10).

252. Fellman, G. and B. Brandt. 1970. "A neighborhood a highway would destroy." ENVIRONMENT AND BEHAVIOR 2(3).

This article reports on a participant's observation of a community embroiled in conflict over the decision to condemn a neighborhood for construction of a highway. Two community groups were identified. A quarter of the respondents were upwardly mobile, had few ties to this blue-collar community, and were not active oppositionists. The second group were long-term residents who had been stabilized into a "love of neighborhood." The author's discussion concentrates in this latter group's feelings on relocation.

253. _____. 1971. "Working-class protest against an urban highway." ENVIRONMENT AND BEHAVIOR 3(1).

This paper examines conflict generated by a decision to build a highway in Cambridge, Mass. Based on a participant observation approach, the best informed and most active in the protest were those with strong social and economic ties to the neighborhood, with homeowners particularly informed and active. Two-thirds of the affected residents did not protest, feeling that "you're up against a stone wall." An organization was established to oppose construction but activism never went beyond letter-writing to officials and other expressive rituals.

254. Fernex, S. 1975. "Non-violence triumphant." *ECOLOGIST* 5(10).

This article traces the history of the opposition movement to the construction of nuclear facilities in the European sites of Marckolsheim, Why1, and Kaiseraugst. From the initial organization of conservationists, a massive opposition coalition formed composed of peasant farmers, politicians, academicians and students, medical professionals, and community members concerned with perceived threats to health. A summary discusses the process of legitimation developed through the tactics of confrontation and occupation at the construction sites that culminated in the abandonment of all three projects.

255. Festinger, L., S. Schacter, and K. Back. 1950. *SOCIAL PRESSURES IN INFORMAL GROUPS*. Stanford: Stanford University Press.

256. Finifter, A. W. 1974. "The friendship group as a protective environment for political deviants." *AMERICAN POLITICAL SCIENCE REVIEW* 68(2).

This research reports on the importance of groups as mediators between the individual and extra-group pressures. It was shown that the more structured the group, the better the individual was able to resist outside pressures and the greater the probability that the individual would hold deviant political views.

257. Fink, C. F. 1968. "Some conceptual difficulties in the theory of social conflict." *JOURNAL OF CONFLICT RESOLUTION* 12(4).

Drawing on developments in the study of social conflict, the author attempts to argue the need for a general theory of conflict, the problems with developing such a theory in the past, and the confusion of terminology associated with comparing the work of different authors.

258. Firestone, J. M. 1972. "Theory of the riot process." *AMERICAN BEHAVIORAL SCIENTIST* 15(6).

This research reviews theories of the riot process and synthesizes a general model. The model focuses on the background conditions, processes of developing confrontation and aggression, then examines outcomes of violence processes.

259. Fischer, C. S. 1975. "Toward a subcultural theory of urbanism." *AMERICAN JOURNAL OF SOCIOLOGY* 80(6).

This research concludes that population concentration is a critical predictor of ethnic characteristics. Specifically, the greater the population density in an urban setting, the greater the subcultural variety; the more intense the commitment to subculture, the more numerous the sources of diffusion and the greater the diffusion into a subculture, and the higher the rates of unconventionality.

260. Fisher, R. J. (ed.). 1964. *INTERNATIONAL CONFLICT AND BEHAVIORAL SCIENCE: THE CRAIGVILLE PAPERS*. New York: Basic Books.

261. _____. 1972. "Third party consultation: a method for the study and resolution of conflict." *JOURNAL OF CONFLICT RESOLUTION* 16(1).

This paper identifies a new role in conflict resolution--the third party consultation defined as focusing on the "facilitative and diagnostic actions" of a third party in demonstrating antagonists methods for handling settlements. This method does not use coercion, directions, and evaluations but rather utilizes innovative problem-solving techniques. The author presents a number of illustrations of the method, applying it to inter-group relations through the international level of analysis. A generalized model of a third party consultation program was detailed with subsequent attention paid to generalizing concepts, determining functions, and examining procedures, strategies, and tactics.

262. Fitzgerald, B. D. 1975. "Self-interest or altruism." JOURNAL OF CONFLICT RESOLUTION 19(3).

This research reports a reassessment and extension of an earlier model of altruism. The findings indicate three possible outcomes: conflict remains unchanged, scope of conflict is narrowed, or conflict becomes a "contest in beneficence." It is concluded that altruism in the absence of other factors is not sufficient to reduce conflict.

263. Foner, A. 1974. "Age stratification and age conflict in political life." AMERICAN SOCIOLOGICAL REVIEW 39(April).

This analysis proposes that age is the basis of stratification in society and that age related processes can be viewed as forming the basis for inter-group conflict. It is shown that hierarchically arranged strata creates potential for conflict due to unequal distributions of power and opposed political views. Where issues in conflict are formed over ideal or moral values, intergroup cleavages are expanded. Where the issue in conflict is materially based, differences in class become salient, and since classes involve cross-cutting age differences, the resulting conflict is mollified. The inference suggested by the analysis is that conflict may be reduced by contacts with age-heterogeneous groups.

264. Forbes. 1968. "Nuclear power: setback? Comeback of coal plants." FORBES 102(November 15).

265 _____. 1970. "Glutton for punishment: GPH's Oyster Creek plant." FORBES 105(February 15).

This article reports on the economic benefits of nuclear generating facilities as stated by General Public Utilities President William G. Kuhns. The benefits were marginally reduced by long lead time and equipment failures.

266. Ford, W. S. 1973. "Interracial public housing in a border city: another look at the contact hypothesis." AMERICAN JOURNAL OF SOCIOLOGY 78(6).

267. Foreman, H. (ed.). 1970. NUCLEAR POWER AND THE PUBLIC. Minneapolis: University of Minnesota Press.

268. Fortune. 1970. "Victory on San Francisco Bay." FORTUNE 2(February).

This article is a case study reflecting the controversy generated over proposals to reclaim thousands of acres of San Francisco Bay for development. While original opposition was not very vocal, community support quickly mounted following the publishing of a research report indicating harmful effects of development. Coalitions of conservation groups formed a solid front in opposition to local election proposals, and succeeded in lobbying for a state-level independent regulatory commission which has halted all development in the bay.

269. Forward, R. 1969. "Issue analysis in community power studies." AUSTRALIAN JOURNAL OF POLITICAL HISTORY 15(December).

This article reviews the literature on community power and issue analysis and identifies deficiencies in conceptualizations of what is or is not an important issue. The author suggests that establishing criteria for the "communityness" of issues would facilitate comparative analysis, and notes that issues selected for analysis should be representative of the full range of community issues, and should include issues that remain unresolved.

270. Francis, M. 1975. "Urban impact assessment and community involvement: the case of the John Fitzgerald Kennedy Library." ENVIRONMENT AND BEHAVIOR 7(3).

This case study reviews the developmental sequences in the planning process for a public project. The paper argues that citizen participation is a critical factor in urban impact assessment. Assessment must consider the following factors: identification of publics, identification of issues and areas of concern, identification of existing quality-of-life concerns, and the issue-based impact assessment.

271. Freeman, A. M. III, and R. H. Haveman. 1972. "Clean rhetoric and dirty water." PUBLIC INTEREST 28(2).

This essay locates the sources of failure to carry through the public commitments for a cleaner environment. Reviewing existing federal legislation, it is contended that while the rhetoric is strong, enforcement is weak--with the task of establishing standards left to the States. Regulatory agencies were singled out for criticism due to their discretionary authority which allows them to circumvent legislation through policies of selection or non-enforcement. It was recommended that the only solution to pollution control is to require offending industries to "pay by the pound", thus creating economic disincentive to pollute.

272. Freeman, L. C. 1968. PATTERNS OF LOCAL COMMUNITY LEADERSHIP. Indianapolis: Bobbs-Merrill.

In this longitudinal case study of Syracuse, New York, the author concluded that power was diffused and issue-centered. It was suggested that the level of urbanization and industrialization was related to the decentralization of power.

273. Frey, F. W. 1971. "On issues and nonissues in the study of power--comment." AMERICAN POLITICAL SCIENCE REVIEW 65(4).

This discussion of nonissues initiates with the premise that there are a large variety of issues from which to choose topics for power research, and that choice usually involves some judgement of importance or representativeness. Even more difficult are the issues that never come to the fore, the nonissues or suppressed issues. The author sees these as involving the use of power to deter others from even attempting to exercise influence. The research question then becomes one of explaining the expectation and the prevention of actions of others.

274. Frey, R. L., Jr. and J. S. Adams. 1972. "The negotiator's dilemma: simultaneous in-group and out-group conflict." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 8(4).

In this experiment, it was found that the least conflict condition was a function of a perceived cooperative opponent and constituent trust in that opponent.

275. Friedell, M. F. 1968. "A laboratory experiment in retaliation." JOURNAL OF CONFLICT RESOLUTION 12(3).

This experiment found that authoritarianism was positively related to the level of retaliation and expectations of further interactions, and shared situational or social influences mitigated against retaliating.

276. Friedland, N., S. E. Arnold, and J. Thibaut. 1974. "Motivational bases in mixed-motive interactions: the effects of comparison levels." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 10(2).

This experiment found that the absolute magnitude of reward had no effect on the level of cooperation. However, the magnitude of reward related to a high individual comparison level induced increases in the level of cooperation.

277. Friend, K. E., J. D. Laing, and R. J. Morrison. 1977. "Bargaining processes and coalition outcomes." JOURNAL OF CONFLICT RESOLUTION 21(2).

This research reviews findings on bargaining processes in the three-person groups. Focusing on outcomes using the experimental information-processing model, the research question becomes one of predicting "who says what to whom next" in the bargaining sequence. Bargaining persistence and duration of interaction were shown to influence the process of forming outcomes.

278. Frohlich, N., T. Hunt, J. Oppenheimer, and R. H. Wagner. 1975. "Individual contributions for collective goods." JOURNAL OF CONFLICT RESOLUTION 19(2).

This research examines several economic models of expectations on costs of acquiring public goods. The author concludes that different findings are due to different assumptions about the character of the public goods and the situation in which individuals behave. Reconciling these differences, the author offers a model of specific variables which can account for variations in supplying public goods.

279. Froman, L. A., Jr. 1967. "An analysis of public policies in cities." JOURNAL OF POLITICS 29(February).

This paper reviews the literature on the determinants of public policy focusing on relations among specific findings in empirical studies. Findings are presented on the determinants of urban renewal, annexation, intermunicipal cooperation, manager-council government forms, fluoridation, and non-partisan election forms. These findings were aggregated into a typology of policies and a set of hypotheses offered consisting of the correlates of community characteristics.

280. Froman, L. A., Jr. and M. D. Cohen. 1969. "Threats and bargaining efficiency." BEHAVIORAL SCIENCE 14(2).

This experiment found that availability of threatening behavior leads to reductions in bargaining efficiency. It was concluded that threats are counter-productive due to the sequence of mutually reinforcing responses that followed the initial threat.

281. Froman, L. A., Jr. and M. D. Cohen. 1969. "Compromise and logroll: comparing the efficiency of two bargaining processes." BEHAVIORAL SCIENCE 15(2).

This experiment sought to distinguish the bargaining characteristics of logrolling (trading concessions) and compromise. It was found that logrolling was significantly more efficient as a bargaining technique.

282. Fry, C. L. 1965. "Personality and acquisition factors in the development of coordination strategy." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 2(3).

In this experiment, paired subjects with discrepant ascendancy scores played a coordination game better than pairs with similar scores. Non-significant variables were intelligence, absolute ascendancy, and authoritarianism.

283. Fry, C. L., R. Hopkins, and P. Hoge. 1970. "Triads in minimal social situations." JOURNAL OF SOCIAL PSYCHOLOGY 80(First half).

This experiment found that subjects who did not receive information as to the social nature of their assigned task performed at a less rewarding level than subjects given social information. When this information was given to only one "leader", the group performance level was worse than either of the above conditions.

284. Fusch, B. H. 1963. "A bomb in New York's doorstep: Ravenswood Power Plant." SCIENCE DIGEST 54(October).

285. Gahagan, J. P. and J. T. Tedeschi. 1968. "Demographic factors in the communication of promises." JOURNAL OF SOCIAL PSYCHOLOGY 76(Second half).

This experiment found that males were more trustworthy than females. Greater credibility induced greater cooperation among males, while lower credibility induced greater cooperation among females.

286. Gallagher, J. P. 1964. "Nuclear power for Piquads." THE AMERICAN CITY (July).

The article reports on the first municipally owned nuclear power plant at Piqua, Ohio. Detailed are the economic benefits of nuclear over coalfired plants.

287. Gallo, P. S., Jr. 1966. "Effects of increased incentives upon the use of threat in bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 4(1).

This experiment found that subjects who displayed intense conflict when playing for imaginary money displayed much more cooperation when playing for real money.

288. _____. 1969. "Personality impression formation in a maximizing difference game." JOURNAL OF CONFLICT RESOLUTION 13(1).

This experiment found that delayed matching strategy where the subject received his choice from the preceding trial induced high levels of cooperation. The subject formed better impressions of their partner and attributed similar personality traits to that partner.

289. Gallo, P. S., Jr. and I. A. Dale. 1968. "Experimenter bias in the prisoner's dilemma game." PSYCHONOMIC SCIENCE 13(1).

290. Gallo, P. S., Jr., S. G. Funk, and S. R. Levine. 1969. "Reward size, method of presentation, and number of alternatives in a prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 13(3).

This experiment found that subjects who played for real money were more cooperative than subjects who played for imaginary money. This effect was interpreted by the number of alternative responses available. The relation did not hold in the 2-choice or 11-choice games.

291. Gallo, P. S., Jr., and J. Sheposh. 1971. "Effects of incentive magnitude on cooperation in the prisoner's dilemma game--a reply to Gumpert, Deutsch, and Epstein." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 19(1).

In two experiments, it was found that subjects who played with real money were slightly more likely to play cooperatively than subjects playing with play money.

292. Gamson, W. A. 1962. "Coalition formation at presidential nominating conventions." AMERICAN JOURNAL OF SOCIOLOGY 68(2).

This research operationalized many of the findings in the experimental literature on coalition formation and sought application to predictions of Presidential nominating conventions. A "presidential potential score" and an "ideology score" were created out of a content analysis. These indicators were shown to be significant predictors of convention outcomes.

293. _____. 1968. POWER AND DISCONTENT. Homewood: Dorsey Press.

294. _____. 1975. THE STRATEGY OF SOCIAL PROTEST. Homewood: Dorsey.

The activities of fifty-three protest groups which emerged in American society between 1800 and 1945 are examined. The strategies employed by these groups and the organizational characteristics that influenced their levels of success are discussed. The author calls for an extension of pluralist theory to deal with the problem of achieving access to the political arena as well as operating within the arena. The problem of achieving access involves fewer of the social sanctions against interpersonal violence (by both protester and insider) rules of conduct in general than does the problem of getting things done within the established polity.

295. Gamson, W. A. and P. H. Irons. 1961. "Community characteristics and fluoridation outcome." JOURNAL OF SOCIAL ISSUES 17(3).

Examining four samples, the authors found communities with higher proportions of voters over 65, with low median education, with lower median family income, and with lower population growth rates to be associated with rejection of fluoridation. No relation was found between fluoridation and percent voting Democratic, regional differences, voter turnout, and population size.

296. Gannon, R. 1972. "What are the dangers?: AMERICAN CITY 71(January).

297. Garfinkel, H. 1967. STUDIES IN ETHNOMETHODOLOGY. Englewood Cliffs: Prentice-Hall.

298. Gendlin, F. 1971. "Palisades protest: a pattern of citizen intervention." BULLETIN OF THE ATOMIC SCIENTIST 27(November).

299. Georgescu-Roegen, N. 1975. "Energy and economic myths--part 1." ECOLOGIST 5(5).

300. Getter, R. and N. Elliot. 1976. "Receptivity of local elites toward planning." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 42(1).

This paper presents a predictive model to assess in advance the attitudes of elected officials to planning and policy concerns. It was determined that officials' knowledge of environmental factors was positively related to the support of planning functions. Personal and political orientations of officials were much less predictive of planning support.

- 301 Gilbert, C. 1968. "Community power and decision-making: a quantitative examination of previous research." in T. N. Clark (ed.), COMMUNITY STRUCTURE AND DECISION-MAKING: COMPARATIVE ANALYSES. San Francisco: Chandler.

302. Giles, M. W., D. S. Gatlin, and E. F. Cataldo. 1976. "Racial and class prejudice: their relative effects on protest against school desegregation." AMERICAN SOCIOLOGICAL REVIEW 41(2).

This study explores the theories of class and race and identifies the relation to prejudice. The data indicate that prejudice stems from negative racial attitudes plus the specification of this relation by the joint effect of the status of the respondent. Generalizability is limited due to the sampling of selected school districts in Florida.

303. Gillette, R. 1971. "Nuclear reactor safety: a new dilemma for the AEC." SCIENCE 173(July 9).

This report comments on the apparent paradox of the Atomic Energy Commissions' request for additional funding for research on reactor safety at the same time the Commission was assuring the public that the reactors are safe and reliable. This paradox was resolved when it was pointed out that reactor aging and design improvements necessitated continuing assessment of reactor safety.

304. _____. 1971. "Nuclear power in the USSR: American visitors find surprises." SCIENCE 173 (September 10).

305. Gilmour, R. S., and J. A. McCauley. 1976. "Environmental preservation and politics: the significance of 'Everglades jetport'". POLITICAL SCIENCE QUARTERLY 90(4).

This case study examines the controversy surrounding the efforts to develop a jetport in the Everglades National Park. As long as decisions on site location remained at the local level, a small, cohesive group (the Dade County Port Authority) could effectively ignore complaints from local conservation groups. As soon as nationally situated conservationists became aware of the intentions and the "New York Times" began national press coverage, the conflict was no longer containable. Increased pressures led to formation of three separate study groups who issued report with "subtle but important differences." These reports were cited by the Interior Secretary in his disapproval of the jetport and by the Transportation Secretary in his support of the project. In the face of Senate hearings, President Nixon finally vetoed the proposed development.

306. Ginsberg, M. 1934. SOCIOLOGY. London: Butterworth.

307. Gofman, J. W. and A. Tamplin. a:1970. "POPULATION CONTROL" THROUGH NUCLEAR POLLUTION. Chicago: Nelson-Hall.

308. _____. b:1970. "Harrassment charges against AEC, Livermore." SCIENCE 196 (August 28).

309. _____. c:1970. "Radiation: the invisible casualties." ENVIRONMENT 12(12).

310. _____. 1971. POISONED POWER. Emmanus: Rodale Press.

311. Goodman, R. F. and B. B. Clary. 1976. "Community attitudes and action in response to airport noise." ENVIRONMENT AND BEHAVIOR 8(3).

This report analyzes survey data on aspects of public reactions to aircraft noise pollution. A complex picture emerged involving inter-relationships between perceptual, attitudinal, demographic, and physical factors.

312. Gough, W. C. and B. J. Eastland. 1971. "Prospects of fusion power." SCIENTIFIC AMERICAN 224(February).

313. Graf, W. L. 1976. "Resources, the environment and the American experience." JOURNAL OF GEOGRAPHY 75(1).

314. Graham, F., Jr. 1970. "Tempest in a nuclear teapot: thermal pollution." AUDOBON 72(March).

This reporting of the September 1969 AEC hearings in Vermont concentrates on the issue of "thermal enrichment" of waterways as a by-product of reactor cooling. The author is critical of the AEC and private industry insofar as both agencies refuse to consider thermal pollution as problematic in the planning and design of nuclear facilities. The possibilities of capturing the heat discharges are discussed, with benefits for aquaculture a case in point.

315. Grant, M. J. and V. Sermat. 1969. "Status and sex of others as determinants of behavior in a mixed-motive game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 12(2).

This experiment could find no evidence for the hypothesis that males were more competitive than females, nor were choices made a function of the power status of subject vis-a-vis others. It was found that subjects were submissive towards superior partners.

316. Green, A. L. 1961. "The ideology of anti-fluoridation leaders." JOURNAL OF SOCIAL ISSUES 17(3).

This article looks at the impact of the oppositions' belief that fluoridation acts as a poison. Opposition leaders were less sure of their beliefs in private interviews than their public statements indicated.

317. Green, H. P. 1968. "Reasonable assurance of no undue risk: reactor licensing procedures." SCIENTIST AND CITIZEN 10(June).

318. Greenberg, D. 1971. "Accomplishments of environment lobby." NEW SCIENCE AND SCIENCE JOURNAL 50(748).

319. Greenberg, J. and G. S. Leventhal. 1976. "Equity and the use of overreward to motivate performance." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(2).

This experiment found that subjects who had been instructed to distribute rewards on the basis of motivating workers gave higher rewards to performers who did poorly than subjects who had been instructed to distribute rewards on the basis of performance alone.

320. Griesinger, D. W. and J. W. Livingston. 1973. "Toward a model of inter-personal motivation in experimental games." BEHAVIORAL SCIENCE 18(3).

The authors introduce the concept of motivational orientation to describe the relative weights opponents place on their outcomes. The use of the concept is illustrated.

321. Grimes, M. D., C. M. Bonjean, J. L. Lyon, and R. L. Lineberry. 1976. "Community structure and leadership arrangements: a multidimensional analysis." AMERICAN SOCIOLOGICAL REVIEW 41(4).

The authors seek to test Clark's (1971) hypothesis that differentiated changes in community structure are related to a pluralistic leadership structure. Two separate samples of communities were compared. One used Clark's (1971) ersatz decisional measure; the other used the Bonjean (1963) modified reputational technique. The evidence indicated that the conception of leadership structure along a unidimensional pluralist-elitist structure is oversimplistic. Leadership patterns vary in terms of visibility, legitimacy and centralization. Included is a discussion of the difficulties and limitations of comparative techniques and ecological approaches to the study of community power structures.

