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SOME RELATIONSHIPS BETWEEN CHANGES IN THE NUMBER
OF INTEREST GROUP ORGANIZATIONS AND CHANGES IN
OTHER POLITICAL SYSTEM ORGANIZATIONS



SCOTT EDWARD BENNETT

A dissertation submitted to the Faculty of Graduate Studies
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Graduate Programme in Political Science
York University
Toronto, Ontario

January 1982

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1982

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ABSTRACT

This dissertation contains an examination of ways in which the number of interest groups may be related to changes in other political system organizations and activities. Relationships between a measure of the number of interest groups, the dependent variable, and certain political party, electoral, governmental agency and civil service variables are considered.

The study begins with a discussion of some existing literature which can be used to support the view that political system leaders and activists are a relatively small part of most populations. A perspective that is consistent with aspects of this literature is used to generate several preliminary hypotheses regarding the ways in which leadership absorption by or changes in the success of political parties and government agencies may influence the creation and survival of interest groups.

The hypotheses are tested in several stages of analysis. Both correlation and multiple regression techniques are employed in examining the data. The dependent variable data and the overall analytic strategy used in analysis are basically cross-sectional in nature. However, because the dependent variable data can be retrospectively related to events occurring during certain periods of time, the cross-sectional analytic strategy does accommodate a temporal referencing or phasing of explanatory variables, and this dimension of the data is utilized in constructing and applying explanatory variables.

In the final chapters of the dissertation, specific results of analysis are presented, and the theoretical and research implications of those results are considered. In general terms, the major results were that electoral and political party phenomena do seem to have fairly strong relationships with the number of interest group organizations, but most government agency and civil service variables are not closely linked with the number of interest group organizations. Furthermore, the signs of relationships between the dependent variable and electoral/political party variables are generally interpretable in terms of the perspective used in generating initial hypotheses, but this is not true of relationships between the dependent variable and civil service/government agency variables.

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Scott Bennett

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Chapter 1

THE FOCUS OF THE WORK

Relationships of Interest Identified

This work contains analysis and discussion of relationships between changes in the number of formally organized interest groups and changes in the number and size of government agencies and political parties. A highly simplified representation of the relationships of interest is provided in the following diagramme:

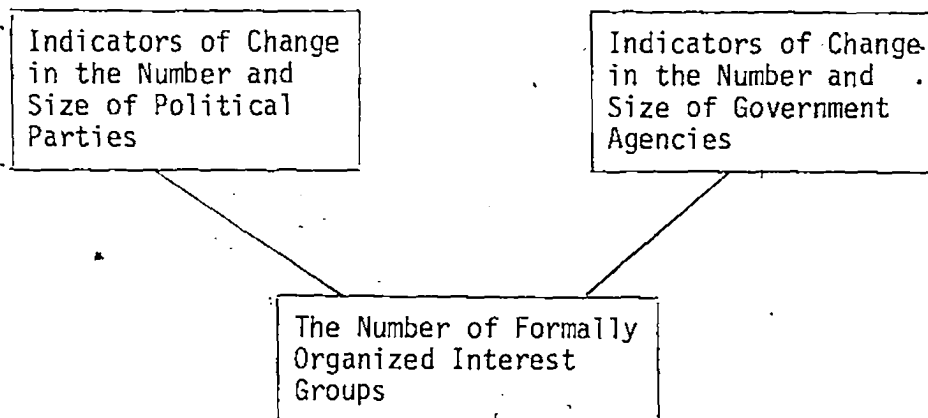


Figure 1.1

Major Relationships of Interest

The lines between the boxes in Figure 1.1 represent relationships which do not have any definitive causal status.

The variable of central interest is "changes in the number of formally organized interest groups". The main purpose of the dissertation is to gain a better understanding of how that variable varies in relation to certain other political system variables. This interest group variable may be viewed as the dependent variable around which analysis is organized. In this work, the concept of "dependent variable" should not be interpreted in terms of the restricted perspectives on dependence and independence which are embodied in true causal analysis and formal experimental analysis. Instead, the dependent variable should be viewed as the focus or target of several kinds of statistical and substantive explanation. In the context of this work, "explanation" consists of analysis which provides some increment in understanding of the way in which a central or dependent phenomenon relates to other phenomena. Such explanation may be based on an improvement in understanding of the causal structure in which a dependent phenomenon is embedded, but it may equally well be based on additional insights which have no necessary relationship to any fixed causal structure.

A Note on Some Definitional Matters

For the purposes of this work, a formally organized interest group is any organization which:

- (1) Has an executive officer
- (2) Is not totally dependent upon government funding
- (3) Has tax-free status under Canadian law.

This definition encompasses more than "lobbying groups", "pressure groups", and "public interest groups". It effectively includes most non-profit organizations with a reasonable degree of formal structure. It excludes unorganized social movements, certain formally organized groups and a few non-profit organizations which are almost direct extensions of government.

One of the major implications of the interest group definition just described is that it denotes both organizations which are involved directly with government and organizations whose members are not engaged in major direct interactions with government. With respect to the specific emphases underlying this work, this sort of inclusiveness is advantageous. This is so because, as will be evident, this study is focused not so much on direct interorganizational transactions as it is focused on the aggregate structure of relations among different types of political system organizations. This aggregate structure results not only from direct transactions among political system organizations but also from the activities of organizations which do not interact directly but which compete for commitments from identical or overlapping groups of people.

As indicated, the major explanatory variables for this study pertain to aggregate characteristics of government agencies and political parties. Certain definitional problems are presented by

¹For a discussion of the meaning of the first two terms and certain other definitions see, Graham Wootton, Interest-Groups (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970), pp. 1-5; For the concept of "public interest organizations" see, Jeffrey M. Berry, Lobbying for the People (Princeton, N.J.: Princeton University Press, 1977), pp. 6-11

these variables. For example, in counting the number of government agencies in existence at a given point in time, one could count all major divisions of government departments, or one could count all major departments. With respect to political parties, one might choose to focus on all parties which had any sort of involvement in the electoral process, or one might confine one's interest to those parties which actually had some representation in relevant legislative bodies.

Prior to conducting the analysis for this work, decisions were made concerning the types of definitional matters just noted. To some extent, these decisions reflect the degree of consistency in various government records over time. Basically, it was decided that:

- (1) Any agency which was not a crown corporation and which reported directly to a cabinet minister would be considered to be relevant. For the most part, this means that government agency units of interest are government departments or ministries.
- (2) Any political party that received votes was designated as being relevant for most of the analysis. However, some explanatory variables would only be meaningful when measured with respect to those parties which had actual legislative representation.

Chapter 2

SOME EARLIER LITERATURE AND ITS IMPLICATIONS

Overview

The major reasons for examining literature related to this work are to:

(1) show that some of the assumptions that guided the development of this work are reasonable in light of the emphases of earlier works.

(2) provide some easily accessible means of interpreting the substantive significance of some of the results of this study.

(3) show how the results of this work fit into the emerging accumulation of knowledge relating to interest groups and other political system organizations.

The type of literature that is most relevant to this study is literature pertaining to interest group creation and/or survival. Studies showing the impact of relations among political system organizations on interest group creation or survival are of particular importance. Although there is a vast amount of literature relating to interest groups, political parties, and bureaucracies, very little of that literature actually has a bearing on interest group creation and survival. Most of it provides commentary on what happens in and among

organizations after they have become fully operative. As James Q. Wilson has written, "theories about how organizations behave abound; theories about how organizations come into being scarcely exist."¹ Much the same assessment can be made with respect to the systematic analysis of organizational survival. Nevertheless, there are some pieces of existing scholarship which were pertinent to the focus of this dissertation. Furthermore, some useful knowledge can be extracted from works which were not primarily concerned with interest group creation or survival. In an attempt to put this analysis in a more general context, the major categories of theory on interest groups and political organization will be examined in order to establish the most important implications of such theory for this analysis.

Two general types of theories have been defined for the purposes of putting this analysis in an intellectual context. The first type to be examined has been termed "classificatory theory". It predominately consists of the work of the conventional pluralists and the work of those who have developed explicit alternatives to aspects of conventional pluralism. These theorists were primarily concerned with describing and classifying general features of existing and/or desirable democratic political systems. Although they certainly describe and classify aspects of behaviour, they do not generally base their work on some highly formalized model of human behaviour. The second type of theory to be discussed is termed "general theories of behaviour and choice". Here, rational choice models and functionalist

¹James Q. Wilson, Political Organizations (New York, N.Y.: Basic Books, Inc., 1973), p. 195

theory are examined. These are obvious examples of general models of behaviour. Other examples exist, but these were deemed to be the general theories of behaviour which had the greatest relevance for the questions of interest in this dissertation. Rational choice and functionalist theories, particularly the latter, contain elements of classification, but they are elements which relate to a general conception of the nature and substance of human social behaviour.

Classificatory Theory: Pluralism and Alternative Interpretations

The Conventional Pluralists

Under this rubric one finds the work of Dahl, Truman, Banfield, Kornhauser and Lindblom and a variety of others.² Although there is certainly considerable internal variation within this grouping of theoretical perspectives most of these theorists do agree on a number of basic principles.

With respect to areas of agreement, most of the conventional pluralists accept the idea that American democracy involves both competition among elites and bargaining among interest groups. Thus, the conventional pluralists do not accept the idea that the American system, and similar systems, are dominated by a single, unified elite.

²For examples of their work see: Edward C. Banfield, Political Influence: A New Theory of Urban Politics (New York, N.Y.: Free Press, 1965); Robert Dahl, Pluralistic Democracy in the United States: Conflict and Consensus (Chicago, Ill.: Rand McNally & Co., 1967); Robert Dahl, Who Governs (New Haven, Conn.: Yale University Press, 1961); Robert Dahl, A Preface to Democratic Theory (Chicago, Ill.: University of Chicago Press, 1956); William Kornhauser, The Politics of Mass Society (Glencoe, Ill.: Free Press, 1959); Charles E. Lindblom, The Intelligence of Democracy (New York, N.Y.: Free Press, 1965); David Truman, The Governmental Process (New York, N.Y.: Alfred A. Knopf, 1951)

8

Modern western democracies are viewed as being responsive to a variety of interests, organizations, and elites. Underlying this focus on competition and bargaining among organizations, is a more or less explicit acceptance of the view that pluralistic democracy is an essentially self-regulating and self-correcting system. The pluralistic political system is seen as being much like a classically competitive market place which can "clear" or adjust itself in an efficient manner without external intervention.

