

Community Response to Locational Conflict

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COMMUNITY RESPONSE TO LOCATIONAL CONFLICT

By

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Abstract

In recent years, community interest groups have played an integral role in conflict situations. This paper focuses on community response to locational conflict and the community's role in the process of conflict resolution. A conceptual model of locational conflict is developed. The model includes three essential elements. These are (i) community perceptions of a facility, (ii) the formation of a community group and (iii) a cycle of conflict. This framework leads to a hypothesis that there exists a cycle of conflict between community response to locational conflict and conflict resolution. Specifically, as a conflict evolves there exists a cyclical repetition of stages which lead to a cycle of conflict. As an empirical example of locational conflict, the Upper Ottawa Street Landfill is used to evaluate the validity of the model. Illegal chemical dumping in the past has created an environmental conflict for the surrounding community. The analysis illuminated the hypothesis that a cycle of conflict exists between community response to locational conflict and conflict resolution.

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TABLE OF CONTENTS

	Page
Abstract	iii
Acknowledgements	iv
Table of Contents	v
List of Figures, Maps and Plates	vii
Chapter 1: Introduction	1
Chapter 2: Concepts of Conflict.....	2
2.1 Locational Conflict.....	2
2.2 Spatial Externalities.....	5
2.3 Cycle of Conflict.....	8
2.3.1 Facility Form.....	8
2.3.2 Context of Community.....	9
2.3.3 Response of Decision Makers.....	16
2.4 Summary.....	19
Chapter 3: A Model of Community Response to Locational Conflict..	20
3.1 The Model.....	20
3.2 Research Method and Sources.....	24
Chapter 4: The Upper Ottawa Street Landfill: A Case of Locational Conflict.....	26
4.1 A Dump is Born.....	26
4.2 External Developments.....	28
4.3 The Catalytic Events.....	29
4.4 Community Involvement.....	31
4.5 The Cycle of Conflict Begins.....	33
4.6 Internal Structure of Community Group.....	34
4.7 The Conflict Escalates.....	34
4.8 Conflict Resolution.....	35
4.9 A Synthesis.....	37
Summary and Conclusions.....	38
5.1 Summary.....	38

TABLE OF CONTENTS

	Page
Summary and Conclusions, continued	
5.2 Evaluation of the Model.....	39
5.3 Suggestions for Future Research.....	40
Appendices	
A. Chronology of Major Events.....	41
B. The Upper Ottawa Street Landfill Area.....	42
C. Plates	43
References	45

LIST OF FIGURES, MAPS AND PLATES

Figure	Page
1 A Model of Community Response to Locational Conflict.....	23
2 Chronology of Major Events.....	41
Map	
1 Map of Upper Ottawa Street Landfill Area.....	42
Plates	
1 The Upper Ottawa Street Landfill.....	43
2 The Community Adjacent to the Upper Ottawa Street Landfill....	44
3 The Landfill as seen from the Community in Plate 2.....	44

CHAPTER ONE

INTRODUCTION

Urban planning faces a crucial challenge of how to respond to the growing demand for public participation. In the past, urban residents have been enveloped into a powerless silent majority role with no involvement in the planning system. In response to this feeling of alienation, there has been a dramatic increase in the number of community interest groups. In particular, there has been an increase in public involvement over environmental conflict issues.

The primary concern of this paper is to develop a conceptual framework suitable for the study of community group involvement in conflict situations. Specifically, the primary objective of the paper is to test the hypothesis that the relationship between community response to locational conflict and conflict resolution is an ongoing cycle of conflict. The development of this framework will permit the researcher to examine the case study in a more ordered fashion.

The structure of the paper is as follows. Chapter two reviews the body of literature related to community response to locational conflict. An emphasis is placed on the themes of locational conflict, spatial externalities, community strategies in conflict issues and political response. The material in this chapter serves as a foundation for the conceptual model.

In chapter three, the model of 'Community Response to Locational Conflict' is outlined along with a discussion of the main

elements of the model. In addition, the method of analysis will be discussed.

Chapter four involves the application of the model using the Upper Ottawa Street Landfill as an example of a conflict situation.

Chapter five summarizes the major findings of the paper as well as suggesting possible directions for future research in this area.

CHAPTER TWO

CONCEPTS OF A CONFLICT

The aim of this chapter is to review the body of literature pertaining to community response to locational conflict. The chapter will be divided into three specific sections. These are: locational conflict, spatial externalities and cycle of conflict. This discussion will provide a basis for the model presented in chapter three.

2.1 Locational Conflict

The term conflict suggests many different ideas: war, antagonism, struggles for the right to exercise power - that extend from the individual through to the global level (Evans, 1976). It has been stated that conflict may be no more than a word that expresses our interpretation of a multitude of widely disparate phenomenon, governed by entirely different principles (Rapoport, 1974). Due to the wide

range of conflict situations, the development of a general theory of conflict seems improbable.

There have been a plethora of definitions written on the theory of conflict. Boulding (1962, pg. 5) defines conflict as " ... a situation of competition in which parties are aware of the incompatibility of potential future positions and in which each party wishes to occupy a position that is incompatible with the wishes of the other." Coser (1956, pg. 8) views it as " ... a struggle over values and claims to scarce status, power and resources, and in which the aims of the opponents are to neutralise, injure or eliminate their rivals." Due to the realization that in an urban society most of the political conflict is the consequence of geographical externalities, it is the spatial view which is of ultimate interest to geographers.

Locational conflict is defined as those processes which lead to overt public debate over some actual or proposed land use changes (Dear, 1975, pg. 157). Janelle and Millward (1974) show from an analysis of newspaper coverage that there exists a strong relationship between conflicts and proposals for land use change, both in the city centre where redevelopment and capital investment is occurring, and in the peripheral areas where newer residential tracts are under construction. The focus of locational conflict research is placed upon the geographical dimensions of decision making. Every planning decision is associated with a series of costs and benefits; it is the differential importance given to these costs and benefits which causes the spatial mismatch between the environment and the needs of society. Harvey (1973) summarizes this notion by stating that much of what goes on in a

city (particularly in the political arena) can be interpreted as conflict over the urban public welfare implications of the distribution of externality effects.

The emphasis of research in locational conflict has been on both a micro and macro scale. The micro perspective is accompanied by some sense of illegitimate transfer on the part of the impacted population (Cox and Dear, 1975). In order for conflict to occur, there must exist a perceived loss of satisfaction between actual environmental utilities and anticipated environmental utilities following the implementation of a planning decision. The micro level of locational conflict could be a labelled source - specific, since it involves identifying the causal attributes of any given conflict. The macro-level places an emphasis on the socio-political climate of locational decisions. Cox and Dear (1975) note that locational choices are guided by local government policy via property rights designed to protect land users against difficulty. Zoning ordinances provide this protection, however due to the fundamental concept of accumulation in urban cities, requests for changes in current zoning regulations result. Conflicts over rezoning decisions are possibly the most common sources of locational conflict in urban areas (Cox and Dear, 1975).

Due to the unique circumstances under which conflicts occur, a great deal of studies have documented the impacts of land use changes on host communities. One major drawback to this approach is that each situation appears to be unique, being composed of exclusive actors in specific geographic settings, that are unlikely to be reproduced in situ.