322. Gruder, C. L. 1971. "Relationships with opponent and partner in mixed-motive bargaining." JOURNAL OF CONFLICT RESOLUTION 15(3).

This experiment tested the effects of exploitive opponents and accountability to opponent. Smaller and fewer concessions were made to an exploitive opponent. Accountability increased the effect with minimum cooperation being associated with exploitive opponents to whom subjects were not accountable.

323. Gruder, C. L. and R. G. Duslak. 1973. "Elicitation of cooperation by retaliatory and nonretaliatory strategies in a mixed-motive game." JOURNAL OF CONFLICT RESOLUTION 17(1).

In this experiment, it was found that the low retaliatory strategy induced the greatest level of cooperation followed by high retaliatory and last, the pacifist nonretaliatory strategy.

324. Gumpert, P., M. Deutsch, and Y. Epstein. 1969. "Effects of incentive magnitude on cooperation in the prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 11(1).

This experiment found that subject cooperation in gaming decreased over trials and that the more money paid the subject, the greater the competition for payoffs.

325. Gushee, D. E. 1974. "Energy vs. environment--a conflict in Congress." CHEMTECH (February).

326. Gustafson, P. F. 1970. "Nuclear power and thermal pollution: Zion, Illinois." BULLETIN OF THE ATOMIC SCIENTIST 26(March).

327. Guyer, M. and A. Rapoport. 1969. "Information effects in two mixed-motive games." BEHAVIORAL SCIENCE 14(6).

This experiment found that greater cooperation was evidenced when the subjects had knowledge about both player payoffs than when the subjects knew only of their own payoff.

328. Hadden, J. K. and E. F. Borgetta. 1965. AMERICAN CITIES. Chicago: Rand McNally.

329. Hall, J., and M. S. Williams. 1966. "A comparison of decision-making performances in established and ad hoc groups." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 3(2).

This experiment documented the effects of tradition and experience in established groups which were able to formulate creative decisions and better solutions than ad hoc groups which were limited to using compromise strategies.

330. Hamilton, M. 1977. "Analysis and typology of social power." PHILOSOPHY OF THE SOCIAL SCIENCES 7(1).

331. Hamner, W. C. 1974. "Effects of bargaining strategy and pressure to reach agreement in a stalemated negotiation." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(4).

This experiment found that under conditions of high pressures to settle negotiations, subjects reach settlements in fewer trials and with greater concessions than where pressure to settle was low. Subjects who faced "tougher" negotiators produced a high number of cases where settlement deadlocked. A soft negotiation strategy produced high payoffs in both high and low pressure conditions.

332. Hanlon, J. O. 1966. "Atomic bomb in the land of coal: TVA's contract for the biggest nuclear power plant." FORTUNE 74(September).

333. Hansen, R. D. and C. A. Lowe. 1976. "Distinctiveness and consensus: the influence of behavioral information on actors' and observers' attributions." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(3).

This experiment found that conditions of low distinctiveness induced strong personal attributions and weak attributions towards the environment. The condition of high consenses induced weak personal and strong environmental attributions.

334. Harford, T. and H. S. G. Cutter. 1966. "Cooperation among Negro and white boys and girls." PSYCHOLOGICAL REPORTS 18(3).

This experiment found that black male children were more aggressive and domineering than white males. Female black children evidenced more affiliation and maturance than white females.

335. Harford, T. and L. Solomon. 1967. "'Reformed sinner' and 'lapsed saint'--strategies in the prisoner's dilemma game." JOURNAL OF CONFLICT RESOLUTION 11(1).

In this experiment, it was found that the most effective strategy was initial noncooperation to unconditional cooperation (the reformed sinner strategy). Less effective was initial cooperation to conditional cooperation (lapsed saint strategy).

336. Harsanyi, J. C. a:1962. "Bargaining in ignorance of opponent's utility function." JOURNAL OF CONFLICT RESOLUTION 6(1).

The author uses game theoretic requirements of opponents having consistent utility functions to address the problem of bargaining under unknown utility functions. He suggests two mechanisms: stereotypical functions and mutual adjustment of functions during bargaining.

337. _____. b:1962. "Measurement of social power, opportunity costs, and the theory of two-person bargaining games." BEHAVIORAL SCIENCE 7(1).

This research introduced the notion that one actor's use or acquisition of power over another actor induces opportunity costs on both. The author discusses various equations which specify these costs, plus the scope, means, base, and the extension of power.

338. _____. 1966. "The bargaining model for social status in informal groups and formal organizations." BEHAVIORAL SCIENCE 11(5).

The author addresses the problem of resources distribution and social status (prestige) in terms of game theoretic concepts of bargaining.

339. Haskell, E. 1971. "New directions in state environmental planning." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 37(4).

This essay follows the emerging trend of the consolidation of state agencies charged with environmental management and concludes that consolidation is the only effective way to pursue adequate planning and implementation of policy. The author argues that since local government lacks technical expertise and is often too close to political pressures and special interests, and that the federal government is too far away from understanding each state's peculiar set of environmental problems, it remains for state governments to assume the role of planner and protector of the environment.

340. Hawley, A. H. 1963. "Community power and urban renewal success." AMERICAN JOURNAL OF SOCIOLOGY 68(June).

This paper develops the case for the usefulness of the MPO ratio (the ratio of managers, proprietors, and officials to the total labor force) in determining social policy outputs as defined within the relations of power in a social system. The model developed predicts that the lower the MPO ratio, the greater the success in implementing urban renewal programs.

341. _____. 1965. "Replay to straits." AMERICAN JOURNAL OF SOCIOLOGY 71(1).

342. _____. 1973. "Comment on Williams: the ecological approach in measuring community power concentration." AMERICAN SOCIOLOGY REVIEW 38(3).

343. Hawley, W. D. and J. H. Svara. 1972. THE STUDY OF COMMUNITY POWER. Santa Barbara: Clio Press.

344. Heclo, H. H. 1972. "Review article: policy analysis." BRITISH JOURNAL OF POLITICAL SCIENCE 2(1).

345. Hedgpeth, J. W. 1965. "Bodega Head, a partisan view." BULLETIN OF THE ATOMIC SCIENTIST 21(March).

346. Heilman, M. E. 1976. "Oppositional behavior as a function of influence attempt intensity and retaliation threat." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(5).

In this experiment, it was shown that as attempts to influence were increased, oppositional behavior increased. Particularly strong effects were noted where there was no threat of retaliation.

347. Heilman, M. E. and K. A. Garner. 1975. "Counteracting the boomerang: the effects of choice on compliance to threats and promises." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(5).

This experiment found that threats were more effective in inducing compliance when the subjects were allowed choice to freely choose among alternative modes of compliance than when no alternatives were available. Whether the influence attempt was prescriptive or proscriptive made no difference in the level of compliance.

348. Helsabec, R. E. 1972. "Toward an optimum decision-making structure in colleges--a literature review and interpretation." JOURNAL OF RESEARCH AND DEVELOPMENT IN EDUCATION 6(1).

This paper reviews the relationship between the decision-making process and organizational effectiveness with explicit attention paid to student input into the process. Specific recommendations are offered to insure: universal participation in decisions relating to personnel and resource allocation; faculty participation for developing standards of student work; student participation in evaluating student progress; and the establishment of faculty interest groups to further decentralize power.

349. Henderson, H. 1971. "Nuclear power--letters." NEW YORK TIMES MAGAZINE (March 21).

This letter comments on the Lapp article noting the author's failure to see the alternatives to use of nuclear power, and also suggests that nuclear fission now represents obsolescent technology. In his response to Henderson, Lapp notes that alternatives are highly localized (e.g., geothermal) and that breeder reactor technology is far from development.

350. Henderson, T. A. and W. A. Rosenbaum. 1973. "Prospects for consolidating local government--role of elites in electoral outcomes." AMERICAN JOURNAL OF POLITICAL SCIENCE 17(4).

This research examines referenda outcomes as a function of elite involvement, group alignments, civic dissatisfaction, and "slack" in the political system. Highest rates of success were found in those elections characterized by a high level of endorsement and involvement by local elites in favor of the issue.

351. Henning, D. H. 1974 ENVIRONMENTAL POLICY AND ADMINISTRATION. New York: American Elsevier.

352. Hensley, V. and S. Duval. 1976. "Some perceptual determinants of perceived similarity, liking, and correctness." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(2).

This experiment found in comparing one group with similar opinions to another group whose opinions varied, that the greater the dissimilarity between the two groups, the greater the liking and perceived correctness in the similar group and the less the liking and perceived correctness of the other group.

353. Herbert, A. W. 1972. "Management under conditions of decentralization and citizen participation." PUBLIC ADMINISTRATION REVIEW 32(October).

This paper addresses the consequences of increased public participation in policy determinations. Managerial implications include the "socio-emotional-

balancing" of citizen needs with employee demands, changes in the work of persons in publicly administered organizations, and alterations of the relations between the organization and its clients served.

354. Hermalin, A. I. and R. Farley. 1973. "The potential for residential integration in cities and suburbs: implications for the busing controversy." AMERICAN SOCIOLOGICAL REVIEW 38(5).

355. Hill, G. 1972. "Air pollution units pose conflict issue." NEW YORK TIMES (December 13).

356. _____. 1975. "Nuclear power development encounters rising resistance with curbs sought in a number of states." NEW YORK TIMES (July 29).

The TIMES surveys several efforts to restrict nuclear power development because of safety and environmental factors.

357. _____. a:1976. "Nuclear safety is issue on coast." NEW YORK TIMES (February 29).

The article discusses the pros and cons of a proposition in the June 8th primary in California that gives the state legislature authority to judge the propriety of proposed nuclear power plants.

358. _____. b:1976. "States to vote on atomic-power curb." NEW YORK TIMES (May 10).

California, Oregon, and Colorado (as well as the possibility of Arizona, Michigan, Missouri, Montana, North Dakota, Ohio, Oklahoma and Washington) will have proposals to restrict the development of nuclear power on their ballots. The proposals are modeled after the California initiative.

359. _____. c:1976. "Environmental lobby campaigns to oust twelve in House." NEW YORK TIMES (July 22).

This article reports on the activities of the Dirty Dozen campaign, which identified the twelve legislators with the worst records in support of environmental issues and who are considered vulnerable. While total membership in environmental organizations is small, if issues affect certain publics, mass mobilization for action is possible.

360. Hilliard, R. 1974. "Energy and the environment: a conflict of interest or two aspects of a single policy?: OECD OBSERVER June (70).

361. Hinckley, B. 1975. "Introduction--coalitions and time." AMERICAN BEHAVIORAL SCIENTIST 18(4).

This is an introduction to a special issue on coalition formation over time. The volume gathers experimental, historical and mathematical analyses.

362. Hinton, B. L., W. C. Hamner, M. F. Pohlen. 1974. "The influence of reward magnitude, opening bid, and concession rate on profit earned in a managerial negotiation game." BEHAVIORAL SCIENCE 19(3).

This experiment found that the opening bid and the bargainer's concession rate were highly significant in reaching agreements and that this relation held despite differences in the magnitude of earnings.

363. Hipel, K. W., R. K. Ragade, and T. E. Unny. 1977. "Political resolution of environmental conflict." WATER RESOURCES BULLETIN 12(4).

This research employed metagame theory toward the determination of decision-making processes which output politically, economically, and physically feasible solutions to specified pollution problems.

364. Hogerton, J. F. 1968. "Arrival of nuclear power." SCIENTIFIC AMERICAN 218 (February).

365. Hohenemser, C., R. Kasperson, and R. Kates. 1977. "The distrust of nuclear power." SCIENCE 196.

366. Hohm, C. F. 1976. "Human-ecological approach to reality and perception of air-pollution--Los Angeles case." PACIFIC SOCIOLOGICAL REVIEW 19(1).

367. Hoinville, G. 1971. "Evaluating community preferences." ENVIRONMENT AND PLANNING 3(1).

This article argues for use of a new survey research method that involves use of an electronic "priority evaluation game" which consists of a series of drawings depicting the worst to best alternatives. Respondents are confronted with about three thousand dollars and told to imagine themselves having to move to a new area. They then "spend" the entire amount distributing it in such a manner that a system of trade-offs develops which when aggregated, depicts the nature of community preferences.

368. Holcomb, R. W. 1970. "Power generation: the next 30 years." SCIENCE 167 (January 9).

369. Holden, W. M. 1968. "Hot water: menace and resource." SCIENCE NEWS 94 (August 17).

370. Holdren, J. and P. Herrara. 1971. ENERGY. San Francisco: Sierra Club.

371. Holloway, S., L. Tucker, and H. A. Hornstein. 1977. "The effects of social and nonsocial information on interpersonal behavior of males: the news makes news." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 35(7).

In this experiment, it was found that social information could affect the level of cooperation and competition. The same information expressed as a natural phenomenon failed to duplicate the affect.

372. Holmes, J. G., W. F. Throop, and L. H. Strickland. 1971. "The effects of pre-negotiation expectations on the distributive bargaining process." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 7(6).

In this experiment, it was concluded that negotiators with high levels of aspirations generated high initial demands, produced higher mean demands levels, and succeeded in securing more settlement points than negotiators whose level of aspiration were relatively low.

373. Homans, G. C. 1961. SOCIAL BEHAVIOR: ITS ELEMENTARY FORMS. New York: Harcourt, Brace & World.

374. Horai, J. 1977. "Attributional conflict." JOURNAL OF SOCIAL ISSUES 3(1).

This paper examines conflict when actors make different attributions of the causes of events. It was shown how disagreement over causal explanations structures interactions such that one actor tries to influence the causal explanations of the other. The author proposed a taxonomy of "verbal strategies" employed as influence mechanisms to manage conflict and stated some of the conditions which activate a particular strategy.

375. Horan, P. M. 1971. "Social positions and political cross-pressures: a re-examination." AMERICAN SOCIOLOGICAL REVIEW 36(4).

Examining voting data from the 1948 and 1956 elections, this research seeks to test the effects of cross-pressures on the political behavior of individuals. The results of analysis lend no support to theories which postulate that cross-pressuring accounts for a substantial level of non-voting behavior and other types of "political escape."

376. Hornstein, H. A. 1965. "The effects of different magnitudes of threat upon interpersonal bargaining." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 1(3).

This study found that threats made before or during negotiations reduced the probability that agreement would be reached. Evidence was found that supported a threat, counterthreat, aggression sequence.

377. Hornstein, H. A. and M. Deutsch. 1967. "Tendencies to complete and to attack as a function of inspection, incentive and available alternatives." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 5(3).

Examining comparative individualistic or competitive behaviors, it was found that whether a subject accepted an alternative behavior depended on the payoff of the alternative. Requiring bilateral inspections produced greater payoffs and reduced aggression.

378. Hornstein, H. A. and D. W. Johnson. 1966. "The effects of process analysis and ties to his group upon the negotiator's attitudes toward outcomes of negotiation." JOURNAL OF APPLIED BEHAVIORAL SCIENCE 2(4).

This experiment found that high commitment induced a subject to "insulated ignorance" in which one does not examine self-behavior and other's perceptions due to the overwhelming support of one's group proposal. Where commitment is placed on the role of negotiator, rather than the group, then the negotiator felt less inclined to stay with the group's proposal.

379. Hrycenko, I. and H. L. Minton. 1974. "Internal-external control, power position, and satisfaction in task-oriented groups." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(6).

This experiment found that a subject's satisfaction with a power position was a function of personality and actual power possessed. Males with external locus of control demonstrated greater satisfaction in a low power position. Females tended to be more satisfied in a low power position when locus of control was internal. Internally controlled males preferred high power.

380. Hunt, R. P. 1963. "Atomic question for the city: proposed nuclear power plant in Queens." NEW YORK TIMES MAGAZINE (October 6).

381. Hunter, A. 1975. "The loss of community: an empirical test through replication." AMERICAN SOCIOLOGICAL REVIEW 40(5).

Utilizing both random survey and field observation methods, this study seeks to replicate Foley's (1952) findings that increasing urbanization leads to a loss of community. Expanding the concept of community, the data indicates that increasing urbanization leads to a decline in local facility use, no change in patterns of informal neighboring, and an increase in the collective "sense of community." The failure of the expected hypothesis is accounted for by the creation of community organizations in response to two pressing ecological problems: noise and air pollution from the local airport and "block busting" by local realtors in the early 1960's. Through these organizations a network of social and community relations was established. Informal neighboring is shown to have significant effects on sense of community, particularly among newcomers.

382. Hunter, F. 1953. COMMUNITY POWER STRUCTURE. Chapel Hill: University of North Carolina Press.

In this case study of "Regional City" (Atlanta, Georgia), influentials in the community were identified by a panel of "judges". Of the forty identified, twenty-seven were interviewed in order to generate patterns of influence. Using a socio-metric analysis, the author concluded that the community was ruled by a small economic elite with interlocking social ties, and that this power elite operated behind the scene to influence policy.

383. Hutchins, R. M. 1975. "Environment and civil rights." CENTER MAGAZINE 8(6).

384. Ikle, F. C. 1964. HOW NATIONS NEGOTIATE. New York: Harper and Row.

385. Jackson, J. E. 1972. "Politics and the budgetary process." SOCIAL SCIENCE RESEARCH 1(1).

Municipal expenditure data for Cleveland, Ohio are used to test three models of political decision-making: the incremental model introduced by Crecine (1969), the electoral demand model implied by Downs (1957), and the external demand model implied by a general economic perspective. Support is found for all three models to a limited extent; however, the support for both the incremental and electoral model was interpreted to mean that an optimal model would view the mayor as an incrementalist decision-maker who is strongly influenced by the demands of the voters.

386. Jacobsen, S. 1973. "Land use dispute in Illinois: nuclear power vs. crops." BULLETIN OF THE ATOMIC SCIENTIST 29(January).

387. Janson, D. 1976. "Hearings open today on application to manufacture floating nuclear power plants." NEW YORK TIMES (March 23).

The opposition by local residents to four floating nuclear power plants proposed by Offshore Power Systems for Jacksonville, Florida is discussed.

388. Janssens, L. and J. R. Nuttin. 1976. "Frequency perception of individual and group successes as a function of competition, coercion, and isolation." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(5).

389. Jennings, M. K. 1964. COMMUNITY INFLUENTIALS: THE ELITE OF ATLANTA. Glencoe: The Free Press.

390. Johnson, D. F. and W. L. Tullar. 1972. "Style of third party intervention, face-saving and bargaining behavior." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 8(4).

In this experiment negotiations which were high in need to save face and not anticipating intervention, or low in need to save face and anticipating intervention were associated with greater conciliation.

391. Johnson, D. L. 1972. "Air pollution--public attitudes and public action." AMERICAN BEHAVIOR SCIENTIST 15(4).

392. Jones, C. O. 1972. "From gold to garbage: a bibliographical essay on politics and the environment." AMERICAN POLITICAL SCIENCE REVIEW 66(2).

This paper reviews fourteen recent works on the impact of politics and environmental issues. While finding serious shortcomings in all books reviewed, it was noted that a pattern of policy response emerged. Identification of a new issue leads to political

rhetoric and expansion of participation without any corresponding increase in new knowledge; thus, when a political decision is made, it creates a new political agent which is understaffed and inadequately funded.

393. _____. 1974. "Speculative augmentation in federal air pollution policy-making." JOURNAL OF POLITICS 36(2).

This discussion examines the effectiveness of the traditional "majority-building incrementalist" approach to policy implementation against the "public-satisfying speculative augmentation" model. In the latter case, the policy process of formulation and legitimation were reversed; the public demanded a dramatic federal action (legitimation) which the federal legislators implemented through enactment of strict pollution standards (formulation). Thereafter public support diminished and policy enforcement became problematic.

394. Jordan, W. H. 1970. "Nuclear energy: benefits versus risks." PHYSICS TODAY 23(May).

395. Kahn, A. J. Hottes, and W. L. Davis. 1971. "Cooperation and optimal responding in the prisoner's dilemma game: effects of sex and physical attractiveness." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 17(3).

This experiment concluded that the sexes share cooperative motives but respond differently to cues. Males made more optimal choices which maximized their winnings. Females choose based on the sex and attractiveness of their partners.

396. Kantor, P. 1974. "Governable city--islands of power and political parties in London." POLITY 7(1).

397. Kasarda, J. D. and M. Janowitz. 1974. "Community attachment in mass society." AMERICAN SOCIOLOGICAL REVIEW 39(June).

Examining a cross-sectional survey of adults in 100 communities, the authors examine two competing conceptions of community attachment. The first model notes population size and density as primary indicators and the second model postulates that the primary predictor of community attachment is length of residence. Principle findings include the following: (1) population size and density were found to have no significant effect on friendship, kinship, and associated bonds--length of residence was highly significant; (2) primary and informal ties remained highly salient in large communities; and (3) increased population and density was not shown to weaken community sentiments. These findings show that the systemic model viewing community organization in terms of ecological, institutional, and normative action is a more powerful explanation of community attachment than the first model which suggests linear development caused by population and density changes in the community.

398. Kaufman, H. G. a:1972. "Attaining environmental quality: the role of the technical decision-maker." JOURNAL OF ENVIRONMENTAL SYSTEMS 2(3).

This paper reviews several studies of executives and technical experts to determine the role of these individuals in decision-making. It was found that they fail to consider the importance of environmental quality, and consider it secondary to profit-making. The author feels this results from the exclusion of professionals from the influence process. It was recommended that the professional societies should seek to sensitize their members to environmental concerns, and should also seek to directly influence public policy.

399. _____. b:1972. "Urban structure and urban politics in Latin-America." JOURNAL OF COMPARATIVE ADMINISTRATION 4(3).

400. Kefalas, A. G., A. B. Carroll. . "Perspectives on environmental protection: a survey of the executive viewpoint." JOURNAL OF ENVIRONMENTAL SYSTEMS 6(3).