Conventional pluralism has a normative as well as descriptive and positive theoretical elements. Its normative dimension was heavily influenced by long established concerns with regulating the potential tyranny of majorities or of any strong formal governmental apparatus. Awareness of the virtue of pluralist group structure in controlling excesses of central power was recognized long ago by De Tocqueville.³ De Tocqueville was also aware that unlimited freedom of pluralistic association can create problems almost as serious as those which are corrected by the modest exercise of pluralism. A related point was made in more recent times in the work of Truman. Truman recognizes that pluralism can be carried to such extremes that the resulting diffusion of power paralyzes political system efforts to correct major, pressing problems.⁴

³Alexis de Tocqueville, Democracy in America (Garden City, N.Y.: Doubleday and Company, Inc., 1969 (copyright)), pp. 189-195

⁴David Truman, The Governmental Process, pp. 516-524

The work of conventional pluralist theorists is closely linked to a body of work on political participation. Some of this work has been done by people who would normally be classified as being part of the conventional pluralist category, but not all of the relevant studies of participation have been done by such people.⁵ The research of interest in this regard has revealed that actual participation in organized groups in pluralist systems is strongly correlated with income and education. Evidence of this can be found in the work of Almond, Verba, Dye, Zeigler and Kornhauser.⁶ Yet, at the same time, an examination of the work of Almond and Verba as well as later work by Verba and Nie reveals that in the United States, a fairly large and probably increasing percentage of the country's citizens do have membership in at least one organized group.⁷ Since membership is

⁵For a reassessment of participation studies and other data which is clearly not part of the conventional pluralist tradition, see: Thomas R. Dye and L. Harmon Zeigler, The Irony of Democracy: An Uncommon Introduction to American Politics (Belmont, California: Wadsworth Publishing Company, Inc., 1970)

⁶See: Gabriel Almond and Sidney Verba, The Civic Culture (Boston, Mass.: Little Brown & Company, 1963), pp. 186-207; William Kornhauser, The Politics of Mass Society, p. 68; Dye and Zeigler, The Irony of Democracy, pp. 197-198

⁷Almond and Verba, The Civic Culture, p. 247; Sidney Verba and Norman Nie, Participation in America (New York, N.Y.: Harper and Row, 1972) pp. 41-42; One perspective on this pattern is provided in William Alton Kelso, American Democratic Theory: Pluralism and Its Critics (Westport, Conn.: Greenwood Press, 1978) pp. 93-95

quite a different thing from leadership or truly active participation, it seems likely the activists and leaders of organized groups in pluralist systems represent a small, but not insignificant, part of the total population.

Some of the more recent trends in the work of Robert Dahl are consistent with the idea that a fairly small portion of the population of modern political systems are effectively involved in such systems as leaders and activists. Dahl has been sufficiently influenced by this interpretation to indicate that polyarchy is possibly a better descriptive model for many western systems than is true pluralism.⁸ Also, in elaborating his work, Dahl has placed increasing emphasis on the relationship between changes in economic systems and the evolution of political systems. He has also given more explicit consideration to socio-economic influences on the development of political systems, and, in a comparative context, seems to have concluded that such factors are important in producing polyarchal systems. However, they do not appear to act in a smooth and continuous manner.⁹

⁸For a general comment on changes in Dahl's perspective over the years see, Kelso, American Democratic Theory: Pluralism and Its Critics, p.34. For recent specific comments by Dahl on the false dichotomy between elitism and democracy as well as comments on the descriptive virtue of polyarchy as opposed to pluralism see, Robert Dahl, Democracy in the United States: Promise and Performance (2nd Ed.) (Chicago, Ill.: Rand McNally and Co., 1972) pp. 29-34

⁹For recent comments by Dahl on socio-economic influences on the evolution of politics see, Robert Dahl, Polyarchy: Participation and Opposition (New Haven, Conn.: Yale University Press, 1971) pp. 57-80

Conventional pluralist theory has a variety of very general implications for any consideration of interest group creation, interest group survival and the dependence of such phenomena on relations among political system organizations. Turning first to interest group creation and survival, the competitive emphasis of pluralism leads to the idea that interest groups arise and flourish because of threats or potential threats from existing or potential organized groups. They may also arise in order to counteract the impact of some crisis on a particular set of people. In such situations, groups are formed in order to enable people to compete more effectively within a turbulent environment or to protect themselves more effectively from other groups in that environment. The potential importance of this explanation has been well developed in the work of Truman. Truman saw these competitive counter waves of group formation as producing a kind of equilibrium. This proposed equilibrating process is related to the conception of the interest group environment as a kind of competitive market place which corrects and adjusts itself.

Truman also was instrumental in elaborating another aspect of the conventional pluralist explanation of interest group creation. This is the idea that the increasing complexity of society leads to more interest groups. Specific facets of the kind of increasing complexity Truman had in mind are the increasing specificity of the division of labour, changes in communication technology, changes in economic structure and changes in the demographic characteristics of populations.¹⁰

¹⁰David Truman, The Governmental Process, 2nd Ed., pp. 52-56

Kornhauser was not concerned with interest group creation and survival per se, but his detailed discussion of the factors which produce different types of social situations does provide some insights into possible determinants of interest group creation and survival. Kornhauser examined some of the factors which appear to be important in producing either pluralist societies, or, alternatively, mass societies. To the extent that factors which produce a pluralist society are also important in producing the specific group components of such a society, then Kornhauser's comments are relevant to the questions of interest in this work.¹¹

Kornhauser has indicated that pluralist societies break down or are difficult to establish when a variety of social, psychological and economic factors act to dissolve or discourage relationships among humans living in the same community. Like Truman, Kornhauser asserts that the complexity of society can impact on the vitality of pluralist groups, but Kornhauser's perspective on this is somewhat more detailed than Truman's. For example, in Kornhauser's view, increases in factors such as urbanization and industrialization do not necessarily act to create a more pluralist society, as opposed to a more mass-oriented society. What is critical with respect to these factors is the rate at which they change. If they change rapidly, potential for disruption of human relations increases and the chances for a thriving pluralist society decrease. Kornhauser also supports the idea that events such

¹¹ Kornhauser's discussion of the sources of mass movements is primarily relevant here and is contained in, Kornhauser, The Politics of Mass Society, pp. 119-172

as depressions, severe unemployment problems and wars can have a negative impact on pluralist tendencies and a positive impact on the probability of mass oriented social behaviour.

Another important part of the material presented by Kornhauser is his discussion of the differences between leaders of organizations and the ordinary members of society. Basically, he presents data showing that leaders and even active members of organizations tend to have a high socio-economic status compared to the general population.¹² Although Kornhauser does not use this information to make a point relating to the creation of groups, it can be used to argue that the relative scarcity of leaders and active members for organized groups does place limits on the number of groups which can be created and/or maintained.

Turning to the matter of relations among different types of political system organizations, conventional pluralism has provided many examples of such phenomena in specific cases, but it has not generated a large number of general propositions about such relations. One generality which can be culled from pluralist literature is the previously mentioned emphasis on bargaining and competition among organizations. Another related generality, particularly evident in some of the work of Dahl and Lindblom, is the description of pluralist systems as systems of multiple, decentralized decision centres.¹³

¹²Ibid., p. 68 as well as the discussion of social classes and mass movements in pp. 177-222

¹³Robert Dahl, Pluralistic Democracy in the United States: Conflict and Consensus, p. 326; Robert Dahl, Who Governs, pp. 89-168 and p. 310; Charles Lindblom, The Intelligence of Democracy; Charles Lindblom, "The Science of Muddling Through", Public Administration Review 19, no. 4 (Spring 1959): pp. 79-88

These general perspectives are primarily relevant to the analysis of relations among interest groups or relations between interest groups and government agencies. They are used to portray pluralist systems as being ones in which interest groups compete or bargain with one another in policy arenas where government agencies act as essentially neutral referees. At the same time, generalizations relating to multiplicity and decentralization of decision centres are used to support the view that results and resources in one competitive policy arena are not generally related to results and resources in other policy arenas in a direct and systematic manner. As indicated later, critics such as Lowi and McConnell do not fully accept conventional pluralist portrayal of relations between interest groups and agencies within a specific policy arena. Their views regarding central agencies that deal with a variety of policy topics are less clearly defined.¹⁴

In describing relations among political parties or between parties and interest group organizations, the conventional pluralists view parties as competing with each other and as responding to and summarizing demands of interest groups. It is also acknowledged that interest groups may sometimes have a major direct role in determining the policies of some parties.¹⁵

¹⁴Theodore J. Lowi, The End of Liberalism (New York, N.Y.: W.W. Norton & Co., 1969); Grant McConnell, Private Power and American Democracy (New York, N.Y.: Alfred A. Knopf, 1966)

¹⁵See: V.O. Key Jr., Politics, Parties and Pressure Groups, 5th Ed. (New York, N.Y.: Thomas Y. Crowell and Co., 1964) pp. 154-161; F.C. Engelmann and M.A. Schwartz, Political Parties and the Canadian Social Structure (Scarborough, Ont.: Prentice-Hall of Canada, Ltd., 1967) pp. 106-114

This general feature of conventional pluralist theory implies that relations among political system organizations are characterized by independence of authority and interdependence in generating policy proposals. Parties and agencies respond to interest groups, but they are generally not completely controlled by them. Furthermore, interest groups are not generally pawns of political parties or government agencies. Yet, parties and governments are not perceived as responding to some generalized public interest, and the content of their activities is largely determined by the specific substance of demands from organized groups.

Given the perspective just outlined, we would expect the conventional pluralist to see proliferation of interest groups due to socio-economic changes causing changes in the structure of government. Interest group creation is not fundamentally a product of changes in agencies and parties. However, because of the emphasis of pluralist literature, this assessment is somewhat speculative. Furthermore, it should be noted that some pluralist students of local government have suggested that the structure of government is essentially an opportunity structure which influences which groups arise and in which it may be beneficial for government officials to encourage the creation of certain interest groups.¹⁶ A normative expression of the virtue of government intervention in interest group creation has been developed under the rubric of "public pluralism".¹⁷ The idea

¹⁶The idea of government creating an opportunity structure for action is closely linked to the idea that the formation of new political system organizations is dependant on the perceived opportunity for success of a new organization within the existing structure of political system organizations. These ideas are important parts of such works as: Edward C. Banfield, Political Influence, pp. 235-306

¹⁷This term is coined and discussed in detail in Kelso, op. cit.

that governments may act to influence or may indirectly¹⁸ influence the creation and survival of interest groups is consistent with a thoroughgoing pluralism in which agencies and parties are seen as just another type of organized interest subject to the same socio-economic trends as true interest groups and competing with other organizations as a result of the pressures imposed by those trends. With this type of interpretation, one ceases to view parties as summarizers of demands and government agencies as simple arbiters.¹⁹

Descriptive Alternatives to Pluralism

These are alternatives which are based either on a fundamental disagreement with the conventional pluralist interpretation of a specific political system or on a model of a particular system which has not been closely associated with conventional pluralist interpretations. Some of these alternatives may have been developed as a result of normative concerns, but they do present alternative empirical descriptions of group activity in western political systems.