(Dear and Long, 1975) There remains something of a conceptual and theoretical gap between this empirical work and more general discourses on power, conflict and crisis in society (Evans, 1976). An attempt by Seley (1973) to apply Dahrendorf's class-conflict model to the analysis of locational conflict ended by criticizing the theory itself as too static to apply to the complexities of locational conflict. Other locational analysts have correlated the Marxist perspective into the analysis of locational conflict. It has been stated that land use conflict is simply an urban manifestation of a much deeper tension between capital and labour (Harvey, 1978). Several attempts have also been made in the application of the economic theory into a spatial setting. In sum, due to the fact that planning decisions are a major source of land use change which, in turn, may result in locational conflict, the study of locational conflict must be addressed from both a social and spatial perspective.

2.2 Spatial Externalities

Throughout the spatial structure, people have been distributed in a non-random fashion, due to constraints such as income and mobility. The distribution of population is constantly shifting; for example large numbers are leaving inner city areas in preference for suburban areas, whilst others are getting involved in the process of gentrification (Kirby, 1980). However, facilities are distributed about the geography of the city as a result of State intervention in the form of urban planning policy. Given the uneven geographical distribution of these externality producing activities, there are sharp contrasts in the

degree of environmental quality of different locations within a city (Cox, 1973). For these reasons, the concept of spatial externalities warrants considerable attention in the study of locational conflict.

The economist's view is that an externality will exist whenever at least one person who is affected by a transaction is excluded from a decision determining role (Cox and Reynolds, 1974). The economic theory of externality effects, however, does not expand on the notion of external costs and benefits as a result of decision making. From the point of view of distribution, the idea of space is an absolutely vital factor in understanding the impact of externality effects in a city system (Harvey, 1973). For the geographer, considerable interest stems from the phenomenon of relative location. The view of relative space proposes that the spatial process be understood from a philosophical perspective, that space exists because objects exist and relate to each other.

Tobler (1970) expands this concept by noting that in the city, everything is related to everything else, but near things are more related.

Due to the importance placed on relative space in the study of locational conflict, accessibility and proximity become important features of the urban system. A locational conflict arises when a community experiences non-proximity from a preferable land use and adjacency to an undesirable land use, without receiving some form of compensatory benefits. The idea of proximity, in relation to locational conflict, can be expressed as the effects of being close to something people do not make any direct use of (Harvey, 1973). This

further explains the fact that recipients of the externality are usually non-users of the facility which emits the externalities.

A synthesis of the above discussion has resulted in a geographic definition of spatial externalities. Externalities are regarded as the uncompensated effects of a certain activity (the generator of the externality) on a group of individuals (the receivers of the externality) who are not directly involved in that activity (Dear, 1975). Civil society allocates itself in order to maximize its subsistence, however it does not take into consideration that, in the process of this allocation, it is generating externalities which are affecting the utility of others. Generally, it is the non-users perception's of externalities which determine the extent and intensity of opposition towards a particular facility or service (Dear, 1975).

Externalities may be regarded as having a spatial field of effects. The externality field defines the limits of the geographic spillover effect. Externality fields can be positive or negative, or sometimes, in the case of an airport, both - since an airport is a nuisance from the point of view of pollution and noise but it has important benefits for employment and transportation (Harvey, 1973). The externality field is often a function of relative location in terms of a distance-response function; this is indicated by the term 'neighbourhood effects' which is occasionally applied to externalities. For example, undesirable facilities impose the greatest disutilities on immediate neighbours, less disutilities on neighbours at one remove as so forth, (Cox, 1973). The extent and configuration of the externality field is influenced by the size and type of externality source and the

nature of the surrounding community.

2.3 Cycle of Conflict

The relationship between locational conflict and conflict resolution is an ongoing, cyclical process. This cycle is attributable to the form of the facility, the content of the host community and the political response of the decision makers. In what follows, the circular process of conflict resolution will be examined.

2.3.1 Facility of Form

The impact of a particular facility appears to be determined by three specific dimensions: scale, type and degree of noxiousness. (Dear, 1975). The scale of the facility shows that the larger and more complex the external effects, the greater the probability of community opposition. Secondly, the type classification refers to the operating characteristics of the facility. This dimension is divided into two subgroups: sites and networks. There exist two sorts of site facilities; a service site involves clients travelling to a facility (library), whereas a dispatch facility involves services and goods taken to the client (fire station). Networks involve route locations (such as expressways, hydro-lines) as line segments in space. Thirdly, the degree of noxiousness is examined. This includes facilities which are necessary, however they are not accepted by the community in adjacency to any potential site. Conflict develops as a result of the distribution of these noxious facilities because they saturate some neighbourhoods and are totally absent in others (Wolport, 1976).

2.3.3 Context of Community

Alexander (1964) notes that the problem of facility location is a planning exercise in urban design of how to achieve a 'goodness of fit' between form and context. Presently, individuals, which perceive some form of residential stress due to a planning decision, may act collectively through some form of political intervention in order to influence planning and policy making. A community's response to a particular conflict situation is determined by the context of the impacted community. This includes variables such as demographic energy, motivation of the community, interest group structure and available strategies. It is these variables which determine the bargaining power of the community.

Smith (1973) defines demographic energy as the social factor which leads to participation in conflict situations. This includes characteristics such as socio-economic status, life cycle, presence of children, political skill, community homogeneity and general administrative ability (Smith, 1973). Many studies have examined the participation of community groups in conflict situations from an ethnological perspective.

Orbell and Uno (1972) state that income and education play a large role in neighbourhood problem solving. They note that people with a high income can escape the problems of the city by relocating, whereas a move by people with a lower income is less likely to create a change in living conditions. They do however remark that the 'relatively powerless groups' can get much of what they want through protest; the skilful use of protest can mobilize other groups which have political

resources to help a group that does not (Orbell, Uno, 1972).

Cox (1983) shows that in the presence of neighbourhood problems, home owners are more likely to be activists, than renters, whereas renters, are more likely to express an intention to move. Cox (1982) states that if homeowners are more likely to be neighbourhood activists, there is no view that this is a result of viewing the home as an investment. Cox hypothesized that activism is mainly a product of concern for transition cost. Selling the house, and buying one elsewhere presents a considerable cost barrier to adopting the typical renter strategy of relocation (Cox, 1982).

Notwithstanding, a study by Leg and Mercer (1980) shows contradictory results. In the analysis of various community groups in Vancouver, they observed that activism appears more likely to erupt in areas where homeownership rates are lower, the apartment proportion is higher and the length of occupancy is lower. This paradox may be explained by the fact that the citizens have not been in the area for a long time and by renting apartments, they are allocating a larger portion of their disposable income to housing, relative to long term homeowners (Ley, Mercer 1980). Harvey (1978) notes that citizens place a large proportion of their savings into their residential property and hence they are concerned with preserving, and if possible enhancing the value of those savings. This poses the question of the relative importance of use value and exchange value of homeownership in the presence of conflict.

In sum, the propensity to participate in conflict situations is not reflected in any simple correlation with demographic energy, however

there is the tendency for small, organized, middle income communities in the presence of children to get involved (Olson, 1971, Cox, McCarthy, 1980).

It has been stated that the potential for community response to conflict situations varies strongly with the intensity and scope of relative deprivation perceived among members of the community (Runciman, 1966). Relative deprivation is defined as an individual's perception of discrepancy between his value expectations and his value capabilities (Gurr, 1970). The larger the gap between value expectations (what one believes one is entitled to) and value capabilities (what one is actually entitled to), the larger the motivation for participation in conflict situations. The perceptions of individuals, therefore, play an important role in the analysis of locational conflict.