This paper reports results from a survey of executive attitudes on environmental protection issues, programs, and concerns. Executives supported cutting back on regulatory activities; felt that conservationist groups did not represent general public opinion; considered tax credits the most effective facilitator of environmental protection; and determined the federal government's approach to environmental protection to be unrealistic and premature.

401. Kelley, D. R., K. R. Stunkel, and R. R. Wescott, 1974. "The politics of the environment." AMERICAN BEHAVIOR SCIENTIST 17(5).

This paper presents a comparative analysis of the political responses to environmental problems by the governments of the U.S., USSR, and Japan. The author finds "remarkably similar" responses--decentralization and bureaucratic fragmentation have limited organizational cooperation and effectiveness. Each country was judged to have weak environmental laws and the agencies created to regulate environmental concerns lacked real power. The main differences involved the American response of an open, conflict-centered system to the Japanese and USSR system which was closed and consensus-centered. The U. S. process facilitated opportunities of environmental groups.

402. Kelley, H. H. 1966. "A classroom study of the dilemmas in interpersonal negotiations." In K. Archibald (ed.), STRATEGIC INTERACTION AND CONFLICT: ORIGINAL PAPERS AND DISCUSSION. Berkeley: Institute of International Studies, University of California, Berkeley.

In a class of college students studying bargaining, experiments were run to study the negotiations between management and labor. Characteristic of such negotiations are multiple issues, deadlines for negotiation and different preferences by the negotiators for the outcomes of each issue. It was found that as time ran out, cooperation increased. In addition, negotiations were more efficient and cooperative when there were multiple issues to discuss and when promises rather than threats were communicated between opponents.

403. Kelley, H. H. and A. J. Arrowood. 1960. "Coalitions in the triad: critique and experiment." SOCIOMETRY 23(3).

This experiment found that subjects in a triad form coalitions on the basis of power distribution such that the weaker two will joint against the more powerful one. The experiment showed how subjects acquire through trials a more "correct" understanding of the true distribution of power and then act on this information rationally.

404. Kelley, H. H., L. L. Beckman, and C. S. Fischer. 1967. "Negotiating the division of a reward under incomplete information." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 1(1).

405. Kelley, H. H., M. Deutsch, J. T. Lanzetta, J. M. Nuttin, Jr., G. H. Shure, C. Faucheux, S. Moscovici, J. M. Rabbie, and J. W. Thibaut. 1970. "A comparative experimental study of negotiation behavior." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(3).

This experiment duplicated in four countries found that the greater the difficulty in the bargaining problem, the more the trial time necessary and the less frequency of agreement. The greater the values at stake, the more negotiations if cooperation led to joint-gain. Conditions of unequal dependence did not lead to disrupted negotiations.

406. Kelley, H. H. and A. J. Stahelski. a:1970. "Errors in perception of intentions in a mixed-motive game." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 6(4).

This experiment found that when subjects were asked to indicate the intentions of their opponent that better predictions were made of non-cooperative opponent's intentions than cooperative opponents. Cooperative members had greater difficulty maintaining cooperation than their non-cooperating partners.

407. _____. b:1970. "The inference of intentions from moves in the prisoner's dilemma game." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 6(4).

This experiment found that where a subject's behavior was consistent, more information was made available and consensus was reached earlier than when the subject's behavior is inconsistent.

408. _____. c:1970. "Social interaction basis of cooperators' and competitors' beliefs about others." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(1).

This study found that when cooperative and competitive subjects are paired, the cooperative subject becomes more competitive. The competitor thinks his opponent is another competitor and the cooperator recognizes his subordinate role. Furthermore, authoritarians are likely to be competitive and nonauthoritarians are likely to be cooperative.

409. Kelley, J. R. 1975. "Planned and unplanned new town impacts: applying a method." ENVIRONMENT AND BEHAVIOR 7(3).

This paper reports on the planned and unplanned social impact of growth in a new community. The author suggests a framework for the analysis of social impact with the initial focus on the characteristics of impacted areas to be followed by a determination of the nature of the impact on specific units in the community, and proceeding to a systematic analysis of the results of the preceedingly identified impacted areas and units.

410. Kendell, H. W. 1975 NUCLEAR POWER RISKS: A REVIEW OF REPORT OF APS SOCIETY'S STUDY GROUP ON LIGHT WATER REACTOR SAFETY. Cambridge: Union of Concerned Scientists.

411. Kesselman, M. and D. Rosenthal. 1974. "Local power and comparative politics." SAGE PROFESSIONAL PAPER IN COMPARATIVE POLITICS SERIES 5.

412. Kifner, J. a:1977. "Occupation of atomic plant site scheduled today." NEW YORK TIMES (April 30).

413. _____. b:1977. "2,000 occupy nuclear plant site in New Hampshire vow to stay." NEW YORK TIMES (May 1).

414. _____. c:1977. "Atom foes adjust to captivity in New Hampshire." NEW YORK TIMES (May 4).

415. Kirby, D. J. and R. L. Crain. 1974. "The functions of conflict--school desegregation in 91 cities." SOCIAL SCIENCE QUARTERLY 55(2).

This paper examines the role of conflict in resolving controversial issues. Findings indicate that conflict generated by powerless groups can create issues and facilitate change in that issue, especially if these powerless groups can gain the support of a few elites. Where decisions are made by the consensus of the community, conflict lessens the prediction of success by challengers to power. Finally, where the target of conflict involves groups with "compulsory attendance," (e.g., legislatures, government bureaucracies) then these groups will seek to compromise to avoid conflict escalation since they cannot withdraw from the conflict.

416. Kirlin, J. J. 1975. "Electoral conflict and democracy in cities." JOURNAL OF POLITICS 37(1).

417. Kirlin, J. J. and S. P. Erie. 1972. "Study of city governance and public policy making--critical appraisal." PUBLIC ADMINISTRATION REVIEW 32(2).

In reviewing the existing approaches to the study of community power and decision-making, these authors suggest going beyond macro-level analysis of rules and policies to consideration of action in a behavioral context involving consideration of the objective and subjective impacts of policy decisions, and a greater emphasis on the city's external environment--particularly the relations of the city to regional economic and political jurisdictions.

418. Kirscht, J. P. and A. L. Knutson. 1961. "Science and fluoridation: an attitude study." JOURNAL OF SOCIAL ISSUES 17(4).

This research seeks to tie respondent attitudes about science in general to support for fluoridation. The indices created support the hypothesis that negative attitudes towards science are related to opposition to fluoridation.

419. Klauster, A. P. 1963. "Radiation and social ethics: conference of nuclear scientists and theologians." CHRISTIAN CENTURY 80(February 13).

420. Kleinke, C. L. and P. D. Pohlen. 1971. "Affective and emotional responses as a function of other person's gaze and cooperativeness in a two-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 17(3).

In this experiment, it was shown that gaze and liking were unrelated. There was more cooperation in the cooperative condition than in the competitive condition.

421. Knowles, E. S. and R. L. Bassett. 1976. "Groups and crowds as social entities: effects of activity, size, and member similarity on nonmembers." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(5).

This experiment found that pedestrians responded initially based on the size of a social entity. After passing the group or crowd, the level of activity and similarity became more salient to the pedestrian.

422. Kobler, J. 1965. "Four deadly minutes; accident at the Boris Kidrick Institute of Nuclear Sciences, Yugoslavia." SATURDAY EVENING POST 238 (November 6)

423. Koenig, D. J. 1975. "Additional research on environmental activism." ENVIRONMENT AND BEHAVIOR 7(4).

This paper reports results on attitudes towards environmental activism in one community. In this sample, there was little concern about water or air pollution. Activism was shown to be related to concern with socioeconomic issues. Of many demographic, attitudinal and behavioral variables, only political alienation, liberal political party, and working class identification predicted environmental concern, and these were statistically weak.

424. Kogan, N., H. Lamm, and G. Trommsdorff. 1972. "Negotiation constraints in the risk-taking domain, effects of being observed by partners of higher or lower status." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 23(2).

In this experiment, it was found that leader negotiators achieved consensus without deallocking significantly more often than subordinate negotiators. Leaders were pressured toward higher risk levels by subordinate observers. It was concluded that observers tended to generate a "loss of face" motivation in their leaders, and increased the fears of possible sanctions in subordinates for deviations.

425. Komorita, S. S. 1965. "Cooperative choice in a prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 2(5).

In this study, it was found that subjects did not reciprocate with cooperative choices even when such behavior would maximize gain. This was more true for females than males.

426. _____. 1973. "Concession-making and conflict resolution." JOURNAL OF CONFLICT RESOLUTION 17(4).

This experiment examines the effects of two situational variables on cooperative choices. It was found that a longer statement was more effective with competitive persons than cooperative persons on competitive actions. Conciliatory actions that were costly to the parties were shown to increase communication and cooperative intent.

427. Komorita, S. S., and M. Barnes. 1969. "Effects of pressures to reach agreement in bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 13(3).

This experiment found that pressure to reach an agreement was significantly related to the number of trials needed to reach agreement and the concessions made in the process. A situation in which one confronted settlement pressures and an opponent's firm bargaining strategy induced large concessions.

428. Komorita, S. S. and A. R. Brenner. 1968. "Bargaining and concession making under bilateral monopoly." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 9(1).

This set of experiments concluded that the more concessions the experimenter made, the less the subject made concessions. The strategy of a fair initial offer and holding firm produced the least concessions; and that a firm strategy was an advantageous, but not necessarily fair agreement.

429. Komorita, S. S., and D. Moore. 1976. "Theories and processes of coalition formation." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(4).

Of four theories on coalition formation (minimum resources theory, minimum power theory, bargaining theory, and the weighted probability model), bargaining theory provided the best predictors of which coalitions are likely to form, and what the division of resources would be for each coalition member. Further, experimental findings indicated interaction effects between subject's sex and power level.

430. Komorita, S. S., J. P. Sheposh and S. L. Braven. 1968. "Power, the use of power and cooperative choice in a two-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 8(2).

In this experiment, under the condition of unilateral power, the order of cooperation was benevolent (most), passive, and malevolent. Under the condition of bilateral power, the benevolent condition again induced the most cooperation, and the control condition, where the subjects played each other, produced the least cooperation.

431. Kornhauser, W. 1959. THE POLITICS OF MASS SOCIETY. New York: Free Press.

432. Korpi, W. 1974. "Conflict, power and relative deprivation." AMERICAN POLITICAL SCIENCE REVIEW 68(4).

This paper examines the power balance model of conflict and suggests the hypothesis that conflict is most probable under conditions where inter-group power differentials are minimized.

433. Kotter, J. P. and P. R. Lawrence. 1974. MAYORS IN ACTION. New York: Wiley-Interscience.

434. Krauss, R. M. 1966. "Structural and attitudinal factors in inter-personal bargaining." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 2(1).

This experiment supports the hypothesis that preferred mode of conflict resolution and bargaining effectiveness in a dyad are a function of the bargainers' attitude and bargaining relations (competitive-positive versus cooperative-negative).

435. Krauss, R. M. and M. Deutsch. 1966. "Communication in interpersonal bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 4(5).

This experiment found that allowing communication between parties in conflict induced higher joint payoffs and reduced conflict.

436. Kreps, G. A. and D. E. Wenger. 1973. "Toward a theory of community conflict--factors influencing initiation and scope of conflict." SOCIOLOGICAL QUARTERLY 14(2).

In this essay an analytical framework is offered that details the varying dimensions in the scope of conflict, seen as the degree of participation in conflict by community members, and its relation to the structure of community power and degree of structural integration. The formalized relations indicated are: the greater the scope of conflict, then the greater the number of separate issues; the greater the importance of general issues, the greater the degree of polarization and the greater the development of partisan organization.

437. Krieger, M. H. 1970. "Six propositions on the poor and pollution." POLICY SCIENCES 1(3).

This paper assesses the differential class impacts of pollution and of environmental policies. The author argues that the poor will be subject to increasingly disproportionate exposure to pollutants; and that environmental policies impact benefits such that "the rich get richer and the poor get poorer." However, those suffering from the greatest exposure to pollutants, the poor, are the least likely to aggressively seek remedy given their concern with increasing incomes and general standards of living.

438. Kruglanski, A. W. and M. Cohen. 1974. "Attributing freedom in the decision context: effects of the choice alternatives, degree of commitment and predecision uncertainty." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(1).

This experiment found that actor made greater attributions of freedom when there was no predecision uncertainty, when at least one choice alternative was perceived as attractive, and when commitment to the chosen alternative was low.

439. Kuhlman, D. M. and D. L. Wimberley. 1976. "Expectations of choice behavior held by cooperators, competitors, and individualists across four classes of experimental game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(1).

This experiment found that competitive subjects assumed that others were like themselves to a greater extent than cooperative subjects.

440. Kuo, W. H. 1973. "Mayoral influence in urban policy making." AMERICAN JOURNAL OF SOCIOLOGY 79(3).

441. Lambert, J. 1968. "Power and politics: German nuclear research." SCIENCE NEWS 94(November 2).

442. Lamm, H. and H. Kogan. 1970. "Risk taking in the context of intergroup negotiation." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 6(3).

443. Lane, D. A. 1973. "Pathology of community--pitfall in community health." COMMUNITY HEALTH 5(3).

444. Lang, G. E. and K. Lang. 1972. "Some pertinent questions on collective violence and the news media." JOURNAL OF SOCIAL ISSUES 28(1).

This paper examines the role of mass media (chiefly television) in generating collective violence. Contrary to the earlier findings, it was shown that media reports rarely influence the level of violence and that more often news reports function to reduce violent conflict, particularly if protestors are concerned with their public image.

445. Langewiesche, W. 1970. "Can our rivers stand the heat?: READERS DIGEST 96 (April).

446. Lapp, R. W. a:1971. "The nuclear power controversy--safety." THE NEW REPUBLIC 164(January).

This report traces the development of the A.E.C. guidelines for nuclear safety. Initial regulatory action centering in siting has given way to engineering concerns. The author points out the anomaly of developing larger reactors at the same time engineering defects are being discovered.

447. _____. b:1971. "The four big fears about nuclear power." THE NEW YORK TIMES MAGAZINE (March 21).

This article by a nuclear physicist presents technical refutations of the common fears of anti-nuclear interest groups.

448. Latour, S., P. Houlden, L. Walker, and J. Thibaut. 1976. "Some determinants of preference for modes of conflict resolution." JOURNAL OF CONFLICT RESOLUTION 20(2)..

This paper reports on the effects of temporal urgency, judgemental standards, and correspondence of outcomes or third-party intervention strategies. Manipulating these variables in an experimental design, the following resolution preferences were identified in descending order: arbitration, moot, mediation, autocratic, and bargaining procedures.

449. Laughlin, P. R., N. L. Keer, J. H. Davis, and H. M. Halff. 1975. "Group size, member ability, and social decision schemes on an intellectual task." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(3).

This experiment found that increased group size, composed of high ability members, operated under a "truth supported wins" process of social decision-making. Strong pressures were evidenced to make a "correct" member conform to the group decision.

450. Laumann, E. O. 1966. PRESTIGE AND ASSOCIATION IN AN URBAN COMMUNITY: AN ANALYSIS OF AN URBAN STRATIFICATION SYSTEM. Indianapolis: Bobbs-Merrill.

451. _____. 1973. BONDS OF PLURALISM. New York: Wiley: Interscience.

452. Laumann, E. O. and F. U. Pappi. 1976. NETWORKS OF COLLECTIVE ACTION. New York: Academic.

453. Laumann, E. O., L. M. Verbrugge, and F. U. Pappi. 1974. "A Causal modeling approach to the study of a community elite's influence structure." AMERICAN SOCIOLOGICAL REVIEW 39(April).

Establishing community power and influence as a function of similarities and dissimilarities among elite pairs in a network of relations, this research finds that "predictor structures" (i.e., business, religious, social ties) can explain a significant portion of the variation in community affairs and while social networks. Values of elites were shown to be a function of economic position, political affiliation, and religion. The full model was able to predict 24.5% of the variation in influence structures.

454. Lee, M. and H. Rosenthal. 1976. "A behavioral model of coalition formation: the French apparentments of 1951." JOURNAL OF CONFLICT RESOLUTION 20(4).

This paper presents a model for the analysis of real-time constraints using district-level election data. The model modestly supports the following findings reported by Lee and Rosenthal in their abstract:

(1) Coalitions are built incrementally and without defection until a coalition controls a majority of the votes;

(2) Offers to prospective partners are constrained by a graph that represents ideological and other constraints;

(3) Offers are made probabilistically, proportional to the votes controlled by the potential allies;

(4) Reciprocated offers are necessary and sufficient for a coalition to form.

Generalizability is problematic from a multi-party political structure. It is pointed out that the model fails to identify the impact of political structures at the national level.

455. Leif, I. P. and T. N. Clark. 1973. "Community power and decision-making: a trend report and bibliography." CURRENT SOCIOLOGY 20(2).

456. Leonard, R. L., Jr. 1975. "Self-concept and attraction for similar and dissimilar others." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(5).

This experiment found that subjects with positive self-concepts were attracted to others with like attitudes, while subjects with unfavorable self-concepts were not attracted to those with attitudes similar to their own.

457. Levenson, H. and J. Miller. 1976. "Multidimensional locus of control in socio-political activists of conservative and liberal ideologies." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(2).

This experiment found a positive relation between liberal activism and increases in external control by powerful others. For conservatism, the effect was inverse.

458. Levine, C. H. and C. Kaufman. 1974. "Urban conflict as a constraint on mayoral leadership--lessons from Gary and Cleveland." AMERICAN POLITICS QUARTERLY 2(1).

459. Lewis, R. 1972. THE NUCLEAR POWER REBELLION: CITIZENS VS. THE ATOMIC INDUSTRIAL ESTABLISHMENT. New York: Viking Press.

460. Liberman, B. 1975. "Coalitions and conflict resolution." AMERICAN BEHAVIORAL SCIENTIST 18(4).

This paper examines the outcomes of coalition formation in three person bargaining situations. Utilizing a game theoretic approach to the study of triadic relations, four experimental analyses and one historical analysis in international behavior were undertaken. The findings indicated that the manipulation of rewards or payoffs caused coalitions to form, become stable, or dissolve.

461. Lieber, H. 1970. "Public administration and environmental quality." PUBLIC ADMINISTRATION REVIEW (May/June).

This essay reviews the national concern over the environmental crisis. Surveying the range of issues, problems, and threats, the author examines the responses made by the institutions responsible for public policy and decision-making and found encouraging, but insufficient impetus to resolve the major issues. It was suggested that future research increase attention to the role of the courts and special interest groups in generating improvements in the overall quality-of-life concerns.

462. Liebert, R. J. a:1974. "Municipal functions, structure, and expenditures: a reanalysis of recent research." SOCIAL SCIENCE QUARTERLY 54(March).

463. _____. b:1974. "Theory construction and measurement error in city expenditure analysis: response to Clark." SOCIAL SCIENCE QUARTERLY 55(3).

464. _____. 1976. DISINTEGRATION AND POLITICAL ACTION. New York: Academic Press.

Using data on the 668 largest American communities, this is a study of the causes and consequences of the "functional scope" of municipal government. The more different functions (e.g., education, welfare, hospitals, etc.) served by a municipal government, then the greater the number of different interest groups one will observe participating in community decision-making. Further, it is the oldest cities that serve the most functions; those more recently established being able to let various federal and state programs fulfill functions that individual communities had to meet earlier. Thus, older communities should evidence higher levels of resource mobilization and citizen participation than do newer communities. This hypothesis is supported both in regard to the formal accessibility of leaders to the general citizen as well as the voter turnout for elections.

465. Liebert, R. J. and A. W. Imershein (eds.) 1977. POWER, PARADIGMS, AND COMMUNITY RESEARCH. London: Sage.

466. Life. 1969. "War over the peaceful atom: radioactive and thermal hazards." LIFE (September 12).

467. Lincoln, J. R. 1976. "Power and mobilization in the urban community: reconsidering the ecological approach." AMERICAN SOCIOLOGICAL REVIEW 41(1).

This research involves an extension and replication of Hawley's theory that the distribution of power in a community is influenced by the community's capacity to mobilize public issues. Primary predictor variables shown to influence mobilization were the MPO ratio (negatively related), governmental scope, population size, manufacturing (negatively related), concentration, and absentee ownership (negatively related). Mobilization was strongly related to municipal expenditures, poverty funding, and urban renewal. Interpreting these findings, the author concludes: the ecological model which conceptualizes the urban community in terms of size and function was supported by the data; Hawley's theory and use of the MPO ratio was supported; the scope of government was shown to be an important intervening variable; and mobilization was deemed a useful and valid measure of unobservable processes in the community.

468. Lineberry, R. L. and E. P. Fowler. 1967. "Reformism and public policies in American cities." AMERICAN POLITICAL SCIENCE REVIEW 61 (September).

This paper replicates Banfield's and Wilson's findings that reformist, non-partisan, city manager forms of community political structure are less responsive to the public as compared to those communities characterized by ward policies and partisan elections.

469. Lipsky, M. and D. J. Olson. 1976. "Processing of racial crisis in America." POLITICS AND SOCIETY 6(1).

470. Llewellyn, L., E. Buntin, C. Goodman, G. Hare, R. Mach, and R. Swisher. 1975. "The role of social impact assessment in highway planning." ENVIRONMENT AND BEHAVIOR 7(3).

This paper seeks to determine the extent to which highway departments conform to federal statutes requiring assessment of social impact. A range of techniques and problems associated with implementing citizen participation and evaluating social impact are discussed. The authors concluded that the primary obstacle in these relations is the "natural" adversary relationship between the public and the highway department and between the engineers and social scientists within the department.