¹⁸For a discussion of the unintended ways in which government action may influence the creation of interest groups see: H.R. Mahood, ed., Pressure Groups in American Politics (New York, N.Y.: Charles Scribner's Sons, 1967)

¹⁹Apart from the descriptive work of Banfield and the insights of democratic theorists such as Kelso, one also finds some theoretical emphasis on the reciprocal interdependence of political system components in: Leon Dion, Societe et Politique: La Vie Des Groupes (Quebec, P.Q.: Les Presses de L'Universite Laval, 1971) particularly pp. 167-175 in the first volume

Some of the major alternatives which constitute a direct disagreement with specific pluralist interpretations of the U.S. political system are contained in the following paragraphs.

Critiques of the scope of group activity implied by pluralism.

These critiques question the conventional pluralist assertion that a large part of the population is actively and effectively involved in or equitably represented by interest groups. Examples are to be found in the works of Richard Hamilton and Robert Paul Wolff. Dye and Zeigler also provide some empirical contributions to this critique.²⁰

Critiques of conventional pluralist perspectives on group access and effectiveness. Some conventional pluralist literature emphasizes the idea that most groups can be effective in pursuing objectives and can communicate with important decision makers. The reality of this is questioned in the works of Bachrach, Baratz, and Schattschneider. Dye and Zeigler also explore aspects of this critique in their criticism of pluralist interpretations.²¹ These

²⁰ Richard Hamilton, Class and Politics in the United States (New York, N.Y.: John Wiley & Sons, 1972) pp. 35-46; Robert Paul Wolff, Barrington Moore, Jr. and Herbert Marcuse, A Critique of Pure Tolerance (Boston, Mass.: Beacon Press, 1965) pp. 3-53; Dye and Zeigler, The Irony of Democracy, pp. 331-332

²¹ Peter Bachrach and Morton S. Baratz, Power and Poverty: Theory and Practice (New York, N.Y.: Oxford University Press, 1970); Peter Bachrach and Morton S. Baratz, "Decisions and Non-Decisions," American Political Science Review, 57, no. 3 (September, 1963), 641-651; Peter Bachrach and Morton S. Baratz, "Two Faces of Power," American Political Science Review, 56, no. 4 (December, 1962), 947-952; E.E. Schattschneider, The Semi-Sovereign People (New York, N.Y.: Holt, Rinehart & Winston, 1960); Dye and Zeigler, The Irony of Democracy, pp. 331-335

theorists think that there is a definite bias in the openness of the U.S. system to interest group input. In their views, groups representing or containing people with high socio-economic status are far more likely to impact effectively on decision makers than groups representing lower status citizens.

The Oligarchical critique. This includes the work of such people as Kariel and McConnell.²² It verges on being a normative critique, and its vagueness and potential for misinterpretation have clouded many aspects of democratic theory. This form of critique sometimes arises from the view that elites and pluralism are incompatible. Elites function within all groups. Hence, pluralism is not a good model of modern political systems. This form of critique is simply a misunderstanding of conventional pluralism which is not antithetical to the existence of elites. In fact, as noted earlier, some conventional pluralists have placed increasing emphasis on the importance of elites. A somewhat more defensible version of this critique is the view that elites within groups sometimes misuse their power or use it for elite purposes rather than for the general good of the membership of a group. This is certainly not compatible with the normative preferences of conventional pluralists. Its empirical validity probably varies among groups.

²²Henry S. Kariel, The Decline of American Pluralism (Stanford, Cal.: Stanford University Press, 1961) pp. 3-4; Grant McConnell, Private Power and American Democracy, pp. 120-122; Also see the discussion of oligarchical interpretations in William Alton Kelso, American Democratic Theory, pp. 145-171.

Elite accommodation model. This type of model was not developed with the same kind of critical intent that guided the construction of the critiques just noted. Yet, it does provide an alternative way of viewing the structure of certain political systems. The elite accommodation model is based on the view that, in some cases, relations among elites may be best characterized as being accommodative rather than competitive. This, of course, contrasts with the perspective on elites embodied in some conventional pluralist literature. The elite accommodation model was initially discussed by Girod²³ and Lijphart²⁴. Later, it was influential in shaping some of the interpretations applied by R.V. Presthus in his examination of the Canadian political system.²⁵ Of course, the idea that elites function through accommodation and consensus is also a part of the viewpoint of some of the writers mentioned earlier, such as Dye and Zeigler.

Descriptive polyarchy. As mentioned earlier, Dahl, a major conventional pluralist, has gradually moved toward accepting polyarchy as a good description of some types of political systems. This really involves taking one component of the "old" pluralism,

²³R. Girod, "Geography of the Swiss Party System," Eric Allardt and E. Litunen, eds., in Cleavages, Ideologies and Party Systems (Helsinki: Academic Bookstore, 1964)

²⁴Arend Lijphart, "Consociational Democracy," World Politics, 21 (January, 1969); Arend Lijphart, The Politics of Accommodation (Berkeley, Cal.: University of California Press, 1970)

²⁵Robert Presthus, Elite Accommodation in Canadian Politics (New York, N.Y.: Cambridge University Press, 1973)

competition among elites, and emphasizing it compared to another major element of the "old" pluralism, wide spread effective participation in and bargaining among interest groups. In a sense, this constitutes an acknowledgement of the partial validity of some of the critiques of conventional pluralism.

Corporate Pluralism. This variant of pluralism is expressed in the work of Lowi²⁶ and McConnell²⁷. It contains an emphasis on the close relationships between interest groups and government agencies in specific policy areas. Government agencies are often portrayed as captives of interest groups and corporations, or the relationships between such organizations are seen as being symbiotic. In any case, competition among interest groups in arenas regulated by independent government agencies is seen as being a rare phenomenon in the U.S. political system.

Lowi has elaborated his description of the current U.S. system into a normative model that stresses the importance of having strong central governmental and judicial agencies and the importance of limiting the discretion of administrative agencies with specific policy concerns.²⁸

²⁶Theodore Lowi, The End of Liberalism, pp. 29-93. Lowi actually calls his descriptive model of the U.S. system, "interest group liberalism".

²⁷Grant McConnell, Private Power and American Democracy, pp. 21-110

²⁸Theodore Lowi, The End of Liberalism, pp. 287-310. Lowi calls his normative model "juridical democracy". Some have described it as a form of polyarchy.

Simple leadership or entrepreneur model. This is exemplified by some of the work of Salisbury.²⁹ Essentially, Salisbury's perspective can be reduced to the idea that the availability of capable leadership at the appropriate time is an important factor in the creation and survival of interest groups. He contrasts this idea with the work of Truman. As already noted, Truman placed a great deal of emphasis on the role of socio-economic factors, collective response to threats or potential threats and extreme changes in such factors in explaining interest group creation. Salisbury adduces some data and arguments to show that Truman's views do not have a high degree of explanatory power during some historical periods. Salisbury also provides examples of how certain individuals were of critical importance in establishing certain interest group organizations. Salisbury does not offer any specific model to explain why group entrepreneurs are available at particular times. However, he does provide some discussion of how such entrepreneurs build groups through an exchange relationship with group members. He notes that the benefits the entrepreneur derives from such exchange may be either monetary or non-monetary. Although Salisbury's argument relates directly to behaviour its exchange behaviour component is insufficiently developed to qualify it for admission into the category of a relevant general model of behaviour.

Basically, most of these alternatives to conventional pluralism take a point acknowledged by the conventional pluralists and amplify its importance. That point is that there are socio-

²⁹Robert H. Salisbury, "An Exchange Theory of Interest Groups", Midwest Journal of Political Science 13 (1969), 1-32

economic, cultural and personal constraints on active and effective participation in interest group organizations. The authors associated with the descriptive alternatives generally think that, in some major political systems, these constraints are so strong that a conventional pluralist interpretation of political phenomena is not adequate.

Although the major classificatory alternatives to conventional pluralism do not embody a great deal of explicit discussion of interest group creation and survival, they do have some implications for those subjects. One of these implications is that the creation and maintenance of interest group organizations is dependant upon the presence and utilization of relatively scarce human resources in some types of systems. It may be possible and/or desirable for such systems to function using a wider range of people, but, at present, they do not.

Most of these alternatives to conventional pluralism do not stress competition among elites or aggressive bargaining among interest groups. Relations among elites and among groups are seen as being more accommodating and cooperative because of the relative homogeneity of the part of the population that serves as a human resource for creation and leadership of interest group organizations and because of the effective exclusion of groups that might make extreme or troublesome demands. This suggests that there will tend to be a fair amount of harmony in relations among groups and in relations between interest group organizations and other political system organizations. At least there will be an absence of extreme conflicts.

The two points just noted about alternatives to conventional pluralism may appear to be superficially inconsistent. On one hand, it was noted that political system organizations utilize a limited pool of a scarce human resource. This would possibly imply competition for that resource. On the other hand, it was noted that relations among political system organizations are seen as being something less than highly competitive. The apparent inconsistency is resolved by considering a basic distinction between competition for organizational resources and competition for policy objectives. In a highly abstract, almost unintentional, sense, organizations can bid for the same organizational resources without competing with respect to external policy objectives. This is similar to a distinction between free competition among many where each actor is unaware of other actors' parameters of action and "competition" among a few where each actor is aware of the probable nature of other actors' plans. This distinction is the same as the resources-policy objectives distinction when the resources are of general interest to many and the policy objectives only concern a few entities with particular substantive interests.

General Theories of Behaviour and Choice

Overview

The theories and models already examined emphasize classification of political system characteristics and general correlates of such characteristics. Such perspectives contain a great deal of information about behaviour, but they are not formally derived from highly structured assumptions about behaviour and choice. For that matter,

they often lack even general reasons for explaining why a certain behaviour occurs or, on the normative side, should occur.

There are, of course, general theoretical approaches which are based on explicit assumptions about the nature of human behaviour and choice. Much of the remainder of this chapter will be devoted to examining the implications of some of these types of theories for the issues of interest in this study. Specifically, their implication with respect to creation of interest group organizations, survival of interest group organizations and the impact of organizational interactions on such creation and survival will be examined.

Theories Based on Models of Rational Behaviour and Choice

Here, one is concerned with the rapidly growing body of literature on what is sometimes referred to as "public choice" or "the new political economy". The relevant part of this literature begins with some of the work of Mancur Olson.³⁰ A major aspect of Olson's work is its use of some features of economic analysis and some concepts relating to economic theory of public goods in examining why people do or do not join groups, particularly large groups, that are supplying public or collective goods. Using various aspects of marginal cost and marginal benefit analysis, Olson was able to demonstrate that it was often not personally beneficial for someone to contribute to the supply of a collective good he desired. If others were willing to make contributions and, because of the good's collective nature, supply it to all members of a general class of people and if a potential

³⁰ Mancur Olson, Jr., The Logic of Collective Action: Public Goods and the Theory of Groups (New York, N.Y.: Schocken Books, 1968), see, particularly, pp. 5-52 and pp. 132-167

beneficiary was a member of that class, then he would automatically receive the benefit whether or not he had made contributions toward the supply of the beneficial collective good. Hence, in such case, it would probably not be rational for a person to contribute toward the supply of the good. This interpretation is closely related to what is sometimes referred to as the "free-rider problem" in public finance. In Olson's view, if it is not rational for people to contribute directly to the supply of a collective good, then it is not rational for them to contribute to, belong to, or help organize a group that is encouraging the supply of the good unless there is some reason, other than the promised supply of the good, to belong to the group.