There are three stages in the transformation of individual perception of facility impacts into community action (Gurr, 1970). Firstly, the process of development of discontent occurs when an impacted community realizes that there exists a reference group which is better off than they are. Secondly, the procedure of politicization of discontent is generally observed in conflict situations. In this process individuals direct their demands at political targets. The political system is the agent most likely to be held responsible because of its expectations that the State has ultimate responsibility for the general welfare of its citizens. Lastly, the actualization of action stage occurs when courses of action are taken in response to the conflict. In conclusion, the phenomenon of relative deprivation may be used to explain individual perceptions of facilities which may inherently

lead to the formation of community pressure groups.

The genesis of community group formation is the existence of a quasi-group, due to common latent interests. Dahrendorf (1959) defines latent interests as a set of concerns which people have in common. Quasi-group membership may be determined geographically by the extent of the externality field. In conflict situations, this group will seek to do something about the source of the conflict, either through traditional forms of political protest such as contacting politicians, signing petitions and the like, or by forming an interest group (O'Riordan, 1976).

The conversion of latent interests to manifest interests is the main factor in establishing a pressure group. Dahrendorf (1959) defines manifest interest as the latent interest surfacing as a specific goal at hand. Interest groups are organizations whose members act together to influence public policy, in order to promote their common interest (Pross, 1975). In this paper, the terms 'pressure group' and 'interest group' will be used interchangeably, because these groups apply pressure to pursue policies which are in their best interest.

A study by McNaught (1977) analyzed participation in community groups from a socio-psychological and structural-political view. Using Dahrendorf's model of latent and manifest interests, a model of interest group formation was developed. Using three established community groups as case studies, the application of the model indicated that the impetus for participation in a community group is a two stage process, depending on the existence of two separate sets of conditions: the impact of the issues, which is directly related to the citizen's distance from the

source of conflict; and the social organization of the interest group (McNaught, 1977).

Pressure groups may be divided into two broad categories (O'Riordan, 1976). Firstly, there is the expressive or goal achieving group. This organization evolves due to issue-oriented crises. The members of this group are labelled private actors. Their interests are of a hierarchical form. Their main interest is to remove the source of conflict which they believe is causing a deteriorating state welfare in their local community. They are also involved in similar wider issues, but to a much smaller degree. Most 'Save the ...' or 'Stop the ...' organizations are of this type (O'Riordan, 1976).

The other type of pressure group is the instrumental or the institutionalized group. This group focuses its attention on improving the process of decision making and the quality of the environment as a whole. The members of these groups are described as ideological actors which participate due to their moral motives. These groups see the solution to the single issue problem as a much needed institutionalized reform (O'Riordan, 1976). A good example of such a group is Pollution Probe, which recently made a request to the Ministry of the Environment, to stop the dumping of hazardous wastes into the ground in all of Ontario. (Globe and Mail, 1984). In times of neighbourhood conflict, there are two main types of community responses. Individuals can either manipulate the surrounding environment by some sort of collective action aimed at increasing their utility, or alternatively, households can alter their position through residential relocation and thus 'vote with their feet' (Cox and Reynolds, 1977).

A study by Long (1975) analyzed individual and community strategies in conflict situations. Using the work of Hirschman, *inter alia*, a dynamic model was developed which examined the options open to citizens faced with residential stress due to undesirable developments in their community. Long identified four key choice options: 'exit', 'voice', 'resignation' and 'outlaw activity'. The model was tested in an empirical example of community conflict in Victoria Park, Hamilton. The analysis revealed that the fundamental strategies are subject to a range of political constraints. Long concludes that participants in conflict situations work with, a cycle of counter strategies.

Hirschman (1970) states that one of the most common community strategies is that of voicing claims over a conflict situation. In this case the individual tries to change the deteriorating quality of the environment by articulating his interests, rather than trying to escape from the problems (Dear, Long, 1976). The voice strategy involves mechanisms such as organizing petitions, lobbying politicians and informing the media. The voice strategy is a long and tedious process. Even after the voice strategy has been effective, the residents must still wait for the decision to be implemented before they benefit (Long, 1975). Sometimes the tactic of voice extends to illegal activities such as personal and physical violence (eg. property damage). These motions are unjust and are commonly used by relatively powerless groups in order to increase their bargaining ability (Dear, Long, 1975).

Alternatively, some communities are able to use channels of formal participation as a worthy strategy. Arnstein (1969) has developed a typology in the form of a ladder of citizen participation ranging from

manipulation - a token seat on a rubberstamp Advisory committee with no real influence - to therapy, informing, consultation, placation, partnership, delegated power and ending with citizen control. Many of these techniques have been used by planners to involve the public in the decision making arena to achieve their administrative objectives. These political tactics may lead to the community strategy of resignation, when the host community anticipates that their involvement in the decision-making process makes no difference, hence the citizens stay in the conflict area and put up with the negative externalities (Long, 1976).

The alternative to the different forms of political activism is the strategy of exit. This refers to the act of relocating and removing one self from the conflict. This is an individual rather than a community tactic. The officials and politicians who are in charge of policy making are influenced to a greater extent by the various community group tactics rather than the few who relocate due to neighbourhood problems. Large numbers must employ this strategy in order to warrant an influence on the policy makers.

In addition to employing conflict resolution tactics, there are many other organizational schemes which must be applied to increase the interest groups' bargaining power.

Pressure groups must be sure of their facts and claims since they could end up as evidence in the legal process of conflict resolution. Conflicts over accuracy and proper interpretation of information about environmental problems pervade nearly every conflict situation (Morrison, 1973). This means that a successful interest

group must be associated with professionally competent people to back up their statements.

Community groups must work with the media to activate public interest and to create political communication. Mass media are often cited as having caused the public awareness of environmental conflict (Winham, 1972). A study by Murch (1971) revealed that media dominated as sources of information about environmental pollution. O'Riordan (1976) states that the media tends to be sympathetic to 'political underdogs' and 'the people versus big bureaucracy' battles.

In addition to using mass media, pressure groups must have a strong physical presence (Chant, 1970). They must develop a public awareness program by addressing groups of citizens and classes of students. They must also make their presence felt at various conventions and conferences. This also creates an interaction between other community organizations in similar conflict situations. Having a recognizable logo, a listed phone number, and a regular newsletter are all necessary methods of stimulating public awareness. Through all those organizational and political tactics, the interest group is striving to gain respectable bargaining power.

2.3.3. Response of Decision Makers

Having examined the context of the host community and the available strategies residents may use in conflict situations, it is of importance to examine the political response to these tactics. A study by Peace (1976) examined community attitudes toward the natural environment and their role in engendering conflict over such issues.

Peace developed a conceptual model of environmental conflict which included the elements of: (i) community evaluations of environmentally disruptive actions, (ii) individual and group strategies adopted in light of these evaluations, (iii) reactions of official agencies to community involvement, (iv) resultant outcomes and (v) the effect of these outcomes on subsequent issues. (Peace, 1976). The proposal to build an expressway through the Red Hill Creek Valley was used to assess the validity of the model. The analysis showed that the role of community participants and the strategies used are limited by the constantly changing status of the conflict. This creates a circuit of attitudinal and conflict perspectives in the process of conflict resolution.