471. Lockhart, C. 1977. "Problems in management and resolution of international conflict." *WORLD POLITICS* 29(3).
472. Love, S. 1972. "Ecology and social justice, is there a conflict?: *ENVIRONMENTAL ACTION* 4(6).
473. Lubkin, G. B. 1971. "Columbia reactor gets thumbs down." *PHYSICS TODAY* 24 (June).
474. Lundquist, L. J. 1974. "Do political structures matter in environmental politics?" *AMERICAN BEHAVIOR SCIENTIST* 17(5).
 This paper uses a structural approach to determine the range of alternatives that are considered "feasible" in solving a political problem. The Canadian, U.S. and Swedish political structures were compared with respect to air pollution control policy alternatives. Findings indicated different patterns of policy authority, methods of implementation, public participation; enforcement and compliance were related to governmental structure.
475. Luttbeg, N. R. and H. Zeigler. 1966. "Attitude consensus and conflict in an interest group: an assessment of cohesion." *AMERICAN POLITICAL SCIENCE REVIEW* 60(3).
 This research found that leaders, while feeling somewhat constrained by their following, at the same time were not willing to give up their autonomy. This suggested that potential role conflict existed between the representative and delegate roles. The data showed leaders to be more organizationally active, more liberal, and more directed toward expansion of the organization's activities than the general membership. Very significant differences were found between the leader's and follower's attitudes, and this difference was shown to be greater than the leader's perceptions of the follower's attitudes.
476. Lyden, F. J. 1975. "Using Parson's functional analysis in study of public organizations." *ADMINISTRATIVE SCIENCE QUARTERLY* 20(1).
477. McCarthy, J. and A. Shorett. 1976. "Mediation to resolve environmental conflict: the Snohomish experiment." *JOURNAL OF SOIL AND WATER CONSERVATION* 31(5).
478. McClintock, C. G., D. M. Messick, D. M. Kuhlman, and F. T. Campos. 1973. "Motivational basis of choice in three-choice decomposed games." *JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY* 9(6).
 This experiment found that the motive of aggression was only "negligibly" present in subject's choices. Playing two games, a subject selected competitive choices when little was at stake, and cooperative choices when more was at stake. In one game, males were more cooperative and females more competitive.
479. McClure, J. A. 1972. "Battle of crises: energy/environment conflict." *PHOENIX QUARTERLY* 4(3).
480. McCord, J. 1976. "Why courts supported New Jersey's ban on out-of-state wastes." *SOLID WASTES MANAGEMENT* 19(4).
481. McDaniel, J. W., E. O'Neal, and E. S. Fox. 1971. "Magnitude of retaliation as a function of the similarity of available responses to those employed by attacker." *PSYCHONOMIC SCIENCE* 22(4).
 This experiment found that retaliation was at its highest level when subjects perceived an attack. When attacked subjects were allowed to do the attacking, even greater retaliation was evidenced.

482. McKersie, R. B., C. R. Perry, and R. E. Walton. 1965. "Intra-organizational bargaining in labor negotiations." JOURNAL OF CONFLICT RESOLUTION 9(4).

This research examines a case study of union management negotiations and found that the role the negotiator performed was much more complex than the role operationalized in laboratory experiments. This fact notwithstanding, the findings indicated substantial similarity to earlier experimental findings.

483. McKinsey, P. W. 1971. "Environmentalists challenge highway lobby over funds." CHRISTIAN SCIENCE MONITOR (December 23).

484. McManus, G. J. 1976. "Is pollution control good to the last drop?: IRON AGE 217(5).

485. McNeel, S. P. 1973. "Training cooperation in the prisoner's dilemma." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 9(4).

This study found that females would respond to conditionally cooperative others in a manner similar to males, i.e., they would seek to maximize their own gain.

486. McPhail, C. 1971. "Civil disorder participation: a critical examination of recent research." AMERICAN SOCIOLOGICAL REVIEW 36(December).

This paper documents the inadequacies of the deprivation-frustration-aggression model in explaining civil disorders at the aggregate level, and at the individual level. The central shortcoming is the model's failure to account for the complexity of civil disorders. The author concludes that future models must consider variations in riot behavior and the interactional environments of actors engaged in riot behaviors.

487. Margolis, J. (ed.). 1970. THE ANALYSIS OF PUBLIC OUTPUT. New York: Columbia University Press.

488. Marine, G. 1963. "Outrage on Bodega Head." NATION 196(June 22); 197 (August 10).

489. Markus, G. B., and R. Tanter, 1972. "A conflict model for strategies and managers." AMERICAN BEHAVIORAL SCIENTIST 15(6).

This paper attempts a synthesis of three models for analysis of intra-nation conflict: the aggression model, the frustration-aggression model, and the decision-making model. Thus stated, the resultant model affirms the analytical importance of psychological, socio-psychological, and sociological variables. Implications of the model for opponents and proponents are presented in terms of alterantive strategies.

490a. Marlow, D., K. J. Gergen, and A. N. Doob. 1966. "Opponent's personality, expectation of social interaction, and interpersonal bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 3(2).

In one experiment, subjects did not exploit opponents when they knew there would be further game interactions. In another experiment, it was found that subjects did exploit egotistical opponents even though further interactions were forthcoming, but refused to exploit a self-effacing opponent.

490b. Marwell, G. and D. R. Schmitt. 1972. "Cooperation in a three-person prisoner's dilemma." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 21

491. Maurice, R. 1971. "Citizen utilization of networking technology: a national environment information system." JOURNAL OF ENVIRONMENTAL SYSTEMS 1(1).

Beginning with the assumption that effective citizen participation can take place only if the public is allowed access into the process of selection of policy options, the author argues for creation of a modern computer system which can be utilized by citizen groups and public interest organizations to share national environment information. Discussed are the advantages, disadvantages (primarily the cost) and feasibility of such a venture. It was proposed that the system be modeled after the in-use computer search system available at many libraries.

492. Mazur, A. 1968. "A nonrational approach to theories of conflict and coalitions." JOURNAL OF CONFLICT RESOLUTION 12(2).

This discussion examines the nonrational, emotional dynamics of coalition formation in relations among small groups. Relations among triads are said to coincide when relations are based on like, support, conformity, and positive identity. As the intensity of these relations increases, the consonance of the relationships increase.

493. Meeker, R. J. and G. H. Shure. 1969. "Pacifist bargaining tactics: some 'outsider' influences." JOURNAL OF CONFLICT RESOLUTION 13(4).

This is an experimental study of the effects of third party "audience" intervention in a pacifist-adversary conflict. Where audience supported domination, cooperative moves dropped; however, the audience effect did not continue if the audience was removed.

494. Meier, R. L. 1969. "Social impact of a nuplex: advantages of nuclear powered industrial complexes." BULLETIN OF THE ATOMIC SCIENTIST 25(March).

495. _____. 1971. "Insights into pollution" JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 37(4).

This essay notes that "pollution" is a less than neutral term that implies a taboo violation, and derives from the Latin noun "pollutionem" meaning defilement. The author argues that a value ethic has evolved such that environmentalism can be characterized as a religious worship of Nature. This irrational behavior has caused unnecessary restrictions on policy-makers and delayed construction of critically needed public facilities. The author notes that public policy must be directed by physical conditions, objective circumstances, and facts, rather than sentiments and attitudes that form cultural prohibitions.

496. Meltsner, A. J. 1971. THE POLITICS OF CITY REVENUE. Berkeley: University of California Press.

The author analyzes the process by which communities obtain revenue using Oakland, California as a case study. Oakland is by and large an administrative city in the sense that confrontation is less often the route to policy than is bureaucratic decision-making. The city council is weak and the city manager is strong. The major actors in the decision-making process, in regard to revenues, are the city council, city manager, and the department officials. The concept of "public avoidance" is introduced as a basic feature of the decision-making process. The process of public avoidance consists of officials deliberately seeking to avoid public participation and conflict in the decision-making process via three strategies; consensual (officials perceive a consensus on taxes and ignore the public), negotiatory (officials discuss a tax proposal with cooperative citizens on a face-to-face basis before implementing the tax on the public at

large), and anticipatory (officials anticipate public reaction so as to avoid having to negotiate). In this last strategy either a tax proposal is not instituted or, if instituted, it is done in a manner so as not to be felt by the public.

497. Messe, L. A., R. R. Vallacher, and J. L. Phillips. 1975. "Equity and the formation of revolutionary and conservative coalitions in triads." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(6).

These experiment found that subjects who were paid in advance or who did not engage in preliminary tasks consistently formed "revolutionary" coalitions in which the weak dyad united against the strong. Another group which had accomplished preliminary tasks formed "conservative" coalitions in which the two stronger members united against the weak member.

498. Metcalfe, J. L. 1974. "Systems models, economic models and causal texture of organizational environments--approach to macro-organization theory." HUMAN RELATIONS 27(7).

499. Metzger, P. H. 1972. THE ATOMIC ESTABLISHMENT. New York: Simon and Schuster.

500. Micheline, R. L. 1971. "Effects of prior interaction, contact, strategy, and expectation of meeting and game behavior and sentiment." JOURNAL OF CONFLICT RESOLUTION 15(1).

In this experiment, it was found that initial interpersonal interaction affected both cooperative behavior and the sentiments formed by the subjects.

501. Michener, H. A., J. A. Fleishman, and J. J. Vaske. 1976. "A test of the bargaining theory of coalition formation in four-person groups." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(6).

This experiment found that bargaining theory predicted the payoff distribution more effectively than minimum resource and pivotal power theories. The three theories equally predict the coalition formed. Bargaining theory was less predictive of veto distribution in payoff division.

502. Milburn, T. W. 1977. "The nature of threat." JOURNAL OF SOCIAL ISSUES. 33(1).

This article is critical of the postulate that size of threat is related to type of response. The author argues that contingent threats and cognitive control are more related to response. These concepts are to be measured in terms of the credibility that threat will be carried out and the degree of meaningfulness based on the past experiences of the target.

503. Miller, A. H. and S. E. Bennett. 1976. "Political ethos--some imperative empirical and conceptual reconsiderations." ETHNICITY 3(2).

504. Miller, D. C. 1975. LEADERSHIP AND POWER IN THE BOS-WASH MEGALOPOLIS: ENVIRONMENT, ECOLOGY, AND URBAN ORGANIZATION. New York: Wiley-Interscience.

This analysis emphasizes the interdependent quality of leadership and political action on a 600 mile stretch of land between southern New Hampshire to Washington D.C.; particularly as it involves the five largest metropolitan centers in this area: Baltimore, Boston, New York, Philadelphia, and Washington. The analysis is primarily based on responses to mail questionnaires sent to four hundred identified leaders in the five cities at two points in time. Strong support is given for treating the five cities as interdependent in the sense that political action in one community has an impact on action in the others.

505. Miller, D. T. and S. A. Norman. 1975. "Actor-observer differences in perceptions of effective control." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(3).

This experiment found that active observers attributed greater behavioral responsibility to the actor and less responsibility to the setting of interaction than passive observer's attributions.

506. Minnesota Out-of-Doors. 1971. "University researchers foresee conflict over pollution control." MINNESOTA OUT-OF-DOORS 16(7).

507. Mitchell, B. 1971. "Behavioral aspects of water management--a paradigm and a case study." ENVIRONMENT AND BEHAVIOR 3(2).

This study examines the differences in environmental perceptions between decision-makers and the lay public. The findings demonstrate that significantly different perceptions of important environmental problems exist between professionals and the lay public. In the latter group, no polarized differences emerged on environmental perceptions, suggesting that the range of public interests regarding the environment represents a continuum.

508. Mithun, J. S. 1977. "Black power and community change-assessment." JOURNAL OF BLACK STUDIES 7(3).

509. Mitnick, B. M., and C. Weiss, Jr. 1974. "The siting impasse and a rational choice model of regulatory behavior: an agency for power plant sitings." JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT 1

This essay undertakes an examination of the present policies and practices of regulatory agencies on power plant sitings. To reform deficiencies noted, the author presents a model bureaucratic agency which would include adversary proceedings which would institutionalize mechanisms to insure separation of potentially conflicting interests.

510. Mogulof, M. 1969. "Coalition to adversary: citizen participation in three federal programs." AMERICAN INSTITUTE OF PLANNERS JOURNAL (July).

This study examines and compares three federal programs looking at the impact and structure of public participation in the planning and decision-making process. The author concluded that the earliest program, the Delinquency Demonstration Program, was characterized by separatism and third-party election; the Community Action Program was characterized by coalitions, and the model cities program reflected adversary relations.

511. Molotch, H., and M. Lester. 1975. "Accidental news: the great oil spill as local occurrence and national event." AMERICAN JOURNAL OF SOCIOLOGY 81(2).

This paper seeks to determine what types of actors and actions become newsworthy nationally. It was found that environmentalists and local officials received significantly less coverage than federal officials and representatives of the business sector. In addition, newspapers were more likely to cover "symbolic topics" and avoid coverage of stories which involved redistribution of wealth. It was not made clear how the latter concepts were directly comparable. The discussion centered around the implications for social control through ideological domination.

512. Moore, D. E. and R. L. Cantrell. 1976. "Community response to external demands--an analysis of participation in federal flood insurance program." *RURAL SOCIOLOGY* 41(4).

513. Morgan, W. R. and J. Sawyer, 1967. "Bargaining expectations, and the preference for equality over equity." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 6(2).

This experiment demonstrated that classmates preferred strict equality as the outcome of reward distributions. Friends were willing to accept inequality if one thought the other wanted it. Nonfriends sought equality.

514. Morgan, W. R. and T. N. Clark. 1973. "The causes of racial disorders: a grievance-level explanation." *AMERICAN SOCIOLOGICAL REVIEW* 38(5).

This analysis seeks to extend and replicate the earlier work of Spilerman (1970). Where the earlier model focused dependence on disorder frequency, this model extend structural dependence to include precipitation conditions and severity. The analysis finds that differences in the size of non-white population and size of the community police force to be the primary predictors of disorder severity.

515. Moynihan D. P. (ed.). 1970. *TOWARD A NATIONAL URBAN POLICY*. New York: Basic Books.

516. Muller, F. G. 1976-1977. "Environmental protection and its effects on the distribution of environmental quality." *JOURNAL OF ENVIRONMENTAL SYSTEMS* 6(3).

This research examines the relation between income levels and the distribution of air pollution as a response to critics who felt environmentalism served the self-interests of upper and middle income groups. Analysis of data from Montreal indicated that improvement of air quality most benefited low income groups.

517. Mumphrey, A. J., Jr., J. E. Seley, and J. Wolpert. 1971. "A decision model for locating controversial facilities." *JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS* 37(6).

This essay argues that the traditional least-cost model of assessing the minimum physical costs should be abandoned. By not considering the potential costs of construction delays brought about by opposition tactics, this model fails to predict the real costs of public facilities. Two alternative approaches are considered as replacements. The short-run "political placation" and the "welfare distribution" approach were combined into a decision model which takes into account and plans for mechanisms which function to placate the opposition thus reducing conflict and attendant delays. The model presented equations for establishing the dollar value of concessions.

518. Myers, D. G. and P. J. Bach. 1974. "Discussion effects on militarism-pacifism: a test of the group polarization hypothesis." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 30(6).

519. Myers, D. G. and H. Lamm. 1975. "The polarizing effect of group discussion." *AMERICAN SCIENTIST* 63(May-June).

This paper examines the extent to which active discussion affects levels of group polarization. Recent research has taken insights from the discredited group discussion model and refined the conceptualizations to develop models with greater explanatory power. The author finds through the examination of the experimental literature that competing explanation of the interpersonal comparison model and informational influence model must be seen as conjoint processes. As such, it is clear that measuring levels of active discussion between sets of actors can

lead to accurate predictions in the direction of polarization. It was also noted that such discussions have greater impact on opinion formation than the influence of mass media.

520. Myers, D. G. and H. Lamm. 1976. "The group polarization phenomenon." PSYCHOLOGICAL BULLETIN 83(4).

This paper reviews the literature on experimental findings on the group polarization phenomenon. Three basic theoretical orientations were identified and the evidence supporting each was appraised. The group discussion model was contradicted by evidence in seven categories. The model based on interpersonal comparisons received mixed, moderate support from available evidence. The informational influence approach received strong support. Here the "risky shift" was explained by cognitive learning that resulted from discussing arguments. It was concluded that increased information led to greater polarization of opinions.

521. Nation. 1968. "Cayuga's waters: thermal pollution by a proposed power plant." NATION 207 (December 30).

522. Natural History. 1963. "California atom controversy." NATURAL HISTORY 72 (December).

This article is critical of the siting of a nuclear generating facility at Bodega Head near San Francisco. It was noted that not only is the site a "gemlike peninsula. ...which teem with all manner of marine life, but also that the San Andreas fault passes within 1000 feet.

523. Nelkin, D. 1971. NUCLEAR POWER AND ITS CRITICS: THE CAYUGA LAKE CONTROVERSY. Ithaca: Cornell University Press.

This monograph gives a detailed case study of the controversy over the Cayuga Lake nuclear power plant. The types of actors involved in the conflict, the manner in which they interacted with one another, and the types of issues discussed are given.

524. Nelson, B. 1967. "Thermal pollution: Senator Muskie tells AEC to cool it." SCIENCE 158(November 10).

525. Nelson, M. D. 1974. "The validity of secondary analyses of community power studies." SOCIAL FORCES 52(4).

526. New York Times. 1972. "Pollution lobby." NEW YORK TIMES (March 30).

This news report comments on the favorable results of intensive industry lobbying of the House to drastically dilute the waterpollution control bill.

527. _____. a:1974. "A town is divided on nuclear plant." NEW YORK TIMES (January 6).

This news report noted the developing conflict over a proposal to build a nuclear generating plant in Charlestown, Rhode Island.

528. _____. b:1974. "Joint atomic panel accused by Nader." NEW YORK TIMES (January 28).

529. _____. c:1974. "Panel backs reactor project on coast." NEW YORK TIMES (February 24).

The article reported on the reversal of a state ruling on expansion of nuclear generating facilities at San Onofre, California. The accepted plan provides for increased public access to beach areas and assures protection of the marine environment. Opponents (Friends of the Earth and local environmental groups) attacked the reversal and plan further delaying actions.

530. _____. d:1974. "Upstate area divided by atomic project." NEW YORK TIMES (April 14).

Citizens to preserve Hudson Valley oppose plans for a nuclear power plant to be built by the New York State Power Authority in Athens, New York area. The Greene County legislature voted unanimously against the plans even though some legislators realize the need for power.

531. _____. 1975. "Sound Avenue named historic corridor." NEW YORK TIMES (July 6).

The New York State Legislature and Governmental agencies have declared the Sound Avenue on Long Island a "scenic and historic corridor" so as to prevent historic land from being transformed to 4-lane highway by the Long Island Lighting Company during construction of a nuclear power plant.

532. _____. a:1976. "A-plant in Vermont ordered to return operating license." NEW YORK TIMES (July 23).

This article reports on the comments by the utility company appealing the ruling that the Vermont Nuclear Power Corporation must return the operating license for the Vernon, Vermont, plant since the plant was constructed without formal consideration of its environmental impact.

533. _____. b:1976. "Court order to ban protest of A-plant." NEW YORK TIMES (August 21).

Public Service Company of New Hampshire is granted a temporary injunction prohibiting unauthorized persons from entering the site of the Seabrook nuclear plant.

534. _____. c:1976. "Nuclear foes face criminal charges." NEW YORK TIMES (August 24).

Judge orders protesters arrested while "occupying" the site for the Seabrook power plant to be tried on criminal trespassing charges.

535. _____. d:1976. "Residents protesting noise at site of nuclear plant." NEW YORK TIMES (August 29).

Citizens are protesting the noise of constructing a nuclear plant in Seabrook, New Hampshire, and were able to stop 24-hour work shifts using the town nuisance ordinance.

536. _____. e:1976. "Appeals board suspends nuclear facility permit." NEW YORK TIMES (October 1).

Appeals board suspended the construction permit for a power plant in Seabrook, New Hampshire, resulting from intervention by New England Coalition on Nuclear Pollution over waste disposal.

537. _____. 1977. "35 town meetings in Vermont vote to prohibit nuclear energy plants." NEW YORK TIMES (March 3).

Of 238 communities in Vermont holding town meetings, 36 considered a vote on a proposal to ban nuclear power plants and 35 of those voting passed the proposal. The proposal was publicized by the Vermont Public Research Interest Group.

538. Newsweek. 1963. "Atomic jitters; proposed new station at Coral Canyon, Los Angeles." NEWSWEEK 62(November 25).

Reacting to protestors at nuclear construction sites, the Atomic Energy Commission defended the safety record of commercial and research reactors.

539. _____. 1969. "Sluggish atom; delays in construction." NEWSWEEK (June 23).

540. Nisbett, R. E. and T. D. Wilson. 1977. "The halo effect: evidence for unconscious alteration of judgments." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 35(4).

In this experiment it was found that when a college instructor with a European accent spoke in warm and friendly tones, the subjects perceived him as "appealing"; whereas if he spoke coldly and distantly, the subjects perceived him as "irritating."

541. Noel, B. and A. F. Fontana. 1974. "The university as a system with competing constituencies." JOURNAL OF CONFLICT RESOLUTION 18(4).

The university is described as a political system with overlapping and competing constituencies. The article attempts to determine the relative importance of different bases for determining the allegiances and divisions within the university. The primary predictors of constituencies are the individual's role group and ideology. Respondents' age, field, and level of activism were less predictive of attitudes on issues, self-image, and a typology of respected persons.

542. Noll, R. G. 1976. "Information, decision-making procedures and energy policy." AMERICAN BEHAVIOR SCIENTIST.

543. Novick, S. 1968. "Earthquakes and nuclear power." SCIENTIST AND CITIZENS 10 (November).

544. _____. a:1969. THE CARELESS ATOM. New York: Houghton-Mifflin.