Since organized interest groups seeking ostensibly collective goods do sometimes form, Olson attempts to explain why such groups may form even though it may not be rational for group members to support the group simply because they value the collective good with which it is associated. Despite the fact that a person will get a collective good if it is supplied, that person may still join the group because of the following major reasons, according to Olson.³¹

- (1) Coercion --- Some legal or even physical coercion may be brought to bear on potential beneficiaries of a public good so that they will have to support a group that is pressing for the provision of that good.

³¹Ibid., pp. 132-135

- (2) Selective Inducements --- The group that is pressing for provision of a public good or acceptance of some policy objective may supply people who join it with benefits that have nothing directly to do with such policy objectives but which are still valued. Thus, people who wish to get these selective inducements must join the group, but they are not joining simply because of the magnitude of the public good they might receive or because they think they can affect the probability of its provision.

Apart from these reasons, a person may join a group because a public good the group wants supplied is extremely important to that person and he thinks that his contribution to the group is critical to the group's success. Olson also indicates that his general position may not apply to membership in small groups as well as it applies to membership in large groups.³²

The main problems with Olson's work are its concentration on the problem of membership decisions, his relative deemphasis of entrepreneurial or leadership decisions, his failure to fully recognize how behaviour is affected by the strategic uncertainties involved in gauging one's impact on a group's success, and the fact that Olson did not fully describe the range of value dimensions that can be taken into account in a rational choice model. Some of the

³²Ibid., pp. 22-36

shortcomings in Olson's work were addressed by other writers whose work also falls within the domain of rational choice theory. These later additions to such theory also introduced some important new considerations into the development of rational models of group formation.

The work of Curry and Wade provides one example of rational choice theory which goes beyond the themes emphasized by Olson.³³ In their "theory of political exchange", Curry and Wade discuss the choice processes in which several major kinds of political system actors are typically involved. They identify beneficiary members of interest groups, fiduciary members of interest groups, politicians in government and political spectators not involved in any major interest group or government organization as being the major categories of political system actors. Each of these types of actors is viewed as facing certain typical rewards and costs in making political decisions and as responding to these rewards and costs in a manner which exhibits at least limited rationality. Curry and Wade provide formal analysis of the choices of some of these types of actors in terms of various sets of assumptions about the political market in which the actors are operating.

With respect to interest group creation and survival, Curry and Wade use concepts which are borrowed directly from elementary economic theory. They emphasize the role of leaders or fiduciary members of interest groups in the creation of such groups. Their conception of the activities of such leaders is modelled on the

³³R.L. Curry, Jr. and L.L. Wade, A Theory of Political Exchange: Economic Reasoning in Political Analysis (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968)

concept of the entrepreneur used in the economic theory of the firm.³⁴ In the presentation of Curry and Wade, the interest group entrepreneur, like the private sector entrepreneur, is motivated by maximizing his net benefits, and he will approach the formation and management of interest group organizations in light of this motivation. In their discussion of interest groups, Curry and Wade also use economic theory pertaining to the entry of firms into a market.³⁵ Decisions regarding the viability of new interest groups can be made in terms of the same kind of logic that guides decisions regarding the creation of new firms in a given market. In market entry theory, existing firms can alter their behaviour to reduce the net benefits of new or potential firms. Curry and Wade indicate that existing interest groups may react to new or potential interest groups in a similar way.

Although these analogies with firms and entrepreneurs are important features of Curry and Wade's work, they have also provided examples which show the importance of interactions among various types of political actors and organizations. For instance, they present an example of such interactions that relates to the supply and demand of government positions.³⁶ These examples perhaps give insufficient attention to the details of political factors that can shift supply and demand for government employment and too much attention to skill or human capital factors. However, the examples do illustrate the important point that the growth of government employment and organizations can be linked to interactions among various parts of a political market.

³⁴ Ibid., pp. 97-114

³⁵ Ibid., pp. 92-96

³⁶ Ibid., pp. 51-71

Presumably, similar kinds of arguments could be applied to the supply and demand of other kinds of political positions and organizations.

Compared to Olson's work, the exchange theory of Curry and Wade provides a more balanced portrayal of the organizational and role structure of political systems. An important aspect of this portrayal is that the exchange theory allows for a more careful distinction between choices relating to group membership and choices relating to the initial creation of an organization. Olson only treats the former type of choice in detail, probably under the assumption that the two types of choices are not very distinct. As a result of this limitation, Olson's work is primarily relevant to analysing choices to join an organization that has already been formed. Curry and Wade's highlighting of the role of the entrepreneur and definitions of different types of political system actors provides a clearer basis for formal examination of initial choices to form an interest group organization. For Olson, there may be rare people who have a special interest in actually contributing to an organization because they place a high personal value on the organization's goal or on its formation, not because of its possible by-products. The concept of entrepreneurial action provides a basis for thinking that such people may be rare but are not aberrations. Some of these rare people are interest group entrepreneurs who place a high value on organizational formation because it offers them a profitable place to use their particular skills and/or because it allows them to pursue some non-monetary value that is of special interest to them. This interpretation actually goes beyond the explicit discussion provided by Curry and Wade, but, with certain modifications, their work can be

extended to support this perspective.

Beyond Olson's economic analysis of membership choice and Curry and Wade's exchange theory with emphasis on entrepreneurial action, one finds another facet of rational choice literature that provides insights not found in any of the works already considered. This other facet is contained in a work by Frohlich, Oppenheimer and Young.³⁷

Frohlich, Oppenheimer and Young begin their major work with a discussion of some of the theories already considered in this chapter. They divide theories about the supply of collective goods into two major categories. First, they define and discuss theories which, in their view, focus on problems in interactions among potential consumers of collective goods. The major example of this type of theory is the work of Olson.³⁸ Second, they discuss the various uses of the concept of "political entrepreneur" in explaining the supply of collective goods and the formation of interest group organizations.³⁹ Under this heading, one finds the work of people such as Salisbury, mentioned in earlier discussion of alternatives to conventional pluralism. One also finds mention of the work of Wagner and the work of the two Bretons.⁴⁰ Curry and Wade are not mentioned in the introductory

³⁷ Norman Frohlich, Joe A. Oppenheimer and Oran R. Young, Political Leadership and Collective Goods (Princeton, N.J.: Princeton University Press, 1971)

³⁸ Ibid., pp. 12-18

³⁹ Ibid., pp. 18-20

⁴⁰ Albert Breton and Raymond Breton, "An Economic Theory of Social Movements", The American Economic Review 59 (1969), 198-205; Robert H. Salisbury, "An Exchange Theory of Interest Groups", Midwest Journal of Political Science 13 (1969), 1-32; Richard Wagner, "Pressure Groups and Political Entrepreneurs", Papers on Non-Market Decision Making 1 (1966), 161-170

discussion of entrepreneurial theory. However, their treatment of the role of the entrepreneur is acknowledged at a later point in Frohlich, Oppenheimer and Young's presentation.⁴¹

Frohlich, Oppenheimer and Young make several criticisms and comments respecting the two major categories of theory they consider in their introductory comments. The general thrust of their comment is that the concept of the political leader or political entrepreneur is a major key to understanding the supply of collective goods. However, the specific nature of the link between the rewards for entrepreneurs and the motivations of contributors to collective good entrepreneurs has not been defined in a generally useful way.⁴² This is seen as true even in those works which are clearly a part of the entrepreneurial theory category. In the case of Curry and Wade's treatment of political entrepreneurs, Frohlich, Oppenheimer and Young indicate that Curry and Wade's perspective is really more applicable to the supply of private goods than to the supply of collective or public goods.⁴³ Hence, even Curry and Wade have not made a convincing theoretical bridge between contributor motivation and entrepreneurial action in the supply of true collective goods.

In attempting to construct a more generally useful explanation of political leadership and collective goods, Frohlich, Oppenheimer and Young make a number of valuable contributions to the rational choice theories pertaining to those subjects. One of their major contributions

⁴¹Frohlich, Oppenheimer and Young, op. cit., pp. 87, 96, 117

⁴²Ibid., pp. 19-25

⁴³Ibid., pp. 96, 117

is their introduction of a strategic element into the portrayal of choices relating to the desirability of contributing to the supply of a collective good.⁴⁴ Strategic choice models are based on an explicit acknowledgement of the interdependence of actors' choices and of their estimations of the likelihood of certain future events, including estimation of one actor's probable choices by another actor. This approach to modelling of rational choice can be used to show that the question of whether or not a particular actor's contributions will be critical to the successful action of someone trying to supply a collective good or to the direct supply of that good is highly problematic. Such matters are not necessarily susceptible to treatment in terms of the simple assumptions about objective costs and rewards made by Olson. A person's estimation of the probable impact of his contributions will not only depend on objective costs and rewards but also on that person's estimation of the probable actions of others.

Once strategic or interdependent factors are taken into account, it becomes possible to demonstrate that in some cases, it will be rational for certain actors to contribute to the supply or attempted supply of a collective good even though analysis in terms of complete, objective information may not indicate that such contributions are rational. Frohlich, Oppenheimer and Young, use this type of approach to modelling choice to show that participation in marginal cost-sharing mechanisms by contributors interested in the supply of a collective good can be rational without being an aberrant phenomenon and without the necessary use of by-product private goods or coercion.

⁴⁴Ibid., pp. 20-25, 34, 122-132

The supply and management of such cost-sharing mechanisms through the formation of organizations is seen as a major aspect of the role of political entrepreneurs. Of course, these theorists also indicate that there will also be cases which do, as Olson expected, involve the use of private good incentives and coercion by entrepreneurs.

Frohlich and his colleagues also provide valuable theoretical developments in their analysis of the evaluation of future options by entrepreneurs. Their discussion of entrepreneurs who may place a high value on discontinuing their present status is particularly important for any consideration of the movement of entrepreneurs between positions or between organizations.⁴⁵ Their discussion of the uses of information by entrepreneurs and the uncertainties engendered by strategic interaction are important in examining incentives for groups and coalitions to be larger than one might expect based on an analysis of simple costs and benefits.⁴⁶

All the rational choice theorists discussed in this section offer insights and propositions that are pertinent to the creation and survival of interest group organizations. In linking the supply of collective goods to the formation of organized groups to supply such goods, they have closely associated themselves with the types of creation and survival issues which are the main focus of this dissertation. The work of Olson appeared to have fairly straightforward substantive implications for interest group creation and survival. Interest groups were generally formed more as a result of private by-product payments or

⁴⁵Ibid., pp. 66-99

⁴⁶Ibid., pp. 110-114

coercion than as a result direct valuation of a collective good by its potential consumers. Ultimately, the work of Curry and Wade and, to an even greater extent, Frohlich, Oppenheimer and Young revealed the limitations of Olson's perspective. However, in broadening the scope of rational choice models of group creation, these latter authors were primarily fashioning general tools of analysis and suggesting some very general propositions which follow from preliminary application of such tools. They were not primarily oriented toward providing highly specific substantive analyses.