Olives (1976) notes, that in project planning, it is in the interest of the decision makers to reduce the level of overt conflict in the easiest possible way, in order to maintain a status quo. As an aftermath, in developing new facilities, the motivating force is the desire to overcome or moderate public opposition rather than to find the safest and best solution possible (Jackson et al, 1982). Two main branches of political response have been observed. The decision makers can adopt a method of participation, or on the other hand, a strategy of ambiguity.

One method of integrating the members of the opposition into the calculus of the decision making arena is through a method of co-optation (Ley, 1973). In this process, the leaders of the opposition groups are given positions on committees by the decision making elite. This degree of tokenism allows the citizens to hear, and be heard, but

it does not insure that their views will be accepted by the decision makers (Arnstein, 1969). Even if the citizens advice is rejected, participants feel they have at least had 'their day in court' and are more likely to accept policy decisions (Ingram, Ullery, 1977). What the powerholders achieve is their administrative objective of citizen involvement. In the end, the result is that either deliberately or inadvertently, the ideas of the opposition tend to conform to the interests of the decision makers (Ley, 1973).

Seley and Wolpert (1974) identify a strategy termed 'purposeful ambiguity', which is employed in times of community opposition. This strategy is divided into two groups. The first can be described as purposeful misinformation, whereby policymakers withhold information on critical issues until it is too late for community groups to act effectively (Wolpert, et al, 1972). This scheme is similar to what Bachrach and Baratz (1970) identify as the strategy of 'non-decision', where the politicians aims are to prevent controversial issues from entering the decision making arena.

The second strategy of ambiguity is that of promising concessions which are later modified or ignored. In order to placiate the community opposition, the decision makers offer benefits as a trade off for the negative externalities. Swaigen (1981) notes that compensation for victims of environmental pollution has predominantly been 'after the fact'. Presently, there is an increasing tendency to use prior compensation to offset the social and economic impacts caused by the siting of noxious facilities (Pushchak, Burton, 1983). The introduction

of a scheme of concessions is prima facie beneficial to the impacted community, however the major problem of identifying the spatial extent of the negative externalities makes the original intent behind this tactic socially unjust (Hayes, Haight, 1983). The political motive behind this concept is to keep the anticipated community protest mild and undirected.

2.4 Summary

This chapter has examined three salient elements of conflict situations. Firstly, a discussion on the topic of location conflict was addressed from both a sociological and spatial perspective. Secondly, due to the juxtaposition of space and conflict, the phenomenon of spatial externalities was examined. Lastly, a discussion on the theme of the cycle of conflict, which results from the form of the facility (source of conflict), the context of the host community and the political response of the decision makers was undertaken. The basis for conflict situations is the individual's perception of a facility's impact. Depending on the characteristics of the conflict, the impacted community may employ certain available strategies to initiate change. The response of the decision makers determines the type of change which will result. This change, or lack of, results in new impacts which inherently brings about a new set of strategies employed by the community to increase their well being. Therefore, the phenomenon of conflict is an ongoing, cyclical process.

CHAPTER THREE

A MODEL OF COMMUNITY RESPONSE TO LOCATIONAL CONFLICT

The antecedent chapter introduced some of the important literature pertaining to locational conflict, spatial externalities and cycle of conflict. The purpose of this chapter is to synthesize the above topics into a conceptual model. The model of "Community Response to Locational Conflict" is a simplification of conflict analysis as it occurs in the real world (Figure 1). However this framework may be used as a 'stepping stone' to analyse the events of an empirical case study. This chapter consists of two sections. It begins with a discussion of the elements in the model. It ends with a statement of research methods and sources.

3.1 The Model

From the discussion in the previous chapter, it is evident that the development of a general theory of conflict seems improbable. However, it is also apparent that there exists some common structure in conflict situations. Given these facts, a model is formulated to show the stages of community response to locational conflict. From the elements of the model, a hypothesis is generated. The hypothesis to be tested is that there exists a cycle of conflict between community response to locational conflict and conflict resolution. Specifically, there is a cyclical repetition of stages through time as a conflict evolves. These stages may be labelled as: conflict catalyst, community involvement, political response and conflict resolution.

The discussion in this section is subdivided into three sections: (i) community perceptions of a facility, (ii) the formation of a community interest group and (iii) a cycle of conflict.

Firstly the impact of a facility may be seen as a wanted or unwanted by-product which affects the welfare of the surrounding community. In the model, a distinction is made between actual and potential facility impacts. Actual impacts bear upon perceptions of existing facilities, whereas potential impacts refer to perceptions of proposals for changes in the built environment. These perceptions can be classified into three broad categories: benefit (positive impact), unwanted cost (negative impact) and neutral impact. All three forms may lead to relative deprivation. In terms of locational conflict, Runciman's (1966) concept of relative deprivation may be interpreted as the perception of the impacted community that they are not as well off as some reference group. In this study, attention is placed on the unwanted negative impacts, since these are the common evaluations which lead to community involvement in conflict scenarios.

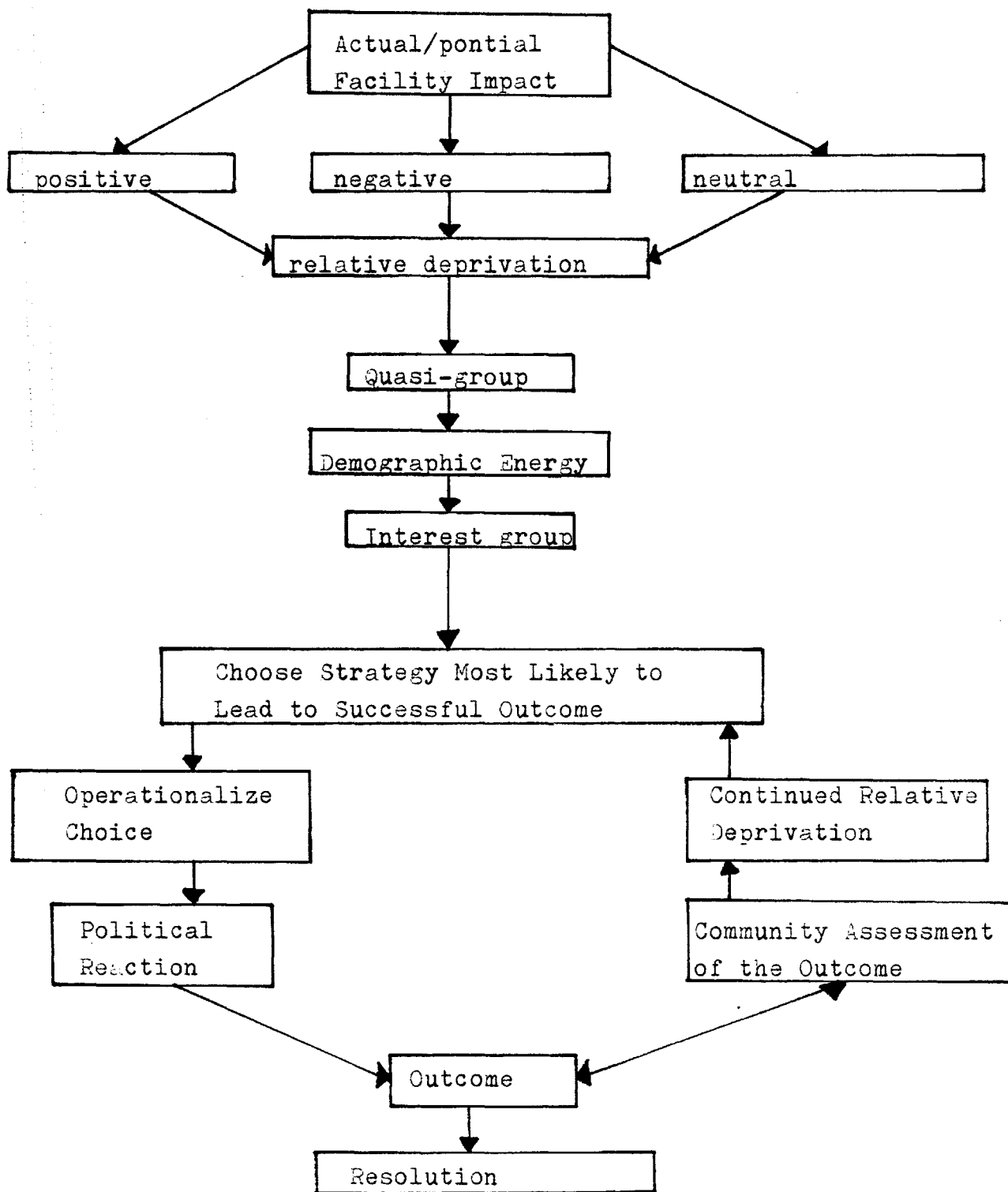
Secondly, due to the nature of the impacts, certain individuals will come together on common grounds. The evolution of a community group begins with the formation of a quasi group, due to common latent interests. This group will seek to do something about the conflict. Their actions range from signing petitions to forming a community pressure group. An important preliminary stage in the formation of an interest group is Smith's (1973) concept of demographic energy which is defined as the social factors which lead to participation in conflict situations. The focus of this study, however, is not to examine the