545. _____. b:1969. "Miles from time Square." ENVIRONMENT 11(January)

546. Nuclear Energy Policy Study Group. 1977. NUCLEAR POWER ISSUES AND CHOICES. Cambridge: Ballinger.

The technical problems in the nuclear power issue are discussed in comparison to alternative sources of power using terms understandable to policy makers.

547. Nuclear Regulatory Commission. 1976. ANNUAL REPORT 1976. Washington, D. C.: U. S. Government Printing Office.

548. Oberschall, A. 1973. SOCIAL CONFLICT AND SOCIAL MOVEMENTS. Englewood Cliffs: Prentice-Hall.

The author presents a general textbook discussion of the form and content of social conflict much along the lines of Coleman's (1957) discussion except that more diverse macro-level illustration is provided and the process of mobilization is a focal point in the work. Mobilization for conflict is patterned by the existing social structure in a system. Two dimensions of structure are distinguished:

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a horizontal dimension (trichotomized into: an abundance of voluntary associations; an abundance of traditional status associations such as kinship, or no associations); and a vertical dimension (dichotomized into linkages between elites and the general public, and no such linkages). These two dimensions define six types of settings for conflict mobilization. The author hypothesizes that as a group is cut off from other strata of society, mobilization is more easily accomplished. Therefore, mobilization is most likely where there is no linkage between elites and the general public and where there is an abundance of formal associations. Mobilization should be most difficult where there is a linkage between elites and the general public and where there are no associations among members of the general public.

549. O'Brien, J. 1975. NEIGHBORHOOD ORGANIZATION AND INTEREST-GROUP PROCESSES. Princeton: Princeton University Press.

Assuming that individuals in poor neighborhoods are self-interested, what are the determinants of their organizing into interest groups for providing themselves with collective goods? This question is addressed using Olson's (1965) work on collective action to analyze three examples of neighborhood organization: the use of the rural organizing technique of "community development" in urban grass-roots programs; the "social action-protest" strategies for organizing the poor via confrontation with their adversaries; and the Community Action Programs sponsored by the federal government as an attempt to promote neighborhood organization. The major point emphasized is that neighborhoods cannot be organized into interest groups without taking into account the interests of other groups in a community; particularly as those other interests bear on the resources required to organize a neighborhood.

550. Office of Waste Isolation. 1976. NATIONAL WASTE TERMINAL STORAGE PROGRAM PROGRESS REPORT. Y/OWI-8. Oak Ridge: Union Carbide.

551. Ofshe, R. 1971. "The effectiveness of pacifist strategies: a theoretical approach." JOURNAL OF CONFLICT RESOLUTION 15(2).

In this paper the author develops a theoretical and conceptual framework for analyzing (under laboratory conditions) the strategies employed by pacifists in their relations with other actors.

552. Okun, M. A. and F. D. DiVesta. 1975. "Cooperation and competition in coacting groups." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(4).

This experiment found that the reward structure and nature of dependency relations affects the levels of group cooperation and competition. Where cgroups were dependently related, group efficiency fell as rewards rose. The equality of the reward structure was positively related to the equality of information distributed across the cgroups.

553. Olson, M., Jr. 1965. THE LOGIC OF COLLECTIVE ACTION. Cambridge: Harvard University Press.

This classic monograph demonstrates that, contrary to common sense, large groups will be less able to provide themselves with collective goods (goods in which each group member share if any group member gets the good) than will small groups. In a group composed of "rational" actors, it is in the interest of any one actor to let the other actors pay for the good since each actor will benefit once the good is purchased. Such "free-riders" are more likely in large groups since there are so many other individuals available to pay for the desired collective good.

554. Olson, M. C. 1976 UNACCEPTABLE RISK. New York: Bantom Books.

555. Orbell, J. M. and T. Uno. 1972. "Theory of neighborhood problem solving--political actions vs. residential mobility." AMERICAN POLITICAL SCIENCE REVIEW 66(2).

This research notes that there are three possible choices of action in response to neighborhood problems: tolerance, exit, and voiced opposition. Findings indicated that voiced opposition is most characteristic of high and low status white suburbs and black ghetto areas (where range of options is more constrained). Exiting the neighborhood is most characteristic of white urban areas.

556. O'Riordan, T. 1971. "Public opinion and environmental quality." ENVIRONMENTAL AND BEHAVIOR 3(2).

This case study examines the impact of public opinion on environmental quality decision-making, and concludes that six factors affect decisions made by political agencies. It was shown that the public input is only considered after final decisions are made.

557. Orlans, H. 1967. CONTRACTING FOR ATOMS. Washington: The Brookings Institution.

558. Orwant, C. J. and J. E. Orwant. 1970. "A comparison of interpreted and abstract versions of mixed-motive games." JOURNAL OF CONFLICT RESOLUTION 14(1).

This experiment used prisoner's dilemma tests and found support for the hypothesis that an interpreted "realistic" dilemma elicits more cooperation than the same dilemma presented in an abstract form.

559. Oskamp, S. 1970. "Effects of programmed initial strategies in a prisoner's dilemma game." PSYCHONOMIC SCIENCE 19(4).

In this experiment five conditions were tested in a prisoner's dilemma situation. It was found that the free-play condition produced the least cooperation.

560. _____. 1974. "Comparison of sequential and simultaneous responding matrix, and strategy variables in a prisoner's dilemma game." JOURNAL OF CONFLICT RESOLUTION 18(1).

This experiment found that whether the experimenter used sequential or simultaneous response types affect the interaction of matrices. The 10% cooperation strategy was found to induce the least cooperation, the "tit-for-tat" strategy, the most.

561. Oskamp, S. and C. Kleinke. 1970. "Amount of reward as a variable to the prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(1).

In one experiment, no effect was found in levels of cooperation produced by five different reward levels. A second experiment found slight associations between more cooperation and no reward.

562. Pack, H., and Pack, Jr. 1977. "Metropolitan fragmentation and suburban homogeneity." NORISK SKOG INDUSTRI 31(6).

563. Patchen, M. 1970. "Models of cooperation and conflict: a critical review." JOURNAL OF CONFLICT RESOLUTION 14(3).

This is a review of the experiment findings from cognitive, learning, and reaction-process approaches in the social-psychological literature on models of cooperation and conflict. Citing deficiencies in each approach, a revised model was presented as a synthesis of features from each approach. Suggestions on the operationalization of the model were offered.

564. Pate, J. L. and E. Broughton. 1970. "Game-playing behavior as a function of incentive." PSYCHOLOGICAL REPORTS 27(1).

This experiment found that subjects did not change to a more cooperative behavior (the optimal strategy) when incentives changes from imaginary to real (pennies).

565. Pateman, C. 1975. "Self-management--theoretical foundations--contribution to political-theory of organizational democracy." ADMINISTRATION AND SOCIETY 7(1).

566. Patterson, W. 1973. "Nuclear power." ECOLOGIST 3(7).

This is an environmental study of the technical aspects of nuclear reactor operations examining the disadvantages and dangers of reactor operations. Included is a description of the activities involved in reprocessing the used, irradiated fuel and the methods (or lack thereof) for disposal of unrecoverable materials.

567. Paul, B. D. 1961. "Fluoridation and the social scientist: a review." JOURNAL OF SOCIAL ISSUES 17(3).

The author traces the history of the fluoridation controversy examining in particular the organizational responses as the issue escalated in conflict.

568. Pearlman, K. 1977. "State environmental policy acts: local decision making and land use planning." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 43(1).

This essay presents an overview of the recent enactment of legislation requiring environmental impact statements. The function of the EIS was shown to be its value as a tool for gathering better information and for allowing more open access into the decision-making process. It is not meant to function as a substitute for effective policy determinations.

569. Pepitone, A., et al. 1970. "Justice in choice behavior: a cross-cultural analysis." INTERNATIONAL JOURNAL OF PSYCHOLOGY 2(1).

570. Pesonen, D. E. 1965. "Atomic insurance; the ticklish statistics." NATION 201 (October 18).

571. Perrucci, R. and M. Pilisuk. 1970. "Leaders and ruling elites; the inter-organizational bases of community power." AMERICAN SOCIOLOGICAL REVIEW 35 (December).

This paper argues that research which measures power in terms of individual characteristics and attributes is inadequate. A case was made for an analytical framework that examines power in terms of inter-organizational ties which create resource networks that are capable of being mobilized to influence decisions on particular issues. Data indicate the existence of a group of inter-organizational leaders who form a distinctly powerful social group, suggesting the existence of a ruling elite.

572. Peterman, F. and M. Knopf. 1976. "Problems in measuring attitude changes. .2. new developments and concepts." ZEITSCHRIFT FUR SOZIALPSYCHOLOGIE 7(3).

573. Phelen, J. G. and E. Richardson. 1969. "Cognitive complexity, strategy of the other player, and two-person game behavior." JOURNAL OF PSYCHOLOGY 71 (Second Half).

This experiment found that subjects who were high in cognitive complexity made more cooperative and fewer competitive choices although the effect diminished over trials.

574. Phillips, K. J. 1976-1977. "Citizen participation in the York River Basin study: the use of the value trade-off questionnaire." JOURNAL OF ENVIRONMENTAL SYSTEMS 6(3).

This paper reports on the design and utilization of a value trade-off questionnaire that goes beyond public hearings by providing a method of quantifying public opinion. The results indicated that people were willing to pay for environmental protection even if it meant slowing economic development.

575. Physics Today. 1970. "Patient earth." Excerpts edited by T. Harte and R. Socolow. PHYSICS TODAY 23(December).

576. Pilisuk, M., P. Potter, A. Rapoport, and J. A. Winter. 1965. "War hawks and peace doves: alternate resolutions of experimental conflicts." JOURNAL OF CONFLICT RESOLUTION 9(4).

This experiment found that the initial reciprocated behaviors in interaction processes significantly affected the level of trust formed. Personality variables were essentially unrelated in any predictive way.

577. Pilisuk, M. and P. Sholnick. 1968. "Inducing trust: a test of the Osgood proposal." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 8(2).

This experiment tests the hypothesis that small conciliatory moves preceded by statements of honest intention were related to adversarial reciprocation. It was found that this was an effective strategy for developing reciprocal cooperation.

578. Pilisuk, M., J. A. Winter, R. Chapman, and N. Haas. 1967. "Honesty, deceit, and timing in the display of intentions." BEHAVIORAL SCIENCE 12(3).

Prisoner's dilemma is used to demonstrate that the opportunity to communicate retards the development of stable groups which tend to polarize as mutually competitive or cooperative dyads.

579. Pinard, M. 1963. "Structural attachments and political support in urban politics: the case of fluoridation referendums." AMERICAN JOURNAL OF SOCIOLOGY 68(March).

This study of 262 communities examines the relation between the level of structural integration of the community and outcomes of fluoridation referendums. The following community characteristics were shown to influence the outcomes: community size, rate of growth, racial and ethnic proportions, unemployment level, and types of occupational and power structures. The best criteria for success was found to be those communities with a small and cohesive elite.

580. Podell, J. E. and W. M. Knapp. 1969. "The effect of mediation on the perceived firmness of the opponent." JOURNAL OF CONFLICT RESOLUTION 13(4).

This experiment supports the hypothesis that mediators serve to lower opponents expectations about one another's ability to make concessions when the mediator has no affiliation with either opponent as opposed to when he does have affiliation with one opponent.

581. Ponting, J. R. 1973. "Rumor control centers." AMERICAN BEHAVIORAL SCIENTIST 16(3).

This paper examines the impact and role of rumor control centers. These centers were established to gather and disseminate information through a community. As such, these organizations functioned as mechanisms of "social control, mediation, facilitation of the tasks of other emergency-oriented organizations, and provisions of psychological relief."

582. Pool, J. 1976. "Coalition formation in small groups with incomplete communication networks." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(1).

This experiment found a positive relation between the number of communication channels and the formation of winning coalitions. Voting behavior was associated with the frequency, direction, and content of information transmitted.

583. Powell, R. S. and E. C. O'Neal. 1976. "Communication feedback and duration as determinants of accuracy, confidence, and differentiation in interpersonal perception." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(4).

This experiment found that reciprocal communication feedback directly influenced the accuracy, confidence, and differentiation in interpersonal perceptions.

584. Press, A. N., J. C. Delia, and W. H. Crockett. 1975. "Effects of cognitive complexity and of perceiver's set upon the organization of impressions." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 32(5).

This experiment found that complex cognitive perceivers use inferences of motives to reconcile their first-hand impressions of another person and the ambivalent information they had received about that person. Cognitive complexity or orientation was shown to be unrelated to the perceiver's liking of the other person.

585. Pressman, J. L. and A. Wildavsky. 1973. IMPLEMENTATION. Berkeley: University of California Press.

586. Presthus, R. 1964. MEN AT THE TOP: A STUDY IN COMMUNITY POWER. New York: Oxford University Press.

In this comparative case study of two small communities, the author makes a case for using both the "decisional" and the "reputational" approach to capture leaders missed by use of either approach singly. Two groups emerged as power centers: the "private" system consisting of economic elites; and the "public" system composed of visible political leaders. In one community the economic leaders were relatively dominant, but the other community was reversed in this relation. Some of this variation may be accounted for by community characteristics.

587. Primick, J. 1975. "An introduction to the issues." BULLETIN OF THE ATOMIC SCIENTIST.

588. Pruitt, D. G. 1967. "Reward structure and cooperation: the decomposed prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 7(1).

This experiment found significant differences in levels of cooperation in three algebraically identical decomposed prisoner's dilemma games (DPD). Levels of cooperation in the DPD were systematically different from the levels produced by the regular prisoner's dilemma games which are less characteristic of real-life situations.

589. _____. 1968. "Reciprocity and credit building in a laboratory dyad." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 8(2).

In this experiment on reciprocity, it was found that a person would receive more rewards: if he had given more rewards earlier, if he would have large future resources, and if his past resources were small.

590. _____. 1969. "Stability and sudden change in interpersonal and international affairs." JOURNAL OF CONFLICT RESOLUTION 13(1).

This theoretical analysis of reciprocative changes over time considers the dimensions of stability to formation of various reactor systems. Stability was conceived as an equilibrium point in a system of relations which when confronted with sudden change "initiates a runaway vicious or benevolent circle." Various geometric interpretations of these reaction systems were developed to explain the variations and determinants of system stability.

591. _____. 1971. "Indirect communication and the search for agreement in negotiation." JOURNAL OF APPLIED SOCIAL PSYCHOLOGY 1(2).

592. _____. 1972. "Methods for resolving differences of interest: a theoretical analysis." JOURNAL OF SOCIAL ISSUES 28(1).

In this article, the author identifies patterns of normative regulation in dyadic conflict resolutions. Norms are examined as methods guiding parties in conflict to either increase or reduce differences of interests. An informal inventory of hypotheses evolved describing the interplay of bargaining, adherence to content-specific norms, adherence to equity norms, and the norms of mutual responsiveness. Out of interaction in the dyad these relatively stable patterns develop to resolve different sets of issues.

593. Pruitt, D. G. and J. L. Drews. 1969. "The effects of time pressure, time elapsed, and the opponent's concession rate on behavior in negotiation." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 5(1).

This experiment found that the greater the time pressures, then the less bluffing, the less ambitious goals, and the lower the mean level of demands.

594. Pruitt, D. G. and D. F. Johnson. 1970. "Mediation as an aid to face saving in negotiations." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 14(3).

This experiment found when a mediator suggested settlement halfway between respective positions that negotiators followed with significant concessions. Concessions were also shown to increase with time pressures. It was shown that mediator functioned as a "face-saving" mechanism for negotiators.

595. Psathas, G. and S. Stryker. 1965. "Bargaining behavior and orientations in coalition formation." SOCIOMETRY 28(2).

This experiment found that more powerful subjects orient their behavior "to and by power" in ways uncharacteristic of weaker subjects whose counter-offers were shown to decrease in relation to increased offers from the stronger subjects.

596. Pursglove, S. D. 1963. "A-power: creeping giant." POPULAR MECHANICS 119 (June).

597. Putnam, R. D. 1975. "Bureaucrats and politicians--contending elites in policy process." TULANE STUDIES IN POLITICAL SCIENCE 15.

598. Quarles, J. 1974. "Fighting the corporate lobby." ENVIRONMENTAL ACTION 6(15).

599. Rabbie, J. M., F. Benoit, H. Oosterbaan, and L. Visser. 1974. "Differential power and effects of expected competitive and cooperative intergroup interaction on intragroup and outgroup attitudes." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(1).

This experiment found that competitive groups demonstrated greater cohesiveness when they had a bargaining position that was strong. An inverse relation was found for cooperation groups.

600. Radin, A. 1974. "Inflation and energy: what we should do to hold down fuel costs." PUBLIC POWER 32(6).

601. Radinsky, T. L. and D. G. Myers. 1968. "The influence of an advantaged third person on collaboration in a prisoner's dilemma game." PSYCHONOMIC SCIENCE 13(6).

Cooperative moves in prisoner's dilemma were higher when the advantaged opponent received higher reward for noncooperative moves than when there was no advantaged opponent.

602. Radlow, R. and M. F. Weidner. 1966. "Unenforced commitments in 'cooperative' and 'noncooperative' non-constant-sum games." JOURNAL OF CONFLICT RESOLUTION 10(4).

This experiment found that unenforced commitments and enforced commitments produced similar levels of security; and that unenforced commitments induced higher levels of cooperative behavior than when no communication was allowed.

603. Ramey, J. T. 1968. "Competitive vigor in nuclear power; unique partnership of business and government." HARVARD BUSINESS REVIEW 46(July).

604. Rannay, A. (ed.). 1968. POLITICAL SCIENCE AND PUBLIC POLICY. Chicago: Markham Publishing Company.

This work evaluates past research on public policy and sets forth recommendations for a comparative approach. A typology of research activities was constructed and judged on the relative adherence to scientific criteria. Another typology judges the usefulness of the various concepts developed in research on public policy. The author concludes that those conceptualizations which offer the greatest potential for theoretical power concurrently offer the most difficult measurement problems.

605. Rasmussen, N. C. 1975 REACTOR SAFETY STUDY. Nuclear Regulatory Commission (WASH-1400). Washington, D. C.: Government Printing Office.

606. Raulet, H. M. 1961. "The health professional and the fluoridation issue: a case of role conflict." JOURNAL OF SOCIAL ISSUES 17(3).

This research addresses the problem faced by the health professional when confronted by conflict between the role of advocate of a partisan political

issue and the constraints of the professional-expert role. Seeking to avoid partisan political debate by engaging in a campaign for public education exposed professionals to charges that they were campaigning in a one-sided undemocratic manner and suppressing the other side of the issue. The referendum failed in both communities studied.

607. Raven, B. H., and A. W. Kruglanski. 1970. "Conflict and power." In P. Swingle (ed.), *THE STRUCTURE OF CONFLICT*. New York: Academic.

Building on earlier work, the authors describe six types of power/influence one opponent can bring to bear on the other so as to resolve a conflict: information, reference, expertise, legitimacy, reward, and coercion.

608. Reich, M. 1975. "A noisy tale of two cities." *PLANNING MAGAZINE ASPO* 41.

This essay reports on the controversy generated by a proposal to apply to the Civil Aeronautics Board for a permit to use Bradley Airport as an international "gateway". The airport served two communities which divided on support for expansion. The community of Suffield vehemently opposed the noise increases and safety hazards associated with jet flights that "literally fly right up Main Street." Residents felt they had not been consulted by the state bureaucracy whose policy was "we plan, you listen." While the controversy was not resolved, the State of Connecticut has revised the planning process to include a citizen input committee.

609. _____. 1976. "The Tocks Island dam is dead, but the Delaware gap widens." *PLANNING MAGAZINE ASPO* 42(7).

610. Rekosh, J. H. and K. D. Feigenbaum. 1966. "The necessity of mutual trust for cooperative behavior in a two-person game." *JOURNAL OF SOCIAL PSYCHOLOGY* 69(First half).

This experiment found that subjects played cooperatively against other students, but competitively against the experimenter. This was explained as a function of the marginal status of student versus academic social hierarchy.

611. Rickson, R. E. 1977. "Dimensions of environmental management--legitimation of government regulation by industrial managers." *ENVIRONMENT AND BEHAVIOR* 9(1).

This paper examines the relation between industry's recognition that government regulation of industrial pollution is a legitimate function. Industry managers supported the legitimate right for regulation, but this support was shown to be based on economic self interest through industry's ability to influence policy as a pressure group. In addition, public pressure on industry was hypothesized to influence the degree of industry legitimation.

612. Ripley, A. 1969. "A-plants: wealth and worry." *NEW YORK TIMES* (September 20).

This news article reports on the developing controversy over nuclear projects in Colorado, particularly the problems of mine tailings from a uranium mill. The opponents, the Colorado Committee for Environment Information, have begun an information campaign detailing the negative environmental effects of radiation.

613. Robie, R. B. 1974. "Water quality control: federal water pollution control act amendments of 1972-state viewpoint." *NATURAL RESOURCES LAWYER* 7(2).

614. Roe, K. S. 1963. "Bodega: symbol of a national crisis." *AMERICAN FORUM* 69(December).

615. Rosenbaum, W. A. and G. J. Kammerer. 1974. "Against long odds--theory and practice of successful governmental consolidation." SAGE PROFESSIONAL PAPER IN ADMINISTRATIVE AND POLICY STUDIES SERIES 2(0302).

616. Rosenberg, S. W. and G. Wolfsfeld. 1977. "International conflict and the problem of attribution." JOURNAL OF CONFLICT RESOLUTION 21(1).

Utilizing the attribution consistency model, this research seeks to determine the means by which policy makers assess actions of antagonists. Findings indicate that attributions formed are often biased and potentially interfere with negotiated settlements.

617. Rosenthal, B. D. and R. L. Crain. 1966. "Structure and values in local political systems; the case of fluoridation decisions." JOURNAL OF POLITICS 28(February).