The rational choice theorists who followed Olson also made useful contributions to modelling interactions among political system organizations, and this too is a central part of the issues of interest in this work. In particular, Curry and Wade offer some specific examples of structural interactions in their work. Frohlich, Oppenheimer and Young do not assess such factors to the same extent as Curry and Wade. However, their views on strategic interaction and competition could be easily extended into an examination of inter-organizational factors impinging on interest group creation and survival.

When one examines the rational choice theorists against the backdrop of theoretical concerns raised by the pluralists and their critics, several interesting points emerge. Olson generally suggests that the emphasis on restricted political participation embodied in, but used differently by, both conventional pluralists and their critics is consistent with his work. Olson tends to emphasize the small magnitude of restricted participation figures, and, in an unusual sense, places his view closer to the view of the critics of

the conventional pluralists.⁴⁷ Frohlich, Oppenheimer and Young indicate that there is considerable opportunity for concentration of vote delivering power in some types of organizations in democratic systems. This would appear to be consistent with the arguments of some critics of the conventional pluralists, and, according to Frohlich and his colleagues, is amplified by some of the power and resource concentration factors described by the pluralist's critics.⁴⁸ Frohlich, Oppenheimer and Young also derive some propositions about political participation that do suggest circumstances in which the socio-economic composition of the set of major political system participants can change.⁴⁹ However, they do not indicate how such changes typically affect the actual magnitude of supply of available political system leaders. They present some interesting ideas on the process of politicization and the way in which that process is affected by changes in the information that entrepreneurs supply to those who make contributions to them.⁵⁰ Again, the exact nature of the impact of this sort of politicization's impact on aggregate leadership supply is not discussed in detail. Finally, Curry and Wade

⁴⁷ For Olson's comment on the reality of restricted participation see, Olson, op. cit., p. 20. For his critique of conventional pluralism, broadly defined, see, Olson, op. cit., pp. 111-131. In this last excerpt, he makes the interesting observation that pluralists do not seem to be aware of the importance of organization in effective pursuit of interests. Thus, he would say that pluralists would not see the actual creation of an organized group from within a latent group as a significant phenomenon. It would be regarded as just another phase of interaction. Olson, himself, seems to realize the importance of creating an organization, but he may place too much emphasis on consumer, as opposed to entrepreneurial, choice in explaining organizational creation, or the lack of it.

⁴⁸ Frohlich, Oppenheimer and Young, op. cit., pp. 116-117

⁴⁹ Ibid., pp. 48-49

⁵⁰ Ibid., pp. 105-108

do not actually make any statements that would consistently connect them with an aspect of the classificatory theories discussed earlier. However, they briefly discuss the idea of consumer-oriented models of political systems as opposed to either pluralist or polyarchal models.⁵¹ This part of their comments appears to have a somewhat normative emphasis, and they conclude it with comments suggesting that they are implicitly closer to the view of the critics of pluralism than to those who are in the mainstream of conventional pluralism.

Functionalist Theory

Here, the work of Parsons, Shils and Mitchell are of primary interest.⁵² These theorists emphasize the concept of equilibrating or self-adjusting systems of societal components, and this is somewhat similar to ideas presented by the conventional pluralists. The functionalists are also not unaware of the competitive aspect of relations among people and collectivities in social systems, but they have chosen to stress the integrative and coordinative aspects of social relations. Functionalist theory is based on a conceptualization of society (or components within society) functioning in order to solve certain basic types of problems which are a part of any social system.

⁵¹ Curry and Wade, op. cit., pp. 119-120

⁵² Of particular interest are: William C. Mitchell, Sociological Analysis and Politics: The Theories of Talcott Parsons (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1967); Talcott Parsons, The Structure of Social Action (New York, N.Y.: McGraw-Hill, 1937); Talcott Parsons, The Social System (New York, N.Y.: The Free Press of Glencoe, 1951); Talcott Parsons and Edward A. Shils, eds., Toward a General Theory of Action (Cambridge, Mass.: Harvard University Press, 1951); Robert F. Bales, Talcott Parsons, Edward A. Shils, Working Papers in the Theory of Action (New York, N.Y.: The Free Press of Glencoe, 1953); Talcott Parsons, Politics and Social Structure (New York, N.Y.: The Free Press, 1969)

These problems and the functions involved in their solution are, for the most part, seen as being derived from basic human needs.

Another noteworthy feature of functionalist theory is its utilization of both macro and micro perspectives on human behaviour. Initially, Parsons was concerned with developing a theory which focused on voluntaristic, goal-oriented, value and norm conditioned action of actors who only had partial control over their environments.⁵³ Later, Parsons sometimes working with Shils, shifted from this micro or individual oriented model to an emphasis on more macrosociological theory which could still be linked to somewhat more abstract units of individual behaviour and structure of action.⁵⁴ Interaction in terms of complementary expectancies becomes a major part of the joint work of Parsons and Shils. The institutionalization and stabilization of large numbers of small scale interactions lead to the formation of concrete collectivities. Such interaction is driven by individual attempts to gratify certain needs and conditioned by values beliefs and norms. At a macro level, institutionalization, stabilization and degree of differentiation are influenced by requirements of solving the basic functional problems which must be addressed in any cohesive society. This later phase of theory, when Parsons' work becomes truly functionalist, also contains the introduction of the concept of interaction among culture, personality, social systems and organisms as well as the development of the "pattern variables" used to describe choices available to participants involved in social interaction. This

⁵³William C. Mitchell, op. cit., pp. 22-25

⁵⁴Ibid., pp. 25-32

attempt to formally combine macro and micro perspectives in a reasonably abstract manner is a factor which distinguishes the functionalists' work from most other analyses of group formation and interaction related to group formation and maintenance.

The implications of functionalist theory for interest group creation and survival follow from the basic thrust of functionalist theory in a straightforward manner. Interest groups arise as a result of increasing role complexity in society as attempts to resolve problems related to such complexity. In addition, such groups do provide an operative way for certain basic human needs to be met. This linkage of human association and interaction with basic human needs has been labelled as an attempt to explain stable patterns of group behaviour in terms of instincts or the evolution of primitive instincts into more complex forms.⁵⁵ This does not actually do full justice to the functionalist perspective. Functionalist theory also places considerable emphasis on normative dimensions of human behaviour. So, functionalist examination of groups also emphasizes the importance of various kinds of groups and associations as foci for people's value commitments.

The work of Parsons contains some particularly interesting examinations of the nature of leadership in groups and social movements.⁵⁶ His work in this area was heavily influenced by the already mentioned writings of Kornhauser. Parsons actually extends some of his work in the direction of economic models of human choices

⁵⁵In particular, see Olson's comments in: Olson, op. cit., pp. 17-18

⁵⁶William C. Mitchell, op. cit., pp. 99-124, particularly pp. 110-115

relating to leadership and social participation. However, he did not unreservedly accept the type of reasoning that served as the foundation of what has now become known as the "public choice" approach to the explanation of social and political behaviour. His emphasis on the importance of social, psychological and value related factors in explaining social phenomena prevented any unselective utilization of rational models of behaviour.

Summary of Implications of Existing Theory

Summaries of the specific implications of a given type of theory have already been provided at the end of comments on each theory type. Now, it will be useful to list those points which consistently emerge as important considerations in the overall context of literature on the creation and survival of interest group organizations.

Primary Implications for the Analysis Contained in this Work

Probably the most important point to emerge from several types of theory is the acceptance of the fact that socio-economic factors appear to limit or determine the number of politically active people at any given point in time. Both the conventional pluralists and their critics generally accept this perspective. However, the pluralists tend to view such factors as not being sufficiently restrictive to seriously compromise the representation of any major group of people in a population served by a political system. The dependance of the availability of leaders and relatively active members of organizations on socio-economic factors is also acknowledged in some of the relevant public choice literature.

The socio-economic skewing of leadership and active member populations is important for the topic of interest in this dissertation. It means that, at any given point in time, there will be a limited number of people available to lead, create or join political system organizations. If one type of organization is successful in attracting a large number of this limited pool of major participants, then one can expect a decrease in the number of people available to lead, create or join other types of organizations. For example, successful recruitment of leaders by political parties may, in the aggregate, reduce the human resources available to create or maintain new interest group organizations. Since some types of organizations can have overlapping memberships, absorption of human resources by one type of organization will not necessarily cause a collapse of other existing organizations, but such absorption should significantly affect the probability that time and people will be available to create and maintain new organizations.

Another point which emerges from some of the literature considered is the fact that choices of organizational settings to pursue political careers and goals will be partially dependant upon on people's assessment of the probable success or effectiveness of different types of organizations. This point appears in the work of some pluralist students of urban politics. It is also a major part of the work of many of the public choice theorists who were discussed, but the use of this concept in the public choice literature serves various purposes. This concept of the probability of success of an organization or potential organization can also be thought of as one facet of the general attractiveness of a particular type of

organization in relation to other organizations.

Considered together, these two points suggest that it would be reasonable to attempt to explain the creation and survival of new members of one set of political organizations in terms of the growth and comparative attractiveness of other types of organizations. Such factors may not be the basis for a complete explanation, but they are the factors that will form the basis of this study's analysis of the relation of interest group creation and survival to changes in other types of political system organizations.

Within the set of people who form a pool of potential leaders and activists in a system, there will be considerable variation. Even though this group may have high socio-economic status compared to other elements of the population, they will exhibit considerable within-group variation on such variables as income, education, training and normal occupation. Variations in such factors may mean that some types of people are less likely to have flexibility in responding to changes in interorganizational attractiveness. For example, some types of civil service leadership roles may require a particular kind of professional expertise and this expertise is largely suited to a particular type of technical setting. A person in this kind of position is unlikely to be extremely responsive to changes in the overall attractiveness of organizational opportunities, but, within limits, he will still exhibit some response to such changes. So, variations in human capital and other characteristics among leaders and activists will make a difference in the degree of response to interorganizational recruitment and change factors, but these variations should not completely negate the impact of such factors in the aggregate.

The implications of leadership scarcity and comparative organizational attractiveness which were just discussed are only reasonable guides for analysis under certain assumptions. Specifically, the usefulness of the implications depends on the assumption that there is little proportionate growth in the pool of leaders and potential leaders compared to growth of the rest of the population. Also, the usefulness of the implications depends on the assumption that there actually are significant variations in organizational attractiveness at given points in time and over time. These assumptions are related to dynamic or intertemporal aspects of the phenomenon under examination. Each of these assumptions is given more explicit consideration in the following remarks.