relationship between demographic energy and community activism. The concept is useful in describing the organizational characteristics of an interest group.

During conflict situations, the interest group mediates the concerns of the quasi-group. The interest group is formed due to the conversion of latent interests to set of manifest interests (Dahrendorf, 1959) and it represents the direction of such interests as a social force (Oliver, 1976). Community pressure groups play a large role in the cycle of conflict resolution.

Lastly, there exists a cyclical relationship between community response to conflict and conflict resolution. The impacted community has several alternative strategies which they could use to initiate change; exit, voice, resignation, and illegal activity are a few of the broad choices available. Once the community employs a set of strategies, it is expected that there will be reactions on the part of the decision makers responsible for the reduction of the conflict. The political reaction determines the type of outcome which may be achieved. Once an outcome results, there exists a stage whereby the community evaluates the outcome. The community's assessment of the outcome depends on the magnitude to which the community's goals were accomplished. This evaluation leads to two consequences. Firstly, if the community's goals were not realized, then there exists a continued state of relative deprivation. This leads to the continuation of the cycle of conflict. Even if this one outcome is acceptable, there may be other goals which the community must strive for in order to fully resolve the conflict. This also leads to a cycle of conflict. Alternatively, if

A Model of Community Response to Locational Conflict



the goals were not achieved, community members may employ the exit option if the conflict situation is no longer acceptable. Secondly, if the community's goals are accomplished, then this leads to conflict resolution. This does not necessarily mean that the community's role in the conflict situation has terminated. It is possible that the community group adopts a 'watch dog' role to make sure that the process of conflict resolution is correctly enacted.

From the general discussion of the model and proposed hypothesis, it would now be beneficial to examine the methods of analysis.

3.2. Research Method and Sources

As an empirical example of locational conflict, the Upper Ottawa Street Landfill will be used to test the validity of the model. The illegal dumping of chemical wastes in the 1960's and the building of homes adjacent to the landfill in the 1970's provides an excellent example of locational conflict which has generated both community and political reaction. Presently, this facility is at the conflict resolution stage. This is important, since the cyclical stages of conflict catalyst, community involvement and political response have already occurred.

The methods of analysis involved using three different data sources. Firstly, conferences were attended to provide a broad background on the topic of waste management. Three such conferences were attended. The first was a conference put on by the Ministry of the Environment in which the 'Blueprint for Waste Management in Ontario' was introduced. The second was a conference on major environmental issues sponsored by Environment Canada. A seminar on the question of

the disposal of chemical wastes was of particular interest. The third consultation was sponsored by the Ontario Waste Management Corporation and the topic was the impact of non-government organizations on the decision making process. These conferences provided a valuable background to the topic of conflict resulting from landfill sites.

The second type of data source involved placing a focus on the conflict around the Upper Ottawa Street Landfill. Information was gathered from both the Hamilton and Toronto newspapers. Once the newspaper clippings were placed in chronological order, it became easier to analyze the conflict scenario. In addition, reports documented by the Upper Ottawa Street Landfill Study Committee (UOSLSC) and newsletters published by the Upper Ottawa Street Residents Association (UOSRA) were used. The third major source of data involved interviewing prominent members of the community pressure group.

In retrospect, the conferences attended provided a strong background on the topic of waste management and the newspaper clippings, governmental reports, and interviews provided detailed information on the local landfill conflict. Using the collected data, the validity of the model will be discussed in chapter four.

CHAPTER FOUR

THE UPPER OTTAWA STREET LANDFILL: A CASE STUDY OF LOCATIONAL CONFLICT

Having suggested the basis for a model in the previous chapter, the purpose of this chapter is to discuss the 'real world' applicability of the model using a local example of locational conflict. Specifically, the cycle of conflict is discussed with reference to the conflict around the Upper Ottawa Street Landfill. The chronology of major events sets the stage for the examination of the model (Figure 2).

4.1 A Dump is Born

The Upper Ottawa Street Landfill began as a rural limestone quarry. In the early 1950's this quarry was empty and was located in the 'middle of nowhere'. This area was seen as a suitable location for the disposal of municipal waste.

A landfill can be labelled by three specific dimensions. Firstly, a landfill is a service type of facility since it requires consumers to travel to the facility for utilization purposes. Secondly, it is a noxious yet necessary facility. The degree of noxiousness depends mostly on the management of operations at the site. Lastly, the dimension of size is used to classify facilities. The Upper Ottawa Street Landfill is a 90 foot high mound, covering 40 acres. These three dimensions are useful in discussing the perceptions of the surrounding community towards the facility.

Map 1 shows the location of the landfill and the areas around it which are referred to in this study. Upper Ottawa Street and the

Quinndale neighbourhood, which contains two elementary schools, and houses within approximately 500 yards of the site are on the west side. The landfill is bordered directly on the north side by the Red Hill Creek and the houses along Limeridge Road are about 500 yards to the north of the Creek. The railway tracks form the eastern boundary of the site. Albion Falls is within one mile of the site to the east. Stone Church Road is along the southern end of the landfill and a light industrial development is located directly across the street (UOSLSC, 1983)

While the Upper Ottawa Street Landfill was the site for disposal of many types of solid and liquid wastes, it was the industrial wastes which were the cause for concern. Prior to 1970, a small volume of liquid wastes were being deposited at the site. Existing records show that about 225,000 gallons of liquid wastes were disposed of in 1970 (UOSLSC, 1983). The amount of liquid waste disposed of at the site increased during the 1970's, reaching an estimated 8 to 10 million gallons in 1978 (UOSLSC, 1983). There were two main reasons for this increase. Firstly, other landfills in the vicinity had reached capacity and began to close; waste haulers were obliged to find alternative sites. Secondly, the increase in wastes deposited at the landfill is attributed to the opening of a privately owned 'solidification/chemical fixation' operation at the site in late 1976. This process transformed inorganic liquid wastes into solid form which was later landfilled. The solidification business also attracted wastes from outside the Region. (UOSLSC, 1983).