Using the data upon which Crain et al. (1969) is based, this article focuses on the hypothesis that the electoral practices and form of government in a community reflect community values. Looking at the decision to fluoridate water, fluoridation is most likely to be established in communities with centralized decision-making and a strong executive (mayor or manager); particularly where the executive is insulated (by the form of government, strong political parties, and low public political participation) from the pressures of vocal minorities.

618. Ross, L. D., T. M. Amabile, and J. L. Steinmetz. 1977. "Social roles, social control and biases in social-perception processes." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 35(7).

This experiment found that subjects did not recognize and correct for advantages and disadvantages in the presentation of self. Questioners were consistently rated as being more knowledgeable than their partners who had to answer the questions. The author discussed the implications of the findings on the public's understanding of powerful/powerless people in society.

619. Ross, L., M. R. Lepper, and M. Hubbard. 1975. "Perseverance in self-perception and social perception: biased attributional processes in the debriefing paradigm." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 32(5).

This experiment showed that even though a subject's perception was discredited by debriefing, the initial erroneous self-perceptions and social perceptions still affected subjects behavior.

620. Ross, R. and G. L. Staines. 1972. "Politics of analyzing social problems." SOCIAL PROBLEMS 20(1).

621. Rossell, C. H. 1976. "School desegregation and white flight." POLITICAL SCIENCE QUARTERLY 90(4).

622. Rossi, P. H. 1957. "Community decision making." ADMINISTRATIVE SCIENCE QUARTERLY 1(March).

Reviewing studies on community decision making, three lines of investigative interest become apparent: studies of decision makers and decisions they made; studies of decision making as a process, and studies of proponents/opponents of issues. Those community characteristics which most consistently predict varying patterns of influence include: rate of community growth, degree of social and economic autonomy, economic differentiation, and political homogeneity. The relations among these variables were discussed and future research strategies offered.

623. _____. 1960. "Power and community structure." MIDWEST JOURNAL OF POLITICAL SCIENCE 4 (November).

Towards the goal of facilitating much needed comparative research in community power studies, the author develops a four-element typology of power structures: pyramidal, caucus, polythitic (where separate structure exists for different community activities) and amorphous. A general hypothesis was presented that related community characteristics to the type of power structure to be expected.

624. Rothstein, D. 1972. "Cultural creation and social reconstruction: the socio-cultural dynamics of intergroup contact." AMERICAN SOCIOLOGICAL REVIEW 37(6).

This paper seeks to locate the dynamic mechanisms producing socio-cultural change and social structural change. Two paradigms are presented, modeled, and tested. It is pointed out that "aside from events there is no basis for predicting change; it is not 'natural' or imminent or genetic in social and cultural systems." Changes occur as a result of discrepancies occurring when old explanations no longer coincide with new experiences. These changes in the epistemic system lead to changes in the patterns of relations involving intergroup contacts. The primary variable considered in the model include cultural similarity and oppression plus social structural compatibility and coercion.

625. Rubin, J. Z. 1971. "The nature and success of influence attempts in a four-party bargaining relationship." JOURNAL OF EXPERIMENTAL AND SOCIAL PSYCHOLOGY 7(1).

This experiment found that powerful cooperative pairs worked effectively with low-power cooperative pairs. Powerful competitive pairs were ineffective working with pairs whose counterpower was high.

626. Rubin, J. Z. and B. R. Brown. 1975. THE SOCIAL PSYCHOLOGY OF BARGAINING AND NEGOTIATION. New York: Academic.

The authors review the psychological literature on bargaining and negotiation from around 1960 to the early 1970's. After introducing the basic concept of bargaining in psychology, the authors discuss four sets of factors affecting the effectiveness of bargaining: structural context, behavioral predispositions, interdependence, and social influence strategies.

627. Ruchelman, L. and C. Brownstein. 1974. "Public needs and private decisions in high-rise building development: a policy making model." URBAN AFFAIRS QUARTERLY 19(2).

This article identifies a model for conceptualizing the public policy process. Rejecting the traditional political science model where policy decisions are a function of intra-institutional communications and interest group pressures, the improved model assumes inter-institutional communications, recognizing public-private interface.

628. Rule, J. 1972. "1830 and the unnatural history of revolution." JOURNAL OF SOCIAL ISSUES 28(1).

This research advances a theory of revolutionary change conceptualized as a political process model. This model overcomes difficulties associated with "natural history approaches" which failed to account for negative cases or alternative explanations. A series of propositions are offered that capture changes in the form, locus, and intensity of conflict. The central hypothesis that receives support predicts that violent revolutions occur when the power of contending groups is mobilized in direct opposition to ruling coalitions who seek to neutralize the contenders influence and resources.

629. Runyan, D. 1977. "Tools for community-managed impact assessment." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 43(2).

This essay reviews twelve techniques for assessing community impact ranging from simple checklist types techniques to complex computer models requiring elaborate data bases. Examined were: checklist/ IMPASSE, Dialectical scanning, Delbecq technique, delphi technique, scenarios and surveys, trend extrapolation, cost-benefit analysis, cost effectiveness analysis, cross impact, simulation-modeling, and input-output analysis. From this list five were determined to be most useful, and from these five, a project comparisons technique was offered for use by local groups. This step-by-step approach is an improvement insofar as it does not rely on computer access, and it takes into consideration similar past experiences.

630. Russell, J. R. 1974. CASES IN URBAN MANAGEMENT. Cambridge: MIT Press.

631. Ryan, J. P. 1975. "Cultural diversity and American experience--political participation among Blacks, Appalachians, and Indians." SAGE PROFESSIONAL PAPER IN AMERICAN POLITICS SERIES 2(0402).

632. Sakolsky, R. 1973. "Myth of government sponsored revolution: a case study of institutional safety valves." EDUCATION AND URBAN SOCIETY 5(3).

This article assesses the impact of the decentralization project in New York City. It was pointed out that the establishment of the school board was intended only to increase citizen participation and not to realize the actual distribution of power and authority. As such, decentralization was seen as a palliative, or safety valve, that would allow for a few trivial reforms.

633. Sampson, E. E. and M. Kardush. 1965. "Age, sex, class, and race differences in response to a two-person non-zero-sum game." JOURNAL OF CONFLICT RESOLUTION 9(2).

This experiment sought to determine if individual characteristics modified the usual expected frequencies of responses. One major finding was that black lower class pairs made significantly more collaborative choices than white lower class pairs.

634. Sandbrook, R., 1976. "We're talking about titanium." NEW SCIENTIST 72 (1030).

635. Sanders, I. T. 1961. "The stages of a community controversy: the case of fluoridation." JOURNAL OF SOCIAL ISSUES 17(3).

This research identifies six stages leading to a decision on a controversial issue: initiation, preproposal, proposal, community action, decision, and aftermath. In the ten communities studied the issue resurfaces, indicating that these stages repeat in subsequent sequences.

636. Sandler, T. and J. Cauley. 1975. "On the economic theory of alliances." JOURNAL OF CONFLICT RESOLUTION 19(2).

This paper formulates three models for the formation of alliances and examines conditions for stability in the context of a public goods paradigm. Introducing resource scarcity into a more general model, national defense is shown to be an impure public good. Membership in the alliance and efficiency were found to be positively related (contrary to intuitive expectations).

637. Schell, O. 1976. THE TOWN THAT FOUGHT TO SAVE ITSELF. New York: Pantheon.

638. Schelling, T. C. 1960. THE STRATEGY OF CONFLICT. Cambridge: Harvard University Press.

This classic monograph contains material that is the basis for much subsequent work on bargaining behavior using game theoretic concepts. As with Boulding (1962), the primary concern is with international conflict. However, the discussion of bargaining, interdependence, and threat is applicable to conflict in general.

639. Schlenker, B. R., T. Bonoma, J. T. Tedeschi, 1970. "Compliance to threats as a function of the wording of the threat and the exploitativeness of the threatener." SOCIOMETRY 33(4).

This experiment found that a subject who was the target of a threat was more compliant if the threatener followed the threat with accommodating behaviors, than when the threatener followed with an exploitive strategy.

640. Schlesinger, J. R. 1971. "AEC to referee, not promote industry." SCIENCE 174(October 29).

641. Schnaiberg, A. 1977. "Obstacles to environmental-research by scientists and technologists-social structural analysis." SOCIAL PROBLEMS 24(5).

642. Schnore, L. F. and R. R. Alford. 1963. "Forms of government and socio-economic characteristics of suburbs." ADMINISTRATIVE SCIENCE QUARTERLY 8(1).

643. Schubert, A. E. 1968. "What nuclear power will do to and for the urban environment." AMERICAN CITY 83(December).

644. Schwartz, H. E., and M. R. Eigerman. 1975. "Trouble in paradise." JOURNAL OF HYDRAULICS DIVISION-ASCE. 101(5).

645. Schwarz, P. 1970. "COALITION BARGAINING. Ithaca: New York State School of Industrial and Labor Relations, Cornell University.

Drawing on management versus labor negotiations, the author examines the "coalition" or "coordinated" bargaining technique in which the opponents on one side of an issue coordinate their demands on those arguing the other side of an issue. Unions adopted the coordinated bargaining technique to counter the centralization of management in corporations with multiple local establishments and therefore multiple union contracts. Unions were thus open to "whipsaw" or "divide and conquer" tactics by management. The author describes the development and possible future of the bargaining technique by both labor and management.

646. Science. 1969. "Radioactive pollution: Minnesota finds AEC standards too lax." SCIENCE 163(March).

This report assesses the impact of the decision by the Minnesota Pollution Control Agency to require stricter levels of discharge than required by the AEC. The decision stems from a year of public controversy and debate over AEC standards for pollution.

647. _____. 1971. "Reaction on Morningside Heights." SCIENCE 174(November).

This article describes the conflict between Columbia University and the Atomic Energy Commission versus community and student groups over the installation of a research reactor on campus. The AEC Atomic Safety and Licensing Board issued its first denial of a permit not on the issue of risk versus benefit as opponents desired, but due to a lack of standards covering siting reactors in metropolitan areas.

648. Science News. 1966. "Nuclear fueled desalting power plant planned." SCIENCE NEWS 90(August 27).

649. _____. 1967. "Teller attacks breeder safety: nuclear power reactors, sodium-cooled." SCIENCE NEWS 92(August 26).

650. _____. 1969. "Overselling a dream." SCIENCE NEWS 96(August 9).

651. _____. a:1971. "Fast breeder moving fast despite the critics." SCIENCE NEWS 100(October 16).

652. _____. b:1971. "AEC to nuclear industry: we're no longer your protector." SCIENCE NEWS 100(October 30).

This article reports on Atomic Energy Commission Chairman James Schlesinger's announcement that the nuclear industry "should not expect the AEC to fight the industry's political, social, and commercial battles."

653. Science News Letter. a:1964. "Atomic dangers overrated." SCIENCE NEWS LETTER 86(September 5).

654. _____. b:1964. "Nuclear power A.D. 2000." SCIENCE NEWS LETTER 86 (September 5).

655. Scientific American. 1966. "Coal power vs. nuclear." SCIENTIFIC AMERICAN 214(February).

656. Scientist and Citizen. a:1968. "Heating up Lake Cayuga: report on Cornell pamphlet." SCIENTIST AND CITIZEN 10(June).

657. _____. b:1968. "Scientists question reactor effects: study of Monticello nuclear generating plant in Minnesota." SCIENTIST AND CITIZEN 10(August).

658. Scott, D. W. 1972. "School district integration in a metropolitan area." EDUCATION AND URBAN SOCIETY 4(2).

659. Scott, J. P. 1977. "Agonistic behavior: function and dysfunction in social conflict." JOURNAL OF SOCIAL ISSUES 33(1).

This essay extrapolates to human behavior the concepts and findings of the theory of agonistic (aggressive conflict) behavior that developed from animal studies. The author argues for the comparability of these principles for the control of human violence. Of particular importance is the concept of passive inhibition which states that the more the individual becomes involved in useful and constructive activities (or in latter life--occupations), the more habituated peaceful behavior becomes and the less the probability of destructive behavior.

660. Scott, W. A. and J. Rohrbaugh. 1975. "Conceptions of harmful groups: some correlates of group descriptions in three cultures." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(6).

This study of three countries (United States, New Zealand, and Japan) found that respondents consistently identified similar "harmful" groups and similar negative characteristics attributed to those groups. Not mentioned as harmful were religious and ethnic minorities.

661. Scott, W. E. and D. J. Cherrington. 1974. "Effects of competitive, cooperative, and individualistic reinforcement contingencies." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(6).

This experiment found that subjects who had been instructed about their competitive contingency tasks performed better and indicated more arousal and less interpersonal attraction than subjects who had been instructed and reinforced in cooperative or individualistic behaviors.

662. Seaborg, G. T. a:1971. "On misunderstanding the atom." BULLETIN OF THE ATOMIC SCIENTIST 27(September).

663. _____. b:1971. "Nuclear power plants, boon or blight?" NATURAL WILDLIFE 9(April).

664. Seeman, M. 1972. "Alienation and knowledge-seeking--note on attitudes and action." SOCIAL PROBLEMS 20(1).

This paper presents evidence for the contention that alienated attitudes are correlated with specific actions designed to reduce or eliminate alienation. Those who were high in alienation and involved in search behavior also displayed higher levels of objective political knowledge.

665. Segalas, H. A. 1975. "Synthetic detergents-1975." HYDROCARBON PROCESSING 54(3).

666. Seligman, C., M. Bush, and K. Kirsch. 1976. "Relationship between compliance in the foot-in-the door paradigm and size of first request." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(5).

This experiment refines the self-perception explanation for the foot-in-the door phenomenon which stated that once you can extract compliance on a small initial request, later larger compliance is more likely. Data showed that only large initial request induced later compliance.

667. Sermat, V. 1967. "The effects of an initial cooperative or competitive treatment upon a subject's response to conditional cooperation." BEHAVIORAL SCIENCE 12(4).

In this experiment, it was found that when cooperative pretreatment is followed by cooperative first moves, then very high cooperation is produced.

668. _____. 1970. "Is game behavior related to behavior in other interpersonal situations?" JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(1).

This experiment concluded that paired subjects who were both highly competitive shared interpersonal relationships that differed from cooperators. At the same time, it was shown that the nature of the task affected whether one would be competitive or cooperative.

669. Seta, J. J., P. B. Paulus, and J. K. Schkade. 1976. "Effects of group size and proximity under cooperative and competitive conditions." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(1).

In this experiment, it was found that cooperative subjects performed best in groups of four, competitive subjects performed best in groups of two. Cooperative subjects also performed best when seated close, while competitive subjects also performed best when seated apart.

670. Severo, R. 1975. "U. S. court in Chicago halts atomic plant." NEW YORK TIMES (April 2).

This article reports on the U. S. Appeals Court ruling enjoining construction of a nuclear generating facility at Bailly, Indiana. The ruling was initiated by the Izaak Walton League and Business and Professional People for Public Interest and based by the court on the AEC regulation prohibiting construction near population centers.

671. Sewell, W. R. D. and R. Burton. 1971. PERCEPTIONS AND ATTITUDES IN RESOURCES MANAGEMENT. Ottawa, Canada: Department of Energy, Mines, and Resources.

672. Sewell, W. R. D., and H. D. Foster. 1971. "Environmental revival: promise and performance." ENVIRONMENT AND BEHAVIOR 3(2).

This examination of the "environmental bandwagon" is highly critical of the public and institutional activities relating to environmental protection. The authors conclude that a radical if not revolutionary change in institutional structure and social values is required if a reversal of environmental deterioration is to come about.

673. Shapley, D. 1973. "Auto pollution, conflict of interest." SCIENCE 181(4101).

674. Sharma, N. C., J. E. Kivlin, and F. C. Fliegel. 1975. "Environmental pollution--is there enough public concern to lead to action?" ENVIRONMENT AND BEHAVIOR 7(4).

This paper reports survey data from a case study done in a small town faced with acute industry effluent polluting a river running through town. The authors conclude that even when faced with an explicit environmental threat "concerns have not crystallized into a coherent movement toward solution." Existing political institutions were considered ineffective in opposing the industry.

675. Sharkansky, I. (ed.). 1970. POLICY ANALYSIS IN POLITICAL SCIENCE. Chicago: Markham.

676. Shaw, J. I. 1976. "Response-contingent payoffs and cooperative behavior in the prisoner's dilemma game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(5).

This experiment found that subjects predisposed to being competitive were exposed to punitive sanctions earlier in the game, learned the appropriate responses faster, and thereby increased their level of cooperative behavior. Increasing the size of the real monetary reward magnified the effect.

677. Shaw, M. E. and B. Harkey. 1976. "Some effects of congruency of member characteristics and group structure upon group behavior." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(3).

This experiment found that subjects who were tested for leadership qualities and then assigned to a leadership role (congruent condition) in a group, outperformed groups with noncongruent leaders.

678. Shears, L. M. 1967. "Patterns of coalition formation in two games played by male tetrads." BEHAVIORAL SCIENCE 12(2).

Tetrad games are used to study patterns of coalition formation and distribution of payoffs. Triple alliances were infrequent and, in contrast to previous theory, coalitions tended to include the tetrad member with disproportionately high power.

679. Shenfeld, G. 1974. "Salem assays impact of nuclear plants." NEW YORK TIMES (April 28).

Citizen response is mixed, however, most favor construction plans because they perceive a tax advantage.

680. Sheposh, J. P. and P. S. Gallo, Jr. 1973. "Asymmetry of payoff structure and cooperative behavior in the prisoner's dilemma game." JOURNAL OF CONFLICT RESOLUTION 17(2).

Cooperative moves were lower in the asymmetric than the symmetric payoff game. This is interpreted to mean that subjects were more concerned with equity of payoff than maximizations of their own payoff.

681. Sherif, M. 1935. A STUDY OF SOME SOCIAL FACTORS IN PERCEPTION. #187 in ARCHIVES OF PSYCHOLOGY.

682. Shure, G. H., R. J. Meeker, and E. A. Hansford. 1965. "The effectiveness of pacifist strategies in bargaining games." JOURNAL OF CONFLICT RESOLUTION 9(1).

This experiment found that pairing of a pacifist with a belligerent bargainer produced losses and disruptions in negotiations. It was concluded that the pacifist strategy was ineffective as it was difficult to transform the adversary's strategy into an ethical issue.

683. Sibley, S. A. et al. 1968. "Race and sex of adolescents and cooperation in a mixed-motive game." PSYCHONOMIC SCIENCE 13(2).

Prisoner's dilemma game is used to show that cooperative moves are more likely when opponents are of the same race than when they are of different races.

684. Sills, D. L. 1975. "The environmental movement and its critics." HUMAN ECOLOGY 3(1).

685. Simmel, A. 1961. "A signpost for research on fluoridation conflicts: the concept of relative deprivation." JOURNAL OF SOCIAL ISSUES 17(3).

The author dismisses the "naturalist attitude syndrome" in favor of the relative deprivation approach to conflict generation. Four types of deprivation are formulated: economic, prestige, political deprivation, and rank disequilibrium. Findings lend modest support to the conceptualization.

686. Simmel, G. 1904. "The sociology of conflict." (Trans. A. Small). AMERICAN JOURNAL OF SOCIOLOGY 9(4,5,6).

687. _____. 1908. CONFLICT AND THE WEB OF GROUP-AFFILIATIONS. (Trans. K. H. Wolff and R. Bendix). New York: Free Press, 1955.

688. _____. 1917. "Individual and society." In K. H. Wolff (ed., trans.), THE SOCIOLOGY OF GEORG SIMMEL. New York: Free Press 1950.

689. Slack, B. D. and J. O. Cook. 1973. "Authoritarian behavior in a conflict situation." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 25(1).

This experiment found that subjects paired on the basis of similar F-scores created much less conflict than low-high paired subjects. Low-low pairs displayed less conflict than high-high scorers on the authoritarian scale.

690. Slade, S. 1975. "Army corps of engineers: caught in mid-stream." NATION 22(6).

691. Slusher, E. A., R. J. Roering, and G. L. Rose. 1974. "The effects of commitment to future interaction in single plays of three games." BEHAVIORAL SCIENCE 19(2).

Cooperation under different levels of commitment to future interactions is analyzed in an experiment. Highest cooperation occurred in the non-conflict setting. Commitment to future interaction led to higher cooperation and the committed-not committed difference in cooperation was greatest in the prisoner's dilemma game.

692. Smelser, N. J. 1963. THEORY OF COLLECTIVE BEHAVIOR. New York: Free Press.

This classic treatment distinguishes five types of collective behavior (the panic, the craze, the hostile outburst, the norm-oriented movement, and the value-oriented movement) and outlines a developmental sequence leading to each types of behavior. Determinants in the sequence are structural conduciveness, structural strain, crystallization of a generalized belief, precipitating factors, mobilization for action, and social control.

693. Smith, G. F. and P. Murdoch. 1970. "Performance of informed versus non-informed triads and quartets in the 'minimal social situation'". JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 15(4).

This experiment tested whether the "win-stay, lose-change" strategy among quartets or the group-problem solving strategy by triad was more effective in reaching a solution. The evidence supports the group problem solving approach with triads being optimal group size.

694. Smith, M. M. 1965. "Labor and the Savannah River AEC project." MONTHLY LABOR REVIEW 88(July).

695. Smith, R. A. 1975. "Measuring neighborhood cohesion: a review and some suggestions." JOURNAL OF HUMAN ECOLOGY 3(3).

This research examines use of the concept of cohesion as it describes a property of neighborhood social groupings. Studies have shown that changes imparting from the larger society affect neighborhood cohesion, and that changes in cohesion produce effects on the behavior of individuals. These findings suggest the existence of different dimensions of cohesion at the system level where the concept was measured. The author postulates four dimensions of neighborhood cohesion: local facilities usage, personal identification, social interaction, and value consensus. When the dimensions are viewed as a variable and related to changes in external conditions, then differential effects on neighborhood behaviors will be observable.