Nature of Leadership Growth Over Time

For the purposes of the analysis in this dissertation, it will be assumed that leadership may grow in absolute terms, but the proportion of people who are leaders or active members of organizations remains fairly constant. This sort of absolute growth can generally be reflected by a simple linear time variable or by a general population size variable.

If the proportion of leaders increases over time and, as a result, leadership becomes less scarce, then a given type of political system organization may absorb leadership resources without impinging on the relative amount of such resources available to other types of political system organizations. In such cases, absorption of leadership by one organizational type may not have a major impact on the resources available to create and maintain new organizations of another type.

This sort of growth in one proportion of leadership resources relative to population growth weakens the usefulness of any attempt to explain interest group organization creation and survival in terms of growth or change in other political system organizations.

Alternatively, if there is shrinkage in the proportion of the population represented by a leadership group, then attempts to explain organization creation and survival in terms of competition for scarce leaders and active members should increase in usefulness. However, the functional form of such explanation should probably include some complex interactive variables.

Is it reasonable to assume that the numbers of leaders and activists will grow at the same rate as the general population? Existing literature does provide some commentary on changes in the pool of political system leaders in terms of political system factors and factors exogenous to the political system. However, most of this commentary does not provide a very direct answer to the question just posed.

With respect to gradual, exogenous influences the pluralists and functionalists argue that there is a general tendency toward proliferation of organizations over time as societies and economies become more complex. Presumably, such proliferation would be associated with an increase in the absolute numbers of leaders and active members in political system organizations, but whether such an absolute increase generally translates into a proportionate increase is debatable.

Frohlich, Oppenheimer and Young also offer some comments on exogenous impacts on the composition of the pool of political system

leaders and activists.⁵⁷ They propose that growth in the private sector compared to the public sector will cause more people of lower socio-economic status to be drawn into the public sector. However, since these people may simply be occupying positions vacated by higher status emigrants to the public sector, this change in composition of the pool of public sector occupants does not necessarily mean that there will be any dramatic change in the overall proportion of the population composed of leaders and activists available to the political system. It may simply mean that average values of certain socio-economic characteristics of political system leaders will be altered.

Not all exogenous impacts on political system actors and organizations will be gradual. Phenomena such as wars, revolutions, and economic depressions may have very abrupt and extreme impacts on the political system. Credence is given to this perspective in works cited earlier by Truman, Kornhauser and the Bretons. Salisbury, in criticism of Truman, attempted to show that some economic factors may not have an immediate impact on interest group creation, but this still does not remove the possibility of economic crises having a lagged effect on political system leadership supply in general. Furthermore, Salisbury's analysis does not prove that economic events did not produce some growth in political system organizations other than interest groups.

With respect to endogenous influences on political system leadership growth, one finds various arguments pertaining to

⁵⁷Frohlich, Oppenheimer and Young, op. cit., pp. 48-49

politicization of groups as a result of political system activities of other groups. For example, this is part of Truman's treatment of interest groups. Frohlich, Oppenheimer and Young also discuss politicization in the context of exchanges between entrepreneurs and contributors to entrepreneurial activity.⁵⁸ It is conceivable that politicization could lead to disproportionate growth in pools of leaders and activists, but it is also conceivable that, except in periods of social or economic crisis, politicization will have a gradual proportionate impact on such factors.

One piece of empirical information cited earlier indicated that there has been an increase in the percentage of Americans who are involved in organizations of various kinds. Yet, it must be noted that such membership increases do not necessarily translate into disproportionate growth in the number of active members or leaders. Furthermore, when one considers the overall allocation of political system leaders and activists, the organizational phenomenon just noted may simply be the statistical complement of reduced participation in one type of political system organization, such as political parties, and an increased participation in single issue interest group organizations.

In summary, an assumption of a relatively stable proportion of a population being involved in political system leadership and activism does not seem unreasonable, but its full validity cannot be assessed at this time. Within the set of explanations which could be used to construct alternative assumptions, it would appear as though explanations relating to major socio-economic crises are the most

⁵⁸Frohlich, Oppenheimer and Young, op. cit., pp. 105-108

convincing. Such occurrences have been rare in the recent history of most major Western political systems.

Variations in Organizational Attractiveness

Although it may be a simple point, it is worth noting that people will only choose to leave one organization to form or join another when there are disequilibriums in the use of human resources in and among organizations. When all relevant actors are being put to optimum use, in their eyes, there will be no incentive for people to shift organizational allegiances or to form new organizations. A similar view can be founded in basic economic theory. Curry and Wade comment on it in the context of political exchange relationships.⁵⁹

It seems unlikely that any totally optimal use of human resources can be maintained for an extended period of time. However, to the degree that such optimal states are approached, there will be a reduction in the apparent degree of competition of political system organizations for human resources and a reduction in efforts by political system actors to create new organizational mechanisms for pursuit of valued goals.

⁵⁹Curry and Wade, op. cit., pp. 42-44

Chapter 3

THE GENERAL CONTENT OF VARIABLES AND RELATED ANALYTIC EXPECTATIONS

Introductory Comment

In the previous chapter, two major aspects of existing literature were identified as being important for this work. First, there is the allocation of a limited supply of leaders and activists among political system organizations. Second, there is the variation in the attractiveness or perceived future success among different types of political system organizations. To some extent, these two points can be viewed as being hierarchically related because the second may be thought of as one of the causes of the change in the first. However, alternative causal interpretations are also quite possible, and, in this dissertation, no specific assumptions are made about the interrelation of these factors.

In this third chapter, these major aspects of received literature will be used as a basis for deriving certain specific analytic expectations regarding the impact of changes in political parties and bureaucracies on the creation and survival of interest group organizations. This is accomplished by discussing different types of behaviour and choice which follow from the existence of a limited supply of political system leaders and variations in the perceived attractiveness of different mechanisms for political system

action. In this work, the behaviour and choice of leaders or potential leaders is of primary importance. However, some commentary is also provided on the relevant behaviour of non-leading members of organizations.

In the course of discussing analytic expectations regarding certain kinds of behaviour, it is noted that data relating to individual behaviour is not consistently available. At this time, it is only possible to analyse the aggregate outcome of many different forms of micro behaviour. So, for purposes of current analysis, it is necessary to define certain aggregate variables that serve as indicators of underlying micro behaviour and choice processes. The general definitions of these aggregate indicators are also presented in the third chapter. In some cases, ideal aggregate indicators cannot be used because of data availability. So, proxies for the best aggregate indicators are identified.

As indicated earlier, this work does not attempt to present any definitive picture of the causal statuses of variables used in analysis. Furthermore, the basic perspectives used in this work that can be associated with earlier literature are viewed as being neutral with respect to causal status. Thus, the framework used to explain the relation of interest group creation and survival in relation to other political system organizations could equally well be used to explain the creation and survival of political parties in relation to government agencies and interest groups. In this work, interest groups have been chosen as an explanatory focus simply because of the author's substantive interests and because of the necessity of placing some limits on the scope of the dissertation.

Organizational Creation and Survival

Leadership Absorption Patterns

Organized interest groups cannot be created and cannot survive without leaders. Thus, the distribution of potential leaders is an important element in any attempt at explaining the creation and survival of such groups. To the extent that political parties and government agencies absorb such leadership talent, one might expect that the number of interest group organizations which are created and which survive will be reduced.

In the case of political parties, their absorption of leaders and the consequent reduction of leadership available to found new interest groups and maintain them can be represented, in part, by the following variables:

1. change in number of parties in a jurisdiction
2. change in average size of parties in a jurisdiction
3. change in the apparent electoral competitiveness of parties in a jurisdiction.

Variable (1) has a straightforward interpretation. Each party, regardless of size, must have some kind of central organization and, probably, at least a few subordinate local organizations. Thus, as the number of parties increases, more people must be found to fill the basic leadership positions in the fundamental organizational structure of parties. Variable (2)'s importance arises from the fact that as parties increase in size, they will generally have a more complex internal structure requiring the services of greater numbers of leaders. The importance of this interpretation of variable (2) may be subject to qualification in situations where parties have a high

geographic concentration of members. Also, variable (2) is difficult to measure consistently in terms of actual formal party membership over time, and, as a practical accommodation of this difficulty, change in the average number of electoral supporters of parties will be used as a proxy for the true variable of interest.

Variable (3) is conceptually somewhat different from the other two listed indicators. It is not so much an indication of actual changes in the distribution of leaders among political system organizations as it is an indicator of the attractiveness of political parties compared to other types of political system organizations. To the extent that parties are perceived to be competitive by potential leaders, such potential leaders will be more likely to be attracted to parties as a means of effectively pursuing their preferences. That is, competitive parties appear to be more effective and attractive mechanisms for the pursuit of interests than other organizations, and relatively competitive party systems should tend to dampen the rate of interest group organization creation to a greater extent than relatively uncompetitive party systems. Similarly, competitive party systems should tend to dampen the survival rate of newly created interest group organizations.

The relation of variable (3) to demand for leaders arises from the fact that a party system which has an overall high degree of competitiveness is one in which existing party leaders of major parties may still feel some need to expand their ranks and infuse new human resources into their organizations. In a party system dominated by one extremely powerful party, there is little incentive for the leaders of such a party to add to their ranks, and there may even be some incentive to reduce the number of senior claimants on party

controlled benefits and rewards.¹ Small parties in an uncompetitive system may or may not see the attraction of new leaders and activists as a matter of primary importance. In any case, potential occupants of those types of positions will probably not be extremely interested in committing themselves to the smaller, less successful political parties in an extremely uncompetitive system.²

The absorption of leadership and executive resources by government agencies can, in part, be represented by the following variables:

1. changes in the number of major government departments
2. changes in the average number of employees in major government departments.

As each of these variables increases, one would expect the number of people available to serve as leaders in new interest groups to decrease. Conversely, decreases in such variables might be expected to free more people for participation in critical positions in new interest groups.

The basic perspective underlying the positing of these variables as important indicators of the availability of leaders for interest groups is similar to the perspective already discussed in relation to political parties. It is assumed that each major department requires a basic stock of leaders simply to organize and maintain its central functions. Thus, the greater the number of such

¹A similar view is developed in, William H. Riker, The Theory of Political Coalitions (New Haven, Conn.: Yale University Press, 1962)

²Two types of competition are actually considered in this work. One is an indicator of the spread of parties' legislative seats around a central value, and the other is an indicator of simple degrees of government stability. They are seen as reflecting different aspects of competition.

agencies, the greater the amount of leadership talent absorbed by filling those central positions. Furthermore, as agencies tend to become bigger (perhaps an implicit proxy for older as well) they tend to be characterized by more levels of control and management, and this leads to a further absorption of available leadership by government agencies.

Clearly, the political party and government employment variables just discussed are proxies for other variables which may more directly reflect explanatory factors of interest. Ideally, one would utilize actual measures of:

1. the number of leaders in political party organizations
2. the number of managers and executives in government departments.