In 1973, the municipal planning office agreed to prepare land across from the landfill for development. In 1974, the construction of

single family homes and condominiums for lower-middle class families began. Potential buyers were told that the dump would soon be turned into a golf course or park. These actions have introduced two prime examples of political tactics uses in planning. Firstly, the construction of homes suited for the lower middle class can be seen as a scheme to create a 'soft area', in terms of anticipated community activism. High class people with political clout would not move into these homes. Secondly, the idea of creating a 'future' park or golf course is a form of promising concessions in order to placiate the community opposition. In this case, the decision makers promised future benefits as a trade off for the present negative externalities.

4.2 External Developments

Before delving deeper into the case study, it would be useful to view the local conflict from a historical perspective. It is of interest to identify what external agents added substance to the conflict. During the 'catalytic' years of the conflict at the Upper Ottawa Street Landfill, there were other similar events surfacing as public problems.

As was already stated, it was the liquid chemical wastes that were the greatest cause for concern at the local landfill. Several factors have been identified which have influenced public opinion regarding the effects of chemicals. In the last 40 years, the quantity of chemicals produced in North America has increased 100-fold. Analytical chemical technology has enabled chemists to detect minute quantities of substances in the air, water and land. Forty years ago, only one part per thousand could be calculated; presently it is possible

to calculate to one part per million. It became apparent that health problems were linked to the effects of chemicals. Urea-formaldehyde insulation and asbestos mining are but a few of the examples. Disasters such as Love Canal and Three Mile Island became media events which terrified the public (Courier, 1984).

To focus closer on waste disposal, it was the Love Canal scenario which identified that past practices of waste disposal were presently arising as public problems. The Love Canal tragedy at Niagara Falls, New York did not appear until twenty-five years after 21,800 tons of toxic wastes were dumped during the late 1940's and early 1950's, forcing the evacuation of 700 families (Jackson et al, 1982). Once this event reached the front page of the New York Times and once President Carter declared the Love Canal community a disaster area, instant public awareness was created. It must be remembered that Love Canal is approximately 100 miles from Hamilton -- so close to home for the Upper Ottawa Street residents.

Due to the awareness of the various external agents, the residents realized that, "it doesn't just happen in the United States, it can happen here -- right in our backyard" -- these are the words of a local resident who formerly lived across from the Upper Ottawa Street Landfill (Jackson et al, 1982).

4.3 The Catalytic Events

In order for conflict to occur, there must exist a perceived loss of satisfaction between present environmental utilities and anticipated future utilities. The following discussion examines the various catalytic

events that led the community to believe that they were in a state of relative deprivation.

In February 1978, the Ministry of the Environment official in the Hamilton Region praised the results of the solidification process conducted at the landfill (Spectator, 1978b). However, as people started to occupy their new homes, concerns were raised about the heavy night traffic in and out of the site. Many residents contacted their member of parliament and voiced their suspicions about the operations at the landfill. As a result a three month audit of waybills at the Interflow transfer station was implemented. Interflow Systems is a subsidiary of Laidlaw Transportation Ltd. The investigation revealed that one third or 540,000 gallons of the wastes received by Interflow during the three month period was not accounted for (Spectator, 1978a). In addition the audit showed that less than half the wastes taken to the landfill were from within the region.

In late 1979, the local Environment Ministry officials admitted that they had known that wastes were being brought in from outside the region (Spectator, 1979). At the same time Environment Minister Harry Parrot ordered a ban on dumping shipments of liquid waste from outside the region. The political tactic of 'purposeful misinformation' whereby government officials withhold information on critical issues was used to keep the local opposition neutral. Due to the conclusions of the inquiry and the political confessions, it was politically necessary for Parrot to order a ban on extra-region dumping.

Locally Colin West, a supervisor at the Hamilton Wentworth regional government laboratories was complaining that the system of

sending samples to the laboratories after dumping is not an effective way of preventing landfill contamination. On his own initiative, West analyzed dumped liquid wastes and found everything from DDT to chloridated biphenals suggesting cancer causing PCB's (Toronto Sun, 1979). As a consequence, the Hamilton lab made recommendations to the city hall that the solidification process used at the landfill be halted because it leaked poisons. In addition, Hamilton Alderman Harry Merling, chairman of the pollution control committee, stated that he has pictures of illegal dumping at the site. Although the provincial government ignored these allegations, the Hamilton-Wentworth regional government admitted that sludges from a liquid waste solidification process at the site were dumped on the municipal garbage to speed up the burning (Jackson et al, 1982).

It was obvious from all the statements and confessions that a full investigation should be implemented to see what exactly was dumped in the landfill. In terms of facility impact, this landfill was perceived as a definite negative externality for surrounding community.

4.4 Community Involvement

The potential for community response to conflict situations varies strongly with the perceived relative deprivation. The local community was told that the landfill was sanitary and that it was to be turned into a park or golf course; however, the residents were deprived of this planning decision due to the illegal operations at the landfill.

It was the work of Hedy Gervais that initiated a strong community awareness that the landfill required a thorough investigation. In

December 1979, Gervais, using a questionnaire employed by residents in the Love Canal area, interviewed 127 residents of her condominium, which is directly opposite the dump on East Mountain. As a control group, she also surveyed 134 residents in another development at the West end of Hamilton Mountain. Those living near the landfill disclosed that in the past 3 years (since the development was built), they reported ear-aches to their doctors 47 times, while the control group reported the same complaint only three times; in addition, twenty people in the landfill area reported abnormal bleeding as compared to four in the control group (Burcher, 1980).

This informal health survey was conducted with the assistance of two doctors from McMaster University. They stated that the findings do not indicate cause and effect, but could be taken as supporting evidence for a call to thoroughly monitor the dump (Globe and Mail, 21 December 1979). However, Ian Cunningham, the Hamilton Wentworth medical officer, noted that the survey lacked a correct structure and hence, the evidence produced is not sufficient to warrant a detailed study. Dr. Cunningham stated that, "living near the dump isn't enough, there has to be contact ... just looking at it won't make you sick" (Globe and Mail, 1979).

The study done by Gervais was a useful scheme to spark public awareness of the conflict situation. The survey results received extensive media coverage. Although the survey structure was not scientific, the results did in fact suggest that further, scientific testing should be carried out. Gervais was highly concerned with the results that showed an increase in kidney infections, bleeding and ear

infections; similar symptoms were reported in the Love Canal survey.

Due to the perceived relative deprivation, the formation of a quasi group resulted. A few members of this quasi group took the responsibility of forming an interest group. The pressure group which was formed was an expressive or goal achieving group.

4.5 The Cycle of Conflict Begins

Once formed, the interest group used many strategies to reduce the conflict. The political reaction and the community's assessment of the outcome resulted in a lengthy cycle of conflict. The following is a discussion on the cycle of conflict surrounding the landfill.