696. _____. 1976. "Community power and decision making: a replication and extension of Hawley." AMERICAN SOCIOLOGICAL REVIEW 41(August).

In an effort to clarify contradictory research results generated by use of Hawley's MPO ratio, the research postulates that centralized government is selectively efficient, that is, when the issue involves segmental impact, such as urban renewal or public housing, the inverse relation to the MPO holds. But where issues involves areal impact, such as fluoridation or hospital construction, Hawley's prediction does not hold, and outputs are better explained by dispersed power arrangements.

697. Smith, W. P. and A. J. Anderson. 1975. "Threats, communication and bargaining." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 32(1).

This experiment found that when subjects were not allowed to communicate and threats were available, then the level of coordinated behaviors was higher than where full communication was allowed. It was also shown that communication did not affect coordination of pairs with threat.

698. Spilerman, S. 1976. "Structural characteristics of cities and severity of racial disorders." AMERICAN SOCIOLOGICAL REVIEW 41(5).

This analysis examines the structural arrangements and demographic characteristics of communities and their relative disorder severity. Examination of 322 events occurring in 1967-1968 leads to the conclusion that level of deprivation in a city does not determine the frequency of outburst of racial violence, and that once in progress, frustration does not necessarily trigger increases in the intensity of conflict. Demographically, southern regionality reduces severity and increasing proportions of non-white populations increase severity. Importantly, "disorder severity declines as a function of the number of prior outbreaks in a city." The author interprets the findings to indicate disorder severity is linked to distinct national characteristics.

699. Sporu, P. 1969. "Energy for man and environmental protection." SCIENCE 166 (December 19).

700. Springell, P. 1976. "Australian Uranium Politics." ECOLOGIST 6(8).

701. Stallings, R. A. 1973. "The community context of crisis management." AMERICAN BEHAVIORAL SCIENTIST 16(3).

This paper reviews the development of organizations established in response to community crises. It is shown that issue-specific crises should be examined as representing a position in a network of multi-issue community concerns. A framework for analysis of community crises is presented. A typology of crises ranging on a continuum from consensus to dissensus is evaluated.

702. Stark, M. J. A., W. J. Raine, S. L. Burbeck, and K. K. Davison. "Some empirical patterns in a riot-process." AMERICAN SOCIOLOGICAL REVIEW 39(December).

This paper re-examines theoretical approaches to riot processes in terms of available empirical referents. It is argued that existing concepts found in the body of theory cannot account for the dynamic and interactive processes found in analyzing riot behavior.

703. Stearnes, B. 1970. "Heat waste: study of Turkey Point plant's effect on Biscayne Bay." SEA FRONT 16(May).

704. Steele, C. M. 1975. "Name-calling and compliance." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(2).

This experiment found that negative name calling induced greater levels of complaint behavior than positive name-calling. It was demonstrated that this effect was most pronounced when the name attacked the general character of their subject rather than any specific behavior.

705. Stein, A. A. 1976. "Conflict and cohesion: a review of the literature." JOURNAL OF CONFLICT RESOLUTION 20(1).

This analysis focuses on the positive relation between external conflict and internal cohesion. Examining the results of inter-disciplinary studies, this relation was shown to be conditionally based on the presence of the following intervening variables: the external conflict must involve an explicit threat; the threat must affect all group members equally; and the threat must be amenable to resolution.

706. Steiner, J. 1969. "Nonviolent conflict resolution in democratic systems--Switzerland." JOURNAL OF CONFLICT RESOLUTION 13(3).

This study elaborates a system of hypotheses designed to test the conditions under which conflict in democratic systems is resolved through nonviolent patterns of relations. Different models are developed and suggestions offered for testing the models.

707. Stelzer, L. 1972. "School board receptivity--representation study" EDUCATION AND URBAN SOCIETY 5(1).

708. _____. 1974. "Institutionalizing conflict response--case of schoolboards." SOCIAL SCIENCE QUARTERLY 55(2).

709. Stern, P. C. 1976. "Effect of incentives and education on resource conservation decisions in a simulated commons dilemma." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(6).

This experiment manipulated the form of incentive and information to examine the joint effect on conservation. The authors found that price increases led to increased conservation and extended life of the resource. Direct payoffs and rationing were not effective in increasing conservation. While reliance on spot messages were ineffective, detailed information on the long-term consequences of failure to conserve resources led to conservation behaviors.

710. Sternglass, E. J. 1969. "The death of all the children." ESQUIRE 72 (September).

711. _____. 1971. "Health effects from radiation." VITAL SPEECHES 37 (September 1).

712. Stewart, T. R. and L. Gelberd. 1976. "Analysis of judgement policy: a new approach for citizen participation in planning." JOURNAL OF THE AMERICAN INSTITUTE OF PLANNERS 42(1).

This research proposes a model analyzing the way in which information is integrated into a single policy judgement. Using data from a case study of Boulder, Colorado, a linear regression model was tested that explained substantial variance in participant's judgements and provided interpretations of the results. By extending the data base to include perceptions of citizens, the public could impact the planning process.

713. Stinchcombe, J. L. R. 1968. REFORM AND REACTION: CITY POLITICS IN TOLEDO. Belmont: Wadsworth.

This paper examines the impact of reformist versus centralized political structure on school desegregation strategies in communities. It was found that greater conflict was generated in the decision-making process in decentralized cities where interest groups were more influential than in the centralized cities where the mayor influenced decisions of the local school board.

714. Straits, B. D. 1965. "Community adoption and implementation of urban renewal." *AMERICAN JOURNAL OF SOCIOLOGY* 71(July).

This article critiques the value of Hawley's MPO ratio in predicting urban renewal successes. It was concluded that the measure is inadequate for explaining the concentration of power in a community. A better predictor is the size and age of a city's housing.

715. Strong, A. L. 1975. "Regional land-use planning: the conflict between national objectives and local autonomy." *ENVIRONMENTAL POLICY AND LAW* 6(2).

This essay describes the conflict attending the opposition of national goals to local autonomy. Four conditions underlie the distribution of power in the United States: rights of private property, municipal regulation of urban growth, segmental environment impact, and freedom from restraint of trade. These conditions represent value judgements which the author illustrated in citing four controversies over environmental issues.

716. Stuart, R. 1975. "T.V.A. proposal for big nuclear unit fosters a controversy in Tennessee." *NEW YORK TIMES* (July 5).

The article reports on conflict in Hartsville, TN over TVA plans to acquire 2,000 acres of fertile farm land so as to build the world's largest nuclear power plant. Local business, professional people, labor, unions, and selected industry personnel are supporting plans for the plant against some area officials and the state attorney general. Farmers have gone to court to block acquisition of their land. TVA has the authority to acquire the land through power of eminent domain.

717. Suedfeld, P. and A. D. Rank. 1976. "Revolutionary leaders; long-term success as a function of changes in conceptual complexity." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 34(20).

This research examined archival records and found that long-term success was correlated with low conceptual complexity during the early phase of revolutionary conflict followed by a change to high conceptual complexity in the consolidation phase following the successful revolution. Leaders who did not change did not stay in power.

718. Suedfeld, P. and P. Tetlock. 1977. "Integrative complexity of communications in international crises." *JOURNAL OF CONFLICT RESOLUTION* 21(1).

This study examines international conflict in terms of communication complexity. Where complexity was low, war was the outcome. "These findings support the general predictions concerning changes in information-complexity as a function of environmental stress, derived from both experimental psychology and political science analyses."

719. Summers, D. A. 1968. "Conflict, compromise, and belief change in a decision making task." *JOURNAL OF CONFLICT RESOLUTION* 12(2).

This experiment found that a subject's compromise behavior was affected by interaction. Specifically, the more one subject compromised, the less the compromise of the other.

720. Swan, J. A. 1970. "Response to air pollution--a study of attitudes and coping strategies of high school youths." *ENVIRONMENT AND BEHAVIOR* 2(2).

This paper examines the attitudes of high school students on the importance of pollution control. Examining the range of priorities, air pollution control was third behind increased job opportunity, and improved police-community relations. Whites were significantly more interested and involved than black students. Environmental concern was also predicted by SES.

721. Swingle, P. G. 1966. "Effects of the emotional relationship between protagonists in a two-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 4(3).

This experiment found that when a subject played with an uncooperative partner who was either liked or unknown, then reduced cooperation resulted. This indicated support for theories of cognitive consistency as a disliked partner had no effect on levels of cooperation.

722. _____. 1968. "Effects of prior exposure to cooperative or competing treatment upon subject's responding in the prisoner's dilemma." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 10(1).

In this experiment, it was found that pretraining or unconditional non-cooperation strategies reduced later noncooperation. The longer the pretraining the more noncooperation was suppressed.

723. _____. 1969. "Ethnic factors in interpersonal bargaining." CANADIAN JOURNAL OF PSYCHOLOGY 23(2).

This experiment found no significant difference in the levels of cooperation between (English) Canadians and (French) Canadians, although in the anonymity condition, the groups tend to show greater competition.

724. _____. 1970. "Exploitative behavior in non-zero-sum games." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(1).

This experiment found that when a powerful opponent failed to use or decreasingly used his capacity to punish, then the other subject would increasingly seek to exploit the powerful opponent.

725. Swingle, P. (ed.) 1970. THE STRUCTURE OF CONFLICT. New York: Academic.

726. Swingle, P. G. and H. Coady. 1967. "Effects of the partner's abrupt strategy change upon subject responding in the prisoner's dilemma." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 5(3).

This experiment found that partner's early strategy affected later abrupt changes and this was shown to be associated with increased variation in the subject's cooperative behavior.

727. Swingle, P. G. and Gillis. 1968. "Effects of the emotional relationship between protagonists in the prisoner's dilemma." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 8(2).

In this experiment, it was found that subjects who showed dislike for opponents choose highly competitive strategies which are not affected by any abrupt strategy change of their opponent. Subjects who liked each other were less competitive and were significantly affected by abrupt change by their opponent.

728. Swingle, P. G. and B. MacLean. 1971. "The effect of illusory power in non-zero-sum games." JOURNAL OF CONFLICT RESOLUTION 15(4).

Power is measured as ability to stop the experiment for some period of time. Highest level of cooperation occurred when both opponents had power and the lowest level occurred when only one player had power.

729. Swingle, P. G. and A. Santi. 1972. "Communication in non-zero-sum games." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 23(1).

This experiment found that forced or optional communication induced greater cooperation between subjects than subjects not allowed to communicate.

730. Tauman, N. 1976. "United States vs. GAF Corporation: a leak in the FWPCA?: ENVIRONMENTAL LAW 6(2).

731. Technology Week. 1967. "AEC moves toward sale of gas plants to industry." TECHNOLOGY WEEK 20(January).

732. Tedeschi, J. T., D. Aranoff, J. Gahagan, and D. Hiester. 1968. "The partial reinforcement effect and the prisoner's dilemma." JOURNAL OF SOCIAL PSYCHOLOGY 75(Second half).

This experiment found that a contingent cooperative strategy which reinforced the subject for cooperative behavior but punished for defections induced the greatest level of cooperation from the subjects.

733. Tedeschi, J. T., T. V. Bonoma, and R. C. Brown. 1971. "A paradigm for the study of coercive power." JOURNAL OF CONFLICT RESOLUTION 15(2).

The authors review the various approaches to studying threat in experiments and suggest that it would be profitable to expand the controls in the threat paradigm to other paradigms.

734. Tedeschi, J. T., G. G. Gaes, and A. N. Rivera. 1977. "Aggression and the use of coercive power." JOURNAL OF SOCIAL ISSUES 33(1).

This paper reviews the aggression literature and finds the field too focused on analysis of "retaliatory behaviors." By reconceptualizing the phenomenon as coercive power initiated by a transgressor, research can distinguish between retaliatory and initiated actions. The author discusses various normative factors which tend to regulate behavior and relates these to individual characteristics which facilitate the selection of violent response.

735. Tedeschi, J. T., D. S. Hiester, and J. P. Gahagan. 1969. "Trust and the prisoner's dilemma game." JOURNAL OF SOCIAL PSYCHOLOGY 79(First half).

This experiment found that a contingent cooperative strategy which reinforced the subject for cooperative behavior but punished for defections induced greater trustworthiness than any other strategy.

736. Tedeschi, J. T. et al. 1969. "Social power and the credibility of promises." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 13(3).

This experiment found that powerful subjects rejected conciliatory initiatives from their partner; equal power subjects were very conciliatory; with weak power subjects tending to be exploitive of conciliatory offers.

737. Teger, A. I. 1970. "The effect of early cooperation on the escalation of conflict." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 6(2).

This experiment found that when a hostile act followed a period of cooperation, greater retaliation was involved, and resultant conflict was of greater magnitude and duration than when the hostile act preceeded initial interaction.

738. Teniere-Buchot, P. F. 1976. "The role of the public in water management decisions in France." NATURAL RESOURCES JOURNAL 16(1).

739. Terborg, J. R., C. Castore, and J. A. DeNinno. 1976. "A longitudinal field investigation of the impact of group composition on group performance and cohesion." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 34(5).

This experiment found that high ability groups produced the best performances on assigned tasks and that groups with similar attitudes developed greater cohesion.

740. Tesser, A. and M. C. Conlee. 1975. "Some effects of time and thought on attitude polarization." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31 (2).

This experiment found that the greater the length of time subjects thought about an attitude, the greater was the tendency for attitudes in the group to polarize.

741. Teuber, E. B. 1973. "Emergence and change of human relations groups." AMERICAN BEHAVIORAL SCIENTIST 16(3).

This paper reports on the emergence of Human Relations Commissions and examines their function as agents for crisis intervention and social change. The Commissions implement these functions through four strategies: consensus, ombudsman, legal-rational, and "creative conflict." The choice of strategy employed was noted to be issue specific.

742. Thibaut, J., N. Friedland, and L. Walker. 1974. "Compliance with rules: some social determinants." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 30(6).

This experiment reported that a subject observed rules if he was in a correspondent interaction with the rulemaker. The more the individual participated in the rule-making procedure, the greater the compliance to the rules. There was no relation between adherence and the level of rule specificity.

743. Thibaut, J., and C. L. Gruder. 1969. "Formation of contractual agreements between parties of unequal power." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 11(1).

This experiment found that agreements were reached between actors when attractive alternative negotiations existed. It was concluded that agreements were reached because actors determined that agreements would facilitate joint outcome maximization.

744. Thomsen, D. E. 1970. "Fusion power to fight the trash glut: self-sustaining fusion reactor." SCIENCE NEWS 97(March 7).

745. Tichenor, P. J., C. N. Olien, G. A. Donohue. 1976. "Community control and care of scientific-information." COMMUNICATION RESEARCH 3(4).

746. Tilden, P. M. 1963. "The California atom controversy: Bodega Head, Sonoma County." NATURAL HISTORY 72(December).

747. Time. 1963. "Atoms downtown: questioning a nuclear plant in New York City." TIME (July 26).

This article reported New York's Consolidated Edison Company's plan to build a nuclear power plant in the heart of New York City. While the facility will possess "fantastically elaborate safeguards," bitter opposition was expected.

748. _____. 1965. "Nuclear energy--destruction on Jackass Flats." TIME (January 22).

This article reports on the test destruction of a nuclear rocket engine by the Atomic Energy Commission. Shutting down reactor controls, "observers heard a loud bang," and the reactor, fuel, and nearby equipment completely vaporized.

749. _____. 1966. "Switching to the atom: nationwide surge." TIME (October 14).

750. _____. 1969. "France buries its pride." TIME (November 28).

751. _____. 1970. "Peaceful atom, friend or foe?" TIME (January 19).

752. _____. 1971. "The great breeder dispute." TIME (November 1).

This article reports on the controversy surrounding breeder reactors, noting the criticism of the Institute of Public Information regarding the failure of the Atomic Energy Commission to publicize the dangers of breeder reactors.

753. _____. 1977. "The atom's global garbage." TIME (October 31).

754. Tognacci, L. N. et al. 1972. "Environmental quality--how universal is public concern?" ENVIRONMENT AND BEHAVIOR 4(1).

This study seeks to isolate patterns of demographic and attitudinal characteristics of environmentalists. Environmentalists were found to be younger, better educated, more liberal, and of higher socioeconomic status than those who indicated less concern for environmentalism. The author notes that the environmentalist constituency share the same characteristics as other types of social activist groups.

755. Tornatzky, L. and P. J. Geiwitz. 1968. "The effects of threat and attraction on interpersonal bargaining." PSYCHONOMIC SCIENCE 13(2).

Prisoner's dilemma game is used to analyze when threat is conducive to cooperation. Threat leads to cooperation only when opponents have low attraction to one another.

756. Tourbier, J., R. W. Pierson, S. McKenzie, R. Westmacot, R. Silson, M. Gross, and E. W. Furia. 1976. "The coastal zone of Delaware: a method for the allocation of land and water uses." UNIVERSITY OF PENNSYLVANIA CENTER FOR ECOLOGICAL RESEARCH IN PLANNING AND DESIGN REPORT, 1976.

757. Tribe, L. H. 1976. "When values conflict: essays on environmental analysis, discourse, and decision." Cambridge: Ballinger.

758. Trigg, L. J., D. Perlman, R. P. Perry, and M. P. Janisse, 1976. "Anti-pollution behavior--a function of perceived outcome and locus of control." ENVIRONMENT AND BEHAVIOR 8(2).

This paper reports research relating locus of control to environmental activism. Internal locus of control characterized those better informed on environmental issues. Internals engaged in more anti-pollution activities; however, this latter finding was specified by the finding that the activists came from the category of "optimistic" regarding future pollution levels.

759. Trubatch, S. L. 1976. "Conservation society of Southern Vermont: the retreat on delegation and scope of environmental impact statements." COLUMBIA JOURNAL OF ENVIRONMENTAL LAW 2(2).

760. Trzyna, T. C. and A. W. Jokela. 1974. THE CALIFORNIA ENVIRONMENTAL QUALITY ACT. Claremont: Center for California Public Affairs.

761. Turk, A. T. 1976. "Law as a weapon in social conflict." SOCIAL PROBLEMS 23(3).

762. Turk, H. 1970. "Interorganizational networks in urban society: initial perspectives and comparative research." AMERICAN SOCIOLOGICAL REVIEW 35(1).

This research examines organizations as actors in a system of relations and defines social integration in organizational terms. It interprets the inter-organizational consequences of integration. The study finds that extralocal integration predicts the activity level and complexity of interorganizational networks. Local integration was inversely related to extralocal integration. Where organizational integration was high, population deprivation rates influenced interorganizational outcomes. Population demographics had no impact on the predicted outcomes.

763. _____. a:1973. "Comparative urban structure from an interorganizational perspective." ADMINISTRATIVE SCIENCE QUARTERLY 18(1).

In this research interorganizational analysis is employed to determine the extent to which the scale and diversity of city government, plus types of voluntary associations influence the formation of hospital councils. These formalizations are expressed in the following hypotheses which were supported by the analysis: formal relations in any broad class of local organizations will occur more frequently--the more diversified the city government and the larger the scale, or the less contexted the existed relations and the more community-wide the voluntary associations.

764. _____. b:1973. INTERORGANIZATIONAL ACTIVATION IN URBAN COMMUNITIES: DEDUCTIONS FROM THE CONCEPT OF SYSTEM. Washington, D.C.: American Sociological Association.

The author contends that the ability of organizations in a community to respond to community needs as new programs depends upon the existing density of linkages among organizations in the community. Using data on 130 American cities with 1960 populations over 100,000, the author demonstrates that the ability of cities to supply (in the form of social programs) their needs (in the form of aggregate census characteristics, e.g., poverty programs given a high poverty rate), increases as the potential activation of organizations in the community increases. Potential for interorganizational activation in a community was shown to be predicted by the size and differentiation of government in the community, the absence of reform government characteristics (thereby indicating the strength of political parties), and the "importance" of community wide voluntary associations.

765. _____. 1977. ORGANIZATIONS IN MODERN LIFE. San Francisco: Jossey-Bass.

The author seeks to formalize his previous work on inter-organization networks in metropolitan areas. Analyzing the 130 largest American cities, the author presents a general perspective on the stability and change of inter-organizational networks. Particularly relevant here is the discussion of centralization, conflict, and decision networks among organizations (Chapter 3). The centralization of municipal government is associated with the occurrence of city-wide voluntary associations, organizational stratification, and organizational complexity. Using the implementation of water fluoridation as an indicator of the absence of community conflict, the author is able to support his proposition that centralization of municipal government (and accordingly organizational complexity) is inversely related to community conflict.

766. Turner, J. H. a:1975. "A strategy for reformulating the dialectical and functional theories of conflict." SOCIAL FORCES 53(3).

767. _____. b:1975. "Marx and Simmel revisited: reassessing foundations of conflict theory." SOCIAL FORCES 53(4).

768. Turner, R. H. 1972. "Integrative beliefs in group crises." JOURNAL OF CONFLICT RESOLUTION 16(1).

This essay seeks to evaluate the hypothesis that following a crises event a "bonded" group or community will seek to suppress dissent and focus on maintenance of intra-group solidarity. This response is based on the avoidance of internal conflict. Where the threat of internal conflict develops to the point of threatening group bonds, the group will seek to define the crises event in terms which minimize its divisive significance.

769. U. S. News and World Report. 1969. "Atomic power in industry: a slump now, but..." U. S. NEWS AND WORLD REPORT 67(July 7).

770. _____. 1971. "Living with atomic power and liking it: Yankee atomic nuclear power station: Rowe, Mass." U.S. NEWS AND WORLD REPORT 70(March 29).

771. USBIM REPORT. 1974. "Proposed increase in acreage to be offered to oil and gas leasing on the outer continental shelf: draft-environmental statement." USBIM REPORT DES 2(October 18).