However, good time series of these variables are not available, and analysis will have to be based on variables which are measurable and which are likely to have a high, but not necessarily perfect, correlation with those factors which would be the conceptually purest foundation for this work.

There is yet another major component of the set of political system organizations which may have an influence on the availability of leaders for new interest group organizations. That additional component is the set of existing (already created) interest group organizations. The existence of a large and complex set of established interest group organizations may reduce the number of people available to lead new groups and may also reduce the incentives for potential leaders of new groups to carve out a niche in the interest group universe. A complex set of existing organizations

may also increase the opportunities for the leaders of some existing organizations to transfer their talents to other established organizations rather than trying to pursue personal preferences through founding or joining new interest group organizations.

It could also be argued that the partially documented tendency of interest group organizations to define their domains in narrow and specific terms may mean that there is nearly always considerable potential for leaders from old organizations or from completely new leadership to define a base for a new organization.³ In other words, a large and complex set of existing interest group organizations may not severely restrict the opportunities for finding distinct foci and resource bases for new interest group organizations.

In any case, it is reasonable to assume that the set of existing interest group organizations may have some impact on the creation and survival of new groups via its effects on incentives perceived by potential leaders of new groups and its effects on the absorption of leadership groups. So, such possible effects should receive some attention in this work. Relevant effects connected with the set of existing interest groups could be examined using a variety of variables. Certainly, the number of existing interest group organizations could be used, and other variables such as the number of leadership positions in existing groups may also be worthwhile components of analysis. However, problems in data availability do not permit use variables which correspond exactly to those just noted. Thus, the major explanatory variable which will be

³ James Q. Wilson, Political Organizations, pp. 261-279

used to represent effects associated with the number of existing interest group organizations will be the number of interest groups which existed prior to the creation of groups in a given dependent variable observation and which survived until the time when the dependent variable data used in this study was collected.

The Perspectives of Non-Leading Members of Political Organizations

The rates of creation and survival of interest group organizations may depend upon the perspectives of those people who are potential, non-leading members of those organizations. In the context of this study, non-leading members of organizations are people who are willing to devote some time and/or material resources to organizations and who do not generally assume roles in the full-time bureaucracy or leadership positions within such organizations. Although this type of person is not as rare as the type of person who pursues and accepts leadership roles in organizations, such people are still a relatively scarce human resource in some communities.⁴ When these people are relatively scarce, their availability to participate in new activities may also have impacts on the rates of interest group organization and survival. The involvement of potential members of interest groups in political parties and/or government agencies may dampen those rates. Furthermore, the level of involvement of non-leaders in existing interest group organizations may also influence the creation and survival of new

⁴ Apart from some of the works cited in the second chapter, also see: Herbert H. Hyman and Charles R. Wright, "Trends in Voluntary Association Memberships of American Adults", American Sociological Review, XXXVI (April, 1971), 191-206; Alex Inkeles, "Participant Citizenship in Six Developing Countries", American Political Science Review, LXIII (December, 1969) 1132-1133; Murray Hausknecht, The Joiners (New York, N.Y.: Bedminster Press, 1962).

interest group organizations.

The absorption of non-leaders by political parties could be represented by a time series of the various parties' active membership roles or by time series data on the number of people participating in different non-leadership activities for parties. This sort of data is not available on a consistent basis for most jurisdictions. The best, consistently available indicator of political party membership, absorption is the indirect indicator embodied in the time series of the number of people who actually vote for each party, and it is this indicator which will be used as an explanatory variable in this work. One would expect this variable to be highly correlated with the purer, but unavailable, indicators which were mentioned as long as each party's portion of voters who are actually party members and active non-leading workers is reasonably constant over time.

It will be remembered that the earlier description of the perspective of potential leaders respecting political parties contained a party competition variable. This variable was to reflect potential leaders' assessments of the probable future value of participating in political parties rather than participating in interest group organizations. Non-leaders who have time and resources to devote to political organizations may also make some assessment of the probable future benefit of participating in parties as opposed to other types of organizations. To the extent that this is the case, a competition variable may also reflect one of the influences acting on the choices of non-leaders. At this time, it is not established that it would be best to use one type of competition indicator for leader related effects and another type for non-leader-related effects. Two types of competition indicators are

used in this work. One is referred to as an indicator of legislative party competition while the other is referred to as a government stability indicator. However, use of those two types of competition variables was not based on a distinction between leader and non-leader related effects.

The magnitude and structure of government employment could influence the number of people available to play non-leading roles in interest group organizations. This possibility arises from the fact that holding any sort of government position, even a non-executive one, generally places certain legal and/or traditional constraints on the amount of political and interest group activity which can be undertaken by the occupant of such a position. The exact nature of such constraints may vary across jurisdictions, but they are of some significance in every major Canadian jurisdiction. Consequently, changes in the total number of people involved in government jobs will be used as an explanatory variable in this work, and it is expected that marked increases in that variable will have a relatively weak, negative association with the number of interest groups which are created and survive.

Jurisdictional Factors

Jurisdictional analysis is not of central interest in this work. Furthermore, the specific political histories of jurisdictions studied in this work are not part of the dissertation's primary focus. However, some of the factors that may condition relationships of interest vary across jurisdictions. As will be evident later, such jurisdictional variation has been taken into account in a general way in analysis. Sometimes this is done by producing separate analyses for separate jurisdictions. Other times, this is accomplished by introducing categorical variables that represent different

jurisdictions. Of course, these types of techniques do not reveal the full detail of relevant jurisdictional variations.

In order to provide a better idea of the substantive factors that underlie interjurisdictional differences on variables which are a main part of analysis, some commentary on each jurisdiction used to generate data is provided below. Commentary covers both political and socio-economic factors.

The Federal Jurisdiction

The Canadian Federal political system from 1941 to 1968 provides one part of the data used in this analysis. The political system itself did not exhibit an extraordinarily high degree of party competition in terms of changes in government. The Liberal Party ruled for the entire period except for the tenure of the Diefenbaker government from 1957 to 1963. However, in terms of vote shares, the federal system was fairly competitive with four parties showing significant success in federal elections and a wide variety of minor parties presenting candidates. So, this jurisdiction does provide a moderate degree of variation on electoral competition and electoral outcome variables during the period of interest.

According to the data gathered for purposes of analysis in this work, there was study growth in the size of the federal government structure during the 1945 to 1968 period. However, dramatic and rapid growth in the size of the bureaucracy appears to have occurred in the years immediately after 1968. In part this later rapid growth was artifactual and resulted from the inclusion of existing non-civil service employees within the realm of the civil service.

The socio-economic systems served by the federal political system contain a great deal of regional and sectoral variation. On average, these systems are highly urbanized and refined with about half of the country's employment being generated in tertiary businesses and industries, over a third in secondary industries and only about a tenth still devoted to the primary sector.⁵ Approximately three quarters of the national population lives in urban communities. These figures relate to the final part of the time period analysed. At the beginning of the period, absolute levels of urbanization and economic refinement were not as high. So, the period of interest contained gradual increases in urbanization and economic complexity.⁶

The British Columbia Jurisdiction

For the first part of the 1945 to 1968 period, British Columbia was ruled by a Liberal-Conservative coalition government. This coalition was subjected to major electoral challenges from the C.C.F. In 1952 the Social Credit party came to power, consolidated its position in 1953 and governed until 1972. Throughout the years of one party dominance, there was still a reasonably high degree of competition exhibited in the popular vote. The C.C.F./N.D.P. and, to a lesser extent, the Liberal party obtained reasonably large and stable portions of the popular vote. As Chandler and Chandler note, B.C., like most western provinces, has a relatively low degree of

⁵ Economic Council of Canada, Living Together: A Study of Regional Disparities, 1977

⁶ Ibid.,

bipartism in its elections.⁷

Although British Columbia generates substantial income from primary resources, its employment structure is quite close to the national average. Employment is primarily in the tertiary sector with a very small percentage of employment arising directly in the primary sector. British Columbia also has about the same degree of urbanization as the nation as a whole.⁸

The Ontario Jurisdiction

Throughout the entire period to be analysed, Ontario was governed by one party. Even though the province has had extreme government stability, there is still a reasonably high degree of fractionalization and competition evident in the popular vote and overall allocation of legislative seats. The Liberal Party and the C.C.F./N.D.P. received substantial electoral support throughout the period to be analysed.

Ontario is the largest, most urbanized and economically sophisticated provincial jurisdiction considered in this work. Its levels of urbanization, secondary sector development and tertiary sector development are well above national averages.⁹

The Quebec Jurisdiction

Quebec was governed by the Union Nationale from 1944 to 1960. After 1960, it was controlled by Liberal governments until 1976 except for a brief period of Union Nationale resurgence during the 1960's.

⁷Marsha A. Chandler and William M. Chandler, Public Policy and Provincial Politics (Toronto, Ont.: McGraw-Hill Ryerson Limited, 1979) p. 55-56

⁸Economic Council of Canada, *Loc. cit.*

⁹*Ibid.*

Quebec has given rise to many minor parties in recent decades, but, at any given point in time, Quebec has been closer to being a two party system than any of the other jurisdictions already noted. The composition of the system has undergone certain transformations over the years. At first, it was essentially defined by competition between the Liberals and the Union Nationale. During and after the collapse of the Union Nationale, the nexus of the two party system became competition between the Liberals and the Parti Quebecois.¹⁰

Quebec has a high degree of urbanization and economic complexity. In terms of population, it is slightly smaller than Ontario.¹¹ The population is predominantly French-speaking, and this distinguishes Quebec from the other jurisdictions to be analysed. During the period of interest, Quebec had a somewhat slower rate of population growth than the other jurisdictions that are analysed.¹²

It is also of interest to note that Quebec has been portrayed as experiencing a major change in attitudes and expectancies during a large part of the 1941 to 1968 period.¹³ This period is often characterized as one of increasing modernization and secularization of Quebec society. To some extent, such changes in attitudes and values may be associated with concurrent economic changes.

¹⁰ Chandler and Chandler, op. cit., p.64

¹¹ Economic Council of Canada, Loc. cit.

¹² Chandler and Chandler, op. cit., p. 19

¹³ Dale Posgate and Kenneth McRoberts, Quebec, Social Change and Political Crisis (Toronto, Ont.: McLelland and Stewart, 1976) p. 31

Summary Comments

The jurisdictions used in this work's analysis are all highly urbanized and economically sophisticated. None of them underwent any truly deleterious socio-economic traumas between 1945 and 1968. Of course, from 1941 to 1945 socio-economic and political life were affected by the Second World War, and recovery from such effects were certainly a factor in Canadian life after the war. For the most part, all four jurisdictions exhibited steady, fairly rapid growth in economic activity and population.