The initial goal of this community group was to close the dump. A set of strategies was chosen to achieve this goal. Through the tactic of door to door canvassing, the quasi group was informed about the planned rally. This method of informing the community resulted in approximately 450 residents joining together at the gates of the landfill chanting 'dump the dump'. A demonstrator recalls the event, "we told them (the police) that this would be a peaceful demonstration, but if the dump isn't closed, then the police would have to make arrests ... we were prepared to stand there and be forcefully moved." (Interview with R. Bridgeland, 16 January 1984).

The response of the decision makers to the community's strategies resulted in the provincial government announcing that the landfill is due to close October 1, 1980. The community's goal of closing the landfill was accomplished. The cycle of conflict continued since the interest group held other goals to fully resolve the conflict.

4.6 Internal Structure of Community Group

Before examining the next chronological event, it would be beneficial to discuss the internal structure of the interest group. The members of the Upper Ottawa Street Residents Association (UOSRA) are all originally from the neighbourhoods located in the vicinity of the landfill. In other words, the interest group members are all from the quasi group.

The members of the pressure group joined for different reasons. Some joined because they felt that the dump was a health hazard for themselves and their children. Other citizens joined the interest group because they felt it was a matter of principle. The UOSRA is made up half a dozen people. These people are responsible for making demands and doing the proper research to back up their statements. The UOSRA has regular newsletters informing the community of upcoming events. The members are involved in giving speeches about the conflict at the landfill and the history of their organization, to both students and other interested organizations. These are all methods of initiating public participation in the process of conflict resolution.

4.7 The Conflict Escalates

Although the interest group achieved their initial demand to close the landfill, the cycle of conflict continued as the community pressed for a health study. There were two specific events which led to the conflict escalating.

Firstly, the conflict heightened when George Buitenwerf, who was a foreman with Interflow Systems from 1974 to 1977, stated that the firm sent more than one hundred 45 gallon drums of PCB's to the dump over a six month period (Spectator, 1980c). The ex-foreman revealed that getting the waste

into the dump didn't require any trickery: "Interflow mixed toxic wastes with a sludge, that sank to the bottom, and that was the first thing to come out if the valves were opened" (Toronto Star, 1980).

Secondly, consultants Gartner Lee Associates, which were hired by the Region, released a report stating that PCB's have been found in the sediment of Red Hill Creek near the landfill. The UOSRA was invited to the official presentation of this report. The questions posed by the pressure group brought consultant Pat Lee into concluding that the dump should not be turned into a park (Interview with R. Bridgeland, 16 January, 1984). Mr. Lee stressed the need for continual monitoring of the landfill because if Mr. Buitenwerf's statements are correct, it will take a long time for the drums to corrode and release the chemicals. At this meeting, it was obvious that the presence of the UOSRA had some degree of influence.

4.8 Conflict Resolution

The above two factors created strong pieces of evidence that past activities at the dump are leading to environmental decay. The interest group was constantly voicing their demands to the local politicians. This resulted in Wentworth MPP Colin Isaacs demanding an immediate health study. The persistence of the community group paid off when in October 1980, Health Minister Dennis Trimbrell announced a full scale epidemiological study. Epidemiology is the branch of medicine that treats epidemic diseases. Trimbrell stated that, "only a full scale study of this type will satisfy the public" (Spectator, 1980b). Furthermore, Environment Minister Harry Parrot called for a provincial investigation into the claims of illegal dumping. This inquiry led to a \$13,000 fine to Interflow Systems for falsifying the origin of hazardous wastes (Globe and Mail, 1980). It was

reported that Interflow dumped untreated wastes from places as far as the Eastman Kodak factory in Rochester, New York (Toronto Star, 1980). The police investigation also revealed that thirty-five waste haulers to hold keys to waste sites.

Due to the conditions at the landfill, the prototype health study encountered many stumbling blocks. The major problem was the lack of information available about the materials deposited at the site. Another drawback was that the dump was closed before the province ordered a health study. This means that the levels of exposure at the time of testing were lower relative to when the dump was in operation. The context of the community also posed a problem. The majority of the residents moved into the area after 1976, which is too short of a time or health effects to be detected. (Hamilton Mountain News, 1980).

The study committee is made up of many prominent physicians and scientists. In order to be represented on the committee, the interest group demanded a residents' consultant. The government hired Dr. Stephen Safe, a toxicologist, to act as liaison between the community group and the study committee. Dr. Safe's position is analogous to that of an advocate planner.

Beginning in the summer of 1981, the study committee performed analytical studies on air, leachate, surface and ground water. In mid March 1982, Sciex, a scientific research company, released a report stating that 273 unusual chemicals, including five cancer-causing chemicals, have been detected in the air above the Upper Ottawa Street Landfill (Spectator, 1982). The interest group saw this report as concrete evidence that the dump should be completely fenced off.

The group's main concern was the north-east section of the landfill, where contaminated liquid formed a pool of black sludge which was subsequently named 'the black hole'. The dump was accessible on three sides and it acted 'like a magnet for children' (Interview with D. Stowe, 16 January 1984). The pressure group contacted the Ministry of the Environment and requested the landfill be completely fenced in. The response was that the Environmental Protection Act states that it is not necessary to have a fence where there exist natural topographic barriers. The Ministry stated that the rail line and Red Hill Creek are adequate obstructions. The pressure group did not feel that this political response was positive.

The next strategy was to request a meeting with the Regional Engineering Services Committee. The committee agreed to discuss the pressure group's concerns. The UOSRA presented their brief with the aid of pictures of the dangerous areas of the dump (the 'black hole', pipes and glass sticking out of the ground). The result was the committee unanimously approving a \$40,000 barbed wire fence (Hamilton Mountain News, 1982a).

In the fall of 1983, field work began on a health survey of former landfill workers and other persons working near the landfill. This inspection is to be followed by a residents' health study.

4.9 A Synthesis

In retrospect, it is now obvious that the relationship between community response to locational conflict and conflict resolution is an ongoing cyclical process. The chain of events at the Upper Ottawa Street Landfill appear to fit the relationships established in the conceptual model. Specifically, as the conflict at the landfill evolved through time, there emerged a cyclical repetition of stages which led to a cycle of conflict.

The residents' perceptions of the landfill created a state of relative deprivation for the host community. Certain external developments, such as Love Canal, and specific local catalytic events led to community involvement in the conflict situation. This led to the formation of the UOSRA. Their prime objective was to stop the operations at the landfill. An organized demonstration and the persistence of the interest group paid off when the government promised to close the site. This was not the end of the conflict scenario. The conflict escalated when evidence of illegal dumping at the landfill was made public. In addition reports revealed that dangerous substances were found near the landfill. This created yet another cycle of conflict which led to the implementation of a health study.

In general, then, the sequence of events appear to conform to the postulated cyclical repetition of stages of conflict catalyst, community involvement, political response and conflict solution which were posited in the developed model.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

5.1 Summary

The primary purpose of this paper has been to examine the cyclical relationship between community response to locational conflict and conflict resolution. To this end, a conceptual model of community response to

locational conflict was developed and assessed using a local case study.

Chapter two dealt with some elements derived from the relevant literature on locational conflict, spatial externalities, community strategies in conflict issues and political response. This chapter provided background information for the forthcoming conceptual model.