772. Uejio, C. K. and L. S. Wrightsman. 1967. "Ethnic-group differences in the relationships of trusting attitude to cooperative behavior." PSYCHOLOGICAL REPORTS 20(2).

This experiment found no significant differences in level of cooperation behaviors between Caucasians and Japanese-Americans. Certain jointly held attitude scales and behavioral traits were associated with higher cooperation.

773. Varley, E. 1975. "Offshore oilmen ask Valey some questions." OCEAN INDUSTRY (May).

774. Verba, S. and N. H. Nie. 1972. PARTICIPATION IN AMERICA: POLITICAL DEMOCRACY AND SOCIAL EQUALITY. New York: Harper & Row.

Of the work published on political participation, this is one of the, if not, major reference. The work is based predominantly on interviews with a representative sample of households in the United States (NORC survey in 1967 2,549 respondents). The authors describe the manner in which participation occurs, the determinants of participation, and finally, the consequences of participation. Participation is largely predicted by socioeconomic status; the most participation coming from those with high income, high education, and high occupational prestige. The effectiveness of participation (measured as the similarity of individual perception of social needs and the perceptions by leaders of social needs) is also predicted by socioeconomic status; the most effective participation coming from those with high socioeconomic status. As one goes up the socioeconomic status dimension, therefore, one finds more participation in the political process and more effect on leaders by individual efforts. These participation findings are based on a general index of participation as a weighted composite of four other weighted composite indices. The overall index consists mostly of campaign activity (weight of .88) and communal activity such as forming local groups to work on specific problems (weight of .79). Also included in the overall index are voting activities (weight of .48).

and personalized contacting such as writing letters to representatives (weight of .15). Particularly relevant to the discussion here is the chapter on citizen participation and community characteristics. The major finding is that as communities grow in size and loosen their social boundaries, participation declines.

775. Vidmar, N: 1971. "Effects of representational roles and mediators on negotiation effectiveness." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 17(1).

This experiment found that mediators increased group performance where role obligations were present. Negotiators with role obligations without mediators displayed ineffective negotiation behaviors.

776. Vilardo, F. J. 1974. "Organizational and environmental factors associated with effective implementation of a safety program." JOURNAL OF SAFETY RESEARCH 6(1).

777. Vinacke, W. E. and A. Arkoff. 1957. "An experimental study of coalitions in the triad." AMERICAN SOCIOLOGICAL REVIEW 22(39).

778. Vuori, H. 1973. "Turkey, Finland--attitudes towards fluoridation of drinking water." INTERNATIONAL JOURNAL OF HEALTH EDUCATION 16(2).

779. Walker, J. L. 1973. "Problems in research on diffusion of policy innovations--comment." AMERICAN POLITICAL SCIENCE REVIEW 67(4).

This paper seeks to justify the primacy of a structural paradigm in the analysis of policy implementation against a more issue-oriented approach. It was shown how the issue approach fails to take into account diffusion of policy innovation.

780. Walker, M. B. 1973. "Caplow's theory of coalitions in the triad reconsidered." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 27(3).

This experiment found that subjects sought coalitions based on relations of superior power rather than on the basis of "proportional gain."

781. Walker, S. G. 1977. "The interface between beliefs and behavior." JOURNAL OF CONFLICT RESOLUTION 21(1).

This paper suggests that knowledge of an actor's "operational code" (defined in terms of the actor's position of various philosophical and practical means/ends dimensions) can predict behavior. Utilizing this framework, the author cognitively maps Henry Kissinger's operational code and creates a matrix of choices in bargaining situations. The conclusion reached by the analysis is that "the best mode of political leadership is the statesman, which prescribes negotiation rather than charisma or force to achieve political goals and minimize the risk of tragic historical consequences."

782. Wall, G. 1973. "Public response to air pollution in South Yorkshire, England." ENVIRONMENT AND BEHAVIOR 5(2).

This paper uses household survey data to distinguish attitudes of residents on air pollution from coalfields. In the communities where pollution abatement programs were in effect, fewer residents perceived pollution as a serious problem than to those communities where abatement programs were still forthcoming.

783. _____. 1976. "National coping styles--policies to combat environmental problems." INTERNATIONAL JOURNAL OF ENVIRONMENTAL STUDIES 9(4).

This essay discussed the identification of distinct national styles which are shown to be one basis for differential strategies for management of pollution problems. Americans are more disposed towards reliance on legally enforceable standards whereas in England there is a greater emphasis on persuasion and cooperation.

784. Wallace, D. and P. Rothaus. 1969. "Communication, group loyalty, and trust in the PD game." JOURNAL OF CONFLICT RESOLUTION 13(3).

Communication between opponents in the experiment served only to decrease cooperative moves--peaceful overtures being used as deceptive instruments--when opponents were strangers but increased cooperative moves, when opponents were friends.

785. Wallace, W. A. 1963. "Radiation and social ethics: conference of nuclear scientists and theologians." AMERICA 108(June).

786. Walsh, J. 1971. "Vermont--a power deficit raises pressure for new plants." SCIENCE 173(September 17).

787. Walton, J. 1966. "Substance and artifact: the current status of research and community power structure." AMERICAN JOURNAL OF SOCIOLOGY 71(January).

788. _____. 1966. "Discipline, method, and community power: a note on the sociology of knowledge." AMERICAN SOCIOLOGICAL REVIEW 31(October).

789. _____. 1967. "Vertical axis and community power." SOUTHWESTERN SOCIAL SCIENCE QUARTERLY 48(December).

Beginning with studies that showed competitive power structures are related to: absentee ownership, satellite states, political party competition, and adequate economic resources, the author attempts to expand the list of variables but was unable to develop anything significant. The four primary predictors were associated with inter-community dependence and this interdependence produces fragmentation of the normative order which led to more competitive power arrangements.

790. _____. 1968. "Differential patterns of community power structure: an explanation based on interdependence." In: T. N. Clark, ed. COMMUNITY STRUCTURE AND DECISION-MAKING: COMPARATIVE ANALYSES. San Francisco: Chandler.

This research argues that extra-local influence leads to a pluralistic political structure in a community. The author hypothesizes that the greater the extra-community influences of culture and groups, the more fragmented the local political structure becomes.

791. _____. 1970. "A systematic survey of community power research." In M. Aiken and P. E. Mott (eds.), THE STRUCTURE OF COMMUNITY POWER. New York: Random House.

Building on his previous two secondary analyses of work on community power structures, the author presents analyses of findings in the thirty-nine studies of power structure in sixty-one communities. Ten hypotheses are confirmed and thirteen variables are shown not to be associated with the type of power structure located in a community.

793. _____. 1973. "Structural bases of political change in urban communities." *SOCIOLOGICAL INQUIRY* 43(3).

This essay presents a theoretical linkage of structural changes with political outcomes. Examination of the variables: urbanization, suburbanization, social polarization, economic polarization, and vertical integration will lead to predicted changes in three dimensions of social organization, segmentation, interdependence, and competition-control.

794. _____. 1976. "Community power and the retreat from politics: full circle after twenty years?" *SOCIAL PROBLEMS* 23(February 3).

This paper reviews the literature on community power and expresses doubt that the field has progressed dramatically since Hunter (1953). Concern centers around the author's contention that studies of power structure, of "who gets what, when, and how," have given way to abstract comparative study of census and other archival data that do not truly measure the "stuff" of politics.

795. Walton, R. E. 1969. *INTERPERSONAL PEACEMAKING: CONFRONTATIONS AND THIRD-PARTY CONSULTATION*. Reading: Addison-Wesley.

This is a theoretical as well as practical discussion of the use of third-parties in negotiations between two opponents. The author discusses the functions served by third-parties, the tactical choices involved in using third-parties, and the most useful attributes of third-parties. The book is a useful summary of hypotheses culled from the social psychology literature and three case studies described by the author.

796. Walton, R. E. and R. B. McKersie. 1965. *A BEHAVIORAL THEORY OF LABOR NEGOTIATIONS: AN ANALYSIS OF A SOCIAL INTERACTION SYSTEM*. New York: McGraw-Hill.

797. Warinner, J. E., M. Nolan, C. Becker, R. W. Middleton, W. Rizzo, P. A. Dales, and M. T. Jacks. 1975. "An assessment of estuarine and nearshore marine environments." *VIRGINIA INSTITUTE OF MARINE SCIENCE REPORTS* (July).

798. Warner, K. E. 1974. "The need for some innovative concepts of innovation: an examination of research on the diffusion of innovation." *POLICY SCIENCES* 5(4).

This essay focuses on the contributions of economists and sociologists in the formulation of a theory on the diffusion of innovations. Where economists concentrated on diffusion in the competitive marketplace, sociologists examined diffusion in quasi or nonmarket areas and the impact on normative dynamics. The author suggested that future research efforts be aimed at providing more rigorous definitions and operationalizations of innovation concepts in order to provide an interdisciplinary approach to studying the origins, uses, and users of diffused innovative technologies.

799. Warner, M. 1972. "Communication overkill in a fluoridation campaign." *CANADIAN JOURNAL OF PUBLIC HEALTH* 63(3).

800. Warren, D. I. 1972. "Mass media and racial crisis: a study of the New Bethel Church incident in Detroit." *JOURNAL OF SOCIAL ISSUES* 28(1).

This case study assumes the impact of the mass media on racial polarization. The author concluded that newspapers caused extinction of perceptions formed from television and that information from television alone reinforced white attitudes and increased polarization.

801. Warren, R. L. 1956. "Toward a typology of extra-community controls limiting local community autonomy." SOCIAL FORCES 24(May).

The analysis introduces the problem of vertical organizations in community structure as the extra-local controls that serve to limit the autonomy a community can have. In contrast to several community studies claiming local autonomy, data presented here suggest that local autonomy was constrained.

802. _____. 1967. "A note on Walton's analysis of power structure and vertical ties." SOCIAL SCIENCE QUARTERLY 48(December).

803. _____. 1970. "Toward a non-utopian normative model of the community." AMERICAN SOCIOLOGICAL REVIEW 35(2).

This essay discusses the implications of including value prescriptions in models of interorganizational networks. Community autonomy, community viability, and the decentralization of decision-making assuring wide public participation--all are qualities to be sought after in what would be the "best" structuring of community power. The author argues that inclusion of these value-dimensions is necessary if social science is to develop models that predict social policy.

804. Warren, R. L., S. M. Rose, and A. F. Bergunder. 1974. THE STRUCTURE OF URBAN REFORM. Lexington: D. C. Heath.

Comparative data across nine cities selected for having different population characteristics but six common "community decision organizations" (terms CDOs by the authors); urban renewal, schools, health/welfare planning, and Model Cities, are used to test propositions connecting organizational structure and organizational effectiveness. The CDOs are discussed in terms of their "domain consensus" approach to dealing with uncertainty. Each organization defines what issues it will address and how it will address issues. The six CDOs perceive one another's methods of dealing with issues and together they define domains of issues each is to cover. The strength and frequency of interactions among CDOs in a community is positively related to their cooperative coordination, their innovativeness, their responsiveness to the citizens they are intended to serve and the participation by these citizens in the CDOs' ongoing activities.

805. Weatherwax, R. K. 1975. "Virtues and limitations of risk analysis." BULLETIN OF THE ATOMIC SCIENTIST 31(10).

806. Webster, B. a:1975. "Mediation office on ecology set up." NEW YORK TIMES (September 18).

807. _____. b:1975. "Environmental service in northwest gets funds." NEW YORK TIMES (September 18).

This news report focused on the development of the Office of Environmental Mediation which had successful 15 year controversy over plans to dam the Snoqualmie River in Washington. The mediator group brought together 10 representatives of both sides and worked out a compromise acceptable to both sides.

808. Weinberg, A. M. and R. P. Hammond. 1973. "Global effects of increased use of energy." BULLETIN OF THE ATOMIC SCIENTIST 29(February).

809. Weiss, E. B. 1975. "New perspective on weather and climate." Presented at AAAS meeting, New York City, January 26-31.

810. Wetboy, A. 1967. "Nuclear power on Salmon Rivers." NATION 205(October).

811. Wheaton, W. L. C. 1976. "Conservation and exclusion." CENTER MAGAZINE 9(1).

812. Wheeler, H. and E. Burdick. 1963. "Politics of destruction." SATURDAY REVIEW 46(November 9).

813. White, L. G. 1976. "Rational theories to participation: an exercise in definition." JOURNAL OF CONFLICT RESOLUTION 20(2).

This article examines the extent to which economic models of rational utility are appropriate for analysis of political variables. Utility models are predictive of participation if differences between public and private goals are clearly identifiable. The multidimensional facets of utility are discussed.

814. White, R. K. 1977. "Misperception in the Arab-Israeli conflict." JOURNAL OF SOCIAL ISSUES 33(1).

This paper reviews the history of the Arab-Israeli conflict examining the psychological factors that have operated to maintain the conflict and prevent resolution. The author examines the explanatory power of projection attribution, and consistency theory, positive reinforcement, and the Jones and Nisbett theory that situational factors are overlooked when the behavior of others is being judged. The author contends that each side does not perceive the fear and anger of the opposition nor its own role in producing and sustaining the oppositions' fear and anger.

815. Wichman, H. 1970. "Effects of isolation and communication on cooperation in a two-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 16(1).

This experiment found that the more isolated the subjects in a prisoner's dilemma game, the more competitiveness develops between subjects.

816. Williams, J. M. 1973. "The ecological approach to measuring community power concentration: an analysis of Hawley's MPO ratio." AMERICAN SOCIOLOGICAL REVIEW 38(2).

This paper addressed explicitly the issue of the validity of Hawley's MPO measure of community power concentration. Hawley's (1968) hypothesis that the smaller the MPO ratio, the more concentrated the power structure is shown to have an exactly opposite effect. The author suggests that this occurs through a confounding of the MPO measure with community stratification and variations in political organizations. The author concludes that MPO is an invalid measure of the relative dispersion of power in a community.

817. _____. 1973. "Reply to Hawley." AMERICAN SOCIOLOGICAL REVIEW 38(3).

818. Williams, R. M., Jr. 1972. "Conflict and social order: a research strategy for complex propositions." JOURNAL OF SOCIAL ISSUES 28(1).

This research seeks to synthesize the relevant features of the various theoretical and methodological approaches to the study of social conflict into a multivariate model. The model predicts increased conflict based on the relation of (at least) two sets of actors under specified levels of high inequality, large cultural differences, decreasing empathy, plus ineffective and distorted channels of communication. The actors must be shown in competition for authority or resources.

819. Wilson, J. Q. (ed.). 1968. CITY POLITICS AND PUBLIC POLICY. New York: John Wiley.

820. Wilson, J. Q. and E. C. Banfield. 1964. "Public-regardingness a value premise in voting behavior." AMERICAN POLITICAL SCIENCE REVIEW 58(December).

The authors present data supporting the "ethos theory" initiated in their CITY POLITICS. The tendency to vote for policies that benefited no one directly yet cost high taxes was associated with political districts with high median incomes and larger proportions of particular ethnic backgrounds (particularly Anglo-Saxon, Jewish and Negro).

821. _____. 1971. "Political ethos revisited." AMERICAN POLITICAL SCIENCE REVIEW 65(4).

This research examines two ethos that are associated with types of government preferred. The WASP ethos is indicative of decentralized government, the immigrant ethos was supportive of centralized government. The WASP ethos was characterized by "public-regarding" while the immigrant ethos was characterized by "private-regarding" values and attitudinal structures. Findings indicated these qualities did not hold true when examining the aggregated public, but that among those politically active are two identifiable power cliques which are characterizable in the above framework.

822. Wilson, W., Jr. 1969. "Cooperation and the cooperativeness of the other play." JOURNAL OF CONFLICT RESOLUTION 13(1).

In this experiment, cooperation, coaxing, and reciprocation induced similar high levels of cooperative choices and with competition strategy scored very low.

823. _____. 1971. "Reciprocation and other techniques for inducing cooperation in the prisoner's dilemma game." JOURNAL OF CONFLICT RESOLUTION 15(2).

This experiment demonstrated that pretraining produced greater cooperation in main trials. Under various conditions, partners received better ratings than the opponents.

824. Wirth, L. 1938. "Urbanism as a way of life." AMERICAN JOURNAL OF SOCIOLOGY 44(July).

825. Wish, M., M. Deutsch, S. J. Kaplan. 1976. "Perceived dimensions of interpersonal relations." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(4).

This study used questionnaires to determine the patterns of relations between a person's perceptions of role relations and his actual relations in that role. The data indicated four dimensions were salient, and that these dimensions varied on biographical characteristics across subgroups.

826. Wolfinger, R. E. a:1971. "Nondecisions and the study of local politics." AMERICAN POLITICAL SCIENCE REVIEW 65(4).

Reacting against the perceived misconceptualization of the neo-elitist's approach to the study of community power, the author offers an alternative framework for the analysis of political nondecisions. Three forms of nondecisions formulated are: renunciation, where the political actor refrains from advancing a proposal feeling that it would not be acceptable to some other important person or groups; the abstention form, where a political actor makes a conscious decision not to become involved; and the nonparticipation form, where actors are not conscious of their interests and therefore cannot articulate those interests. The author notes the difficulty of operationalizing and measuring these concepts without resorting to ex post facto determinants.

827. _____. b:1971. "Rejoinder to Frey's 'comment'". AMERICAN POLITICAL SCIENCE REVIEW 65(4).

This essay covers the methodological difficulties inherent in attempting to measure power through analysis of nonissues. The author rejects Frey's claim that expectations and preventative actions can be measured objectively, and reiterates the claim that while research of nonissues is imperative for understanding power relations, there remains no technique for assessing the validity of the theory at this time.

828. Worchel, P., P. G. Hester, and P. S. Kopala. 1974. "Collective protest and legitimacy of authority." JOURNAL OF CONFLICT RESOLUTION 18(1).

829. Worchel, S., E. A. Lind, and K. H. Kaufman. 1975. "Evaluations of group products as a function of expectations of group longevity, outcome of competition, and publicity of evaluations." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(6).

This experiment found that subjects sought to reduce complacency in winning groups and sought to avoid despair when their group lost. Groups which knew they would be involved in future confrontations were less prone to overevaluate their success in public than in private. Losing groups overevaluated their success in public more than in private.

830. Wortman, C. G. 1975. "Some determinants of perceived control." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 31(2).

This experiment found that subjects who were responsible for their outcome and who knew the reward structure prior to action indicated that they felt they were more in control, had more choice, and accepted greater responsibility for their actions than subjects in the opposite condition.

831. Wortman, C. B., M. Hendricks, and J. W. Hillis. 1976. "Factors affecting participant reactions to random assignment in ameliorative social programs." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 33(3).

This experiment found that subjects who were randomly assigned without knowledge of the differential treatments and subjects who were fully informed that differential treatments would be forthcoming and who then volunteered for random assignment did equally well on assigned tasks. Another group of subjects who were not informed but were allowed to "discover" the differential treatments were much more negative in their responses and their performance suffered.

832. Wrightsman, L. S. 1966. "Personality and attitudinal correlates of trusting and trustworthy behaviors in a two-person game." JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY 4(3).

In this experiment, it was found that subjects who were altruistic, trustworthy, or independent exhibited more trusting behaviors.

833. Wyer, R. S., Jr. 1971. "Effects of outcome matrix and partner's behavior in two-person games." JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 7(2).

This experiment found that predictions of responses were more accurate and great cooperation was found when subjects played against a real "other" as opposed to a simulated other.

834. Yates, D. 1974. "Making decentralization work: the view from city hall." POLICY SCIENCE 5(3).

This study examines the successes and more often the failures to implement decentralization strategies and programs in New York City. One factor which limits successes and accounts for failures was determined to be the lack of sensitivity of City Hall in identifying the sectors of public mistrust.

This had led to failures in coordinating services. One central problem identified in developing coordination was the fragmented city government with decentralization serving not to mollify but rather exacerbate fragmentation.

835. Yin, R. K., R. W. Hearn, and P. M. Shapiro. 1974. "Administrative decentralization of municipal services: assessing the New York City experience." *POLICY SCIENCE* 5(1).

This essay assesses the impact of explicitly designed administrative programs to decentralized decision-making operations so as to maximize responsiveness to neighborhood problems. Examining five major task groups (personnel, budget, priority-setting, information gathering, and inter-agency communication), the author concluded that only with respect to inter-agency communication and coordination did decentralization produce the desired increases in cooperation. No changes were observed in the vertical hierarchical dimensions.

836. Young, F. W. 1970. "Reactive subsystems." *SOCIOLOGICAL REVIEW* 35(2).

This research examines the antecedents to the formation of opposition group solidarity. The level of solidarity was explained as a function of the ratio between the differentiation of group structure and the symbolic recognition given to the opposition group by the system in which the group operates. Examination of the historical movements demonstrates the usefulness of the conceptual framework.

837. Young, L. B. 1973. *POWER OVER PEOPLE*. New York: Oxford University Press.

838. Young, O. R. 1972. "Intermediaries: additional thoughts on third parties." *JOURNAL OF CONFLICT RESOLUTION* 16(1).

This paper addresses the role of intermediaries as third parties to conflict. Geometric interpretations allowed for identification of "contract zones" within which conflict may be mediated. It was the function of the mediation to facilitate an outcome by imposing costs on parties with conflicting interests. Strategies for imposing costs ranged from coercion to bargaining tactics.

839. Yukl, G. A. a:1974. "Effects of situational variables and opponent concessions on a bargainer's perception, aspirations, and concessions." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 29(2).

This experiment found that when the opponent made small concessions, larger concessions were induced in subjects than when the opponent made large initial concessions.

840. _____. b:1974. "Effects of the opponent's initial offer concessions magnitude, and concession frequency on bargaining behavior." *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY* 30(3).

This experiment concluded that a "hard" initial offer induced lower aspirations and more favorable initial and final offers in subjects than when the opponent made a "soft" initial offer.