Chapter three outlines a framework of community response to locational conflict. This model led to the formation of an hypothesis which focuses on the relationship between community response to locational conflict and conflict resolution in an ongoing cycle of conflict. Throughout the analysis in chapter four, emphasis was placed on the postulated cycle of conflict.

5.2 Evaluation of the Model

In chapter four the validity of the model was evaluated with references to a local example of locational conflict. The conflict, centred around the Upper Ottawa Street Landfill illustrated the cycle of conflict which results when a community employs certain strategies to reduce the conflict and the decision makers respond to these tactics by formulating certain outcomes. The community's perception of these outcomes has definite repercussions on the conflict situation, for it introduces a new set of community strategies and political responses. The evidence presented in chapter four supports the hypothesis that as a conflict evolves, there exists a cyclical repetition of stages which lead to a cycle of conflict. Since the hypothesis was patterned on the model, the evidence illuminates the importance of the framework which focuses, in part, on the cycle of conflict.

The generality of the developed model exhibits a beneficial tool which can be applied to a wide range of conflict issues, ranging from those which focus on opposition to planning proposals to this which concentrate on existing negative externalities. In addition the model is such that it is applicable to conflict situations ranging from a local to a national level.

Finally, the model was developed on the premise that a community in a conflict situation will mobilize an interest group. The model is clearly focused on community response to locational conflict, as opposed to individual involvement in conflict scenarios. The analysis in chapter four revealed that the presence of community interest groups creates a healthy political system. Interest groups create connections between public officials and private citizens as well as facilitate the implementation of government decisions.

5.3 Suggestions for Future Research

In light of the assessment of the conceptual framework, suggestions to direct future research in the field of conflict analysis are expressed.

In conflict situations, one would expect a strong relationship between community attitudes and propensity to participate in conflict situations. Future research is needed, from a behavioral perspective, to assess the significance of this association. A second prominent issue focuses on the representation of the pressure group. It is of interest to identify to what degree the interest group is representative of the whole community. Finally, future research may be directed toward understanding the tenuous link between community adoption of specific responses to conflict and the subsequent response of decision makers. Even though this investigation broadly examined this cycle of conflict, much work is to be done.

APPENDIX A

Figure 2: Chronology of Major Events

Approximate Date	
1950	- empty limestone quarry - a dump is born
1970's	- liquid waste disposal at landfill
1973	- municipal office plans area around dumpsite for development
1974	- construction of single family homes and condominiums begins
1976	- solidification process at site in operation, liquid waste dumping increases
1979	- Ministry of the Environment implements three month auditory Interflow Systems
December, 1979	- H. Gervais, resident of neighbourhood adjacent to the landfill, does a health survey
1980	- rally at gates of dump, 450 demonstrators show up
1980	- Ministry of Environment sets October 1, 1980 as the date to close the landfill
1980	- Interflow Systems ex-foreman confesses of illegal dumping of PCB's and cyanide
1980	- report released shows that PCB's have been found in creek adjacent to landfill
October, 1980	- Minister of Health orders Health Study
1980	- Minister of Environment orders monitoring of creek and a police investigation into the management of the facility
1982	- study group releases report revealing that five cancer causing chemicals have been detected
1982	- Region orders the landfill to be completely fenced off
May, 1983	- Study Committee Interim Report released - gas flaring system suggested
September, 1983	- Health study field work begins.

MAP 1 THE UPPER OTTAWA STREET LANDFILL AREA

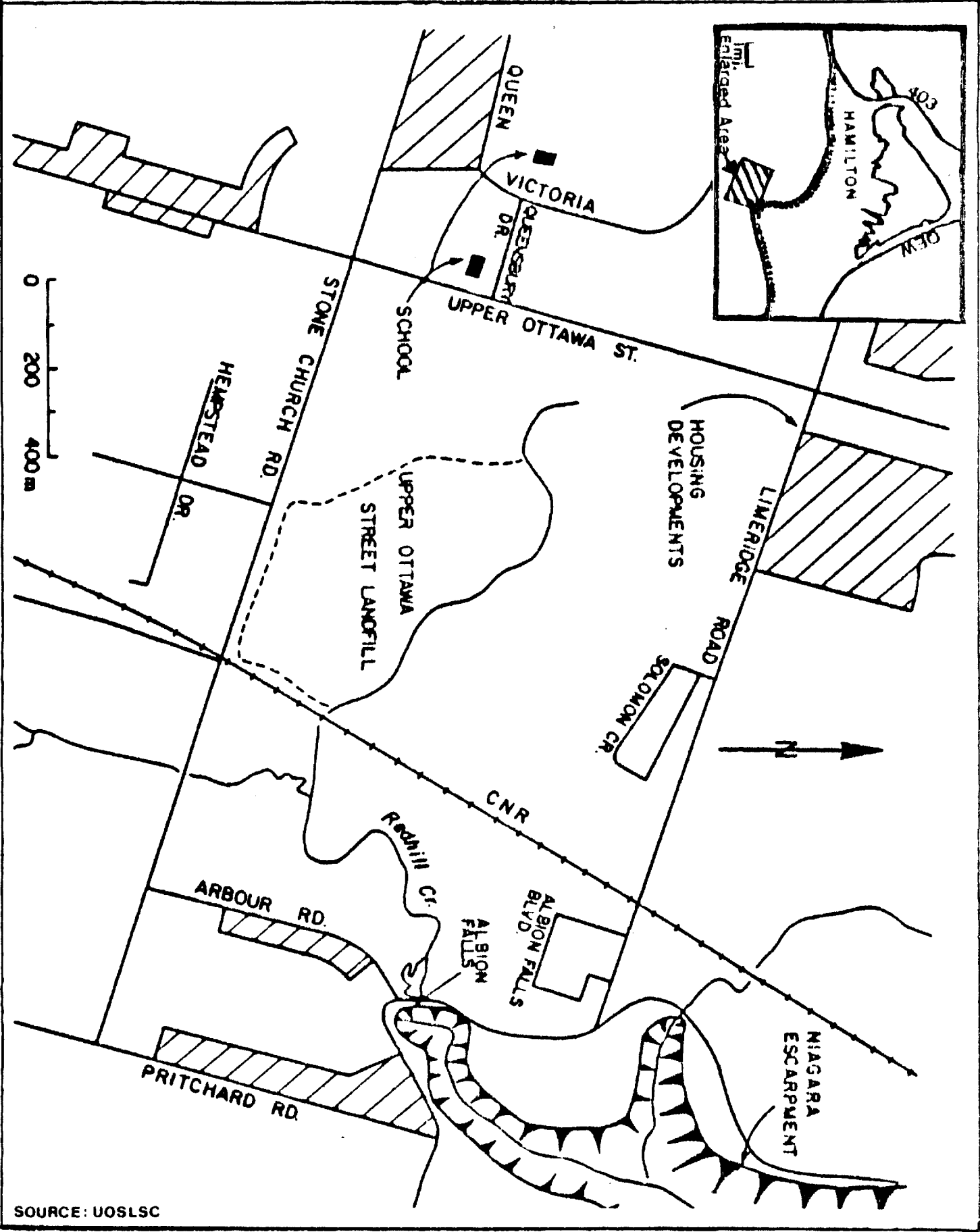


Plate 1:

APPENDIX C



The Upper Ottawa Street Landfill.

Plate 2



The community adjacent to the Upper Ottawa Street Landfill.

Plate 3



The landfill as seen from the community in Plate 2.

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