Having noted the basic similarity of these jurisdictions with respect to general demographic and economic factors, it is useful to note that specific factors of their economic complexity do vary. For example, some jurisdictions have far more reliance on natural resources than others. Some are historically more significant in their development of high technology manufacturing than others, and there are other sources of interjurisdictional variation. With respect to such variables as language, culture, population growth and value changes, Quebec is clearly different from the other jurisdictions.

Turning to political system factors, all four jurisdictions had long periods of one party dominance. However, electoral competition and party fractionalization of the popular vote were still evident in all jurisdictions. Again, Quebec is somewhat different from the other jurisdictions in that Quebec had a greater degree of bipartisan competition than the others.

Chapter 4

METHODS AND ANALYTIC APPROACHES

The Nature of the Dependent Variable

Ideally, this work would be based on the data contained in one or more of the following time series:

1. the number of interest groups created in each year and the number of interest groups dissolved in each year
2. the number of interest groups in existence in each year, measured at the same point in each year

Either of these sets of data could be used as a basis for a straightforward examination of the creation and survival of interest group organizations over time. The former set would permit analysis of the specific flows or changes which combine to produce net changes in the number of interest group organizations. The latter set would permit analysis of the total stock or level of interest groups and changes in that stock over time.

Unfortunately, these sorts of time series are not available. However, cross-sectional data does exist which can be used to explore some aspects of the questions which served as an impetus for this study. Specifically, some of the data collected by R.V. Presthus in his study of Canadian and American interest groups can be used to construct an estimated distribution of interest group organizations

by year of creation.¹ Since this estimated distribution relates to the universe of interest group organizations that existed during the time that the Presthus study was conducted, it reflects the outcome of both processes of interest group creation and processes of interest group survival. This is the case because some of the interest groups created in any given year would probably have ceased to exist during the time between that year and the time when the Presthus data was gathered. So, the Presthus data contains information about interest groups which have been created at various points in the past and which have survived until a particular point in time.

The major implication of the Presthus data for this analysis is that the dependent observations to be examined must be viewed as groups of interest group cohort survivors, not as true time series scores. The interest group organizations which were created in a given year and which survived until the time of the Presthus study constitute a group of survivors from a cohort. In this case, the defining characteristic of the cohort members is the year of their creation. A large number of these groups of cohort survivors can be extracted from the Presthus data, one for each year that can be associated with other relevant explanatory data. The entire set of these groups of cohort survivors forms the distribution of the values of this study's dependent variable. As an example, this

¹Robert Presthus, Elite Accommodation in Canadian Politics (New York, N.Y.: Cambridge University Press, 1973); Robert Presthus, Elites in the Policy Process (New York, N.Y.: Cambridge University Press, 1974)

distribution might take the following form:

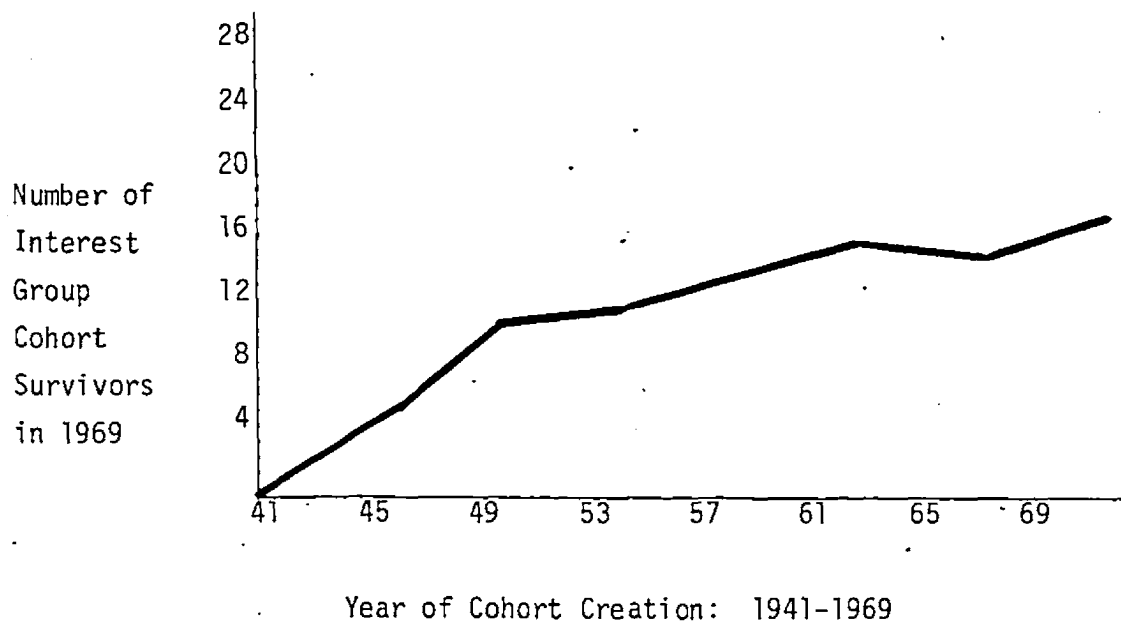


Figure 4.1

Example of Dependent Variable Distribution

In fact, the Presthus data provides this sort of information for four Canadian jurisdictions. These four are the national or federal government, the province of British Columbia, the province of Ontario and the province of Quebec. So, one can really examine four different distributions of the kind diagrammed above using available data, or, one can examine various combinations of these distributions. In this study, some analysis will be done separately for each jurisdiction, and some analysis will focus on the total data set, a combination of the data from four jurisdictions.

One may summarize the nature of this work's dependent variable by describing the basic unit of analysis which defines the dependent observations to be analysed. The basic unit of analysis in this study

is the group of cohort survivors, and the defining features of cohort membership are year of interest group organization creation and jurisdiction. Twenty-five to thirty groups of cohort survivors are associated with each jurisdiction, and the total data set contains slightly over 100 valid observations (the sum of 4 groups of 25 to 30 elements). The number of observations for each jurisdiction arises primarily from the fact that only cohorts formed between 1941 and the time of the Presthus data collection were used in the analysis. This number would vary from jurisdiction to jurisdiction since the Presthus project spanned several years and proceeded more quickly in some places than in others. Additional variation in the number of observations per jurisdiction was introduced by minor instances of missing or incomplete data. In any case, the number of observations per jurisdiction was generally in the range of 25-30 because the Presthus data was collected after about 25-30 years had elapsed since 1941, thus allowing time for the creation of twenty-five to thirty relevant groups of cohort survivors.

Clearly, this type of unit of analysis does not constitute a true time series or set of time series, but it does have some definable relationship with the passage of time. The most appropriate way to view the structure of these observations is to consider them as time referenced units in a cross sectional data set. Similar kinds of data sets can be found in cross sections which use age groups as a unit of analysis, cross sections of survivors of other types of cohorts, or cross sections of groups defined in other ways for which

time linking retrospective data has been collected.² Time referenced, cross sectional data provides an extremely useful, although not perfect, basis for analysing time related processes to which time series or longitudinal measurement techniques have not been applied. Either for reasons of lack of research resources or lack of foresight, good time series or longitudinal measurements are not available for a great number of important time related social processes.

The Nature of the Explanatory Variables and Analysis of Creation and Survival Processes

The primary explanatory variables used in this study are those governmental and political party variables which have already been discussed. Since these variables will be used to analyse a dependent variable which is the outcome of both creation and survival processes, it seems advisable to construct these explanatory variables in a manner which reflects effects resulting from either of these types of processes. In order to achieve this representation of two different processes and two different kinds of relationships, each explanatory variable previously discussed will actually be represented by two operative variables. One of each of these pairs of variables will be used as an indicator of relationships relevant to the creation of interest group organizations, and the other member of each of these pairs will be used as an indicator of relationships relevant to the survival of interest group organizations. The logic of this pairing of variables is described in the following comments.

²For a discussion of methodological issues in the expanding use of retrospective, time referenced research, see: David L. Featherman, Retrospective Longitudinal Research: Methodological Considerations (Reprint 382) (Madison, Wisconsin: Institute for Research on Poverty, 1980) which originally appeared in the Journal of Economics and Business, Vol. 32 (1979-1980), 152-169

First, let it be assumed that the number of organizations in one of the groups of cohort survivors being analysed can be expressed in the following way:

$$N_{ij} = (C_{ij} - D_{ij})$$

where;

N_{ij} = the number of organizations surviving from the cohort created in year "i" in jurisdiction "j"

C_{ij} = the original size of the cohort of organizations created in year "i" in jurisdiction "j"

D_{ij} = the number of organizations in the original cohort (C_{ij}) which have ceased to exist between the year "i" and the time of data collection

Thinking of this in terms of a hypothetical explanatory system with a single variable to represent creation relationships and one other variable to represent survival relationships, one could express the components of the preceding identity for N_{ij} in the following way:

$$C_{ij} = f(X_1)$$

$$D_{ij} = f(X_2)$$

and, therefore;

$$N_{ij} = f(X_1) - f(X_2)$$

Of course, the actual relationships to be examined later in this work involve a greater number of explanatory variables, but an increase in the number of explanatory variables would not greatly alter the generality of the comments presented at this point.

Since processes involved in creating interest groups and the processes involved in their survival relate to different periods of

time, X_1 and X_2 must be defined in ways which reflect these different relationships to time. A specific example will serve to illustrate how this difference has been introduced into all pairs of explanatory variables used in this analysis. For, illustrative purposes, it can be assumed that X_1 and X_2 represent two different aspects of the general explanatory factor which was referred to earlier as, "change in the number of political parties". In this case, we have:³

X_1 = average change in the number of political parties in existence just prior to the year a given cohort was created

X_2 = average change in the number of political parties in existence during the period between cohort creation and the time when numbers of cohort survivors are actually measured

³It will be noted that, in this example, variables are averages of change occurring over relevant periods of time. This is generally the case for most explanatory variables. This approach avoids some problems associated with total change defined on variable periods of time.

Computation of most variables mentioned earlier follows this simple average change approach. One variable which involves further complexities is the legislative competitiveness variable. In computing this variable, the following procedure is used:

- (1) Find the deviation of each party's number of seats in a legislature in a given year from a central value representing the number of seats needed for a bare majority.
- (2) Divide those deviations by the size of the legislature to adjust for interjurisdictional scale variations.
- (3) Add these adjusted deviations for a given year.
- (4) Use the total adjusted deviations as the input into the average change computations already defined. This will provide average change in legislative competitiveness for relevant periods of time.

Basically, the greater the spread or deviation around a central value the less the competition. As parties all converge closely to the central or majority value, effective competition increases.

Computation of the government stability variable is also somewhat different from computation of most of the other variables.

So, X_1 represents that aspect of change in the number of political parties which may be related to interest group organization creation, and X_2 represents that aspect of the change in the number of political parties which may be related to the survival of interest groups.

The following diagram provides additional illustration of the difference between X_1 and X_2 in terms of a specific group of cohort survivors (the group of survivors from the 1953 cohort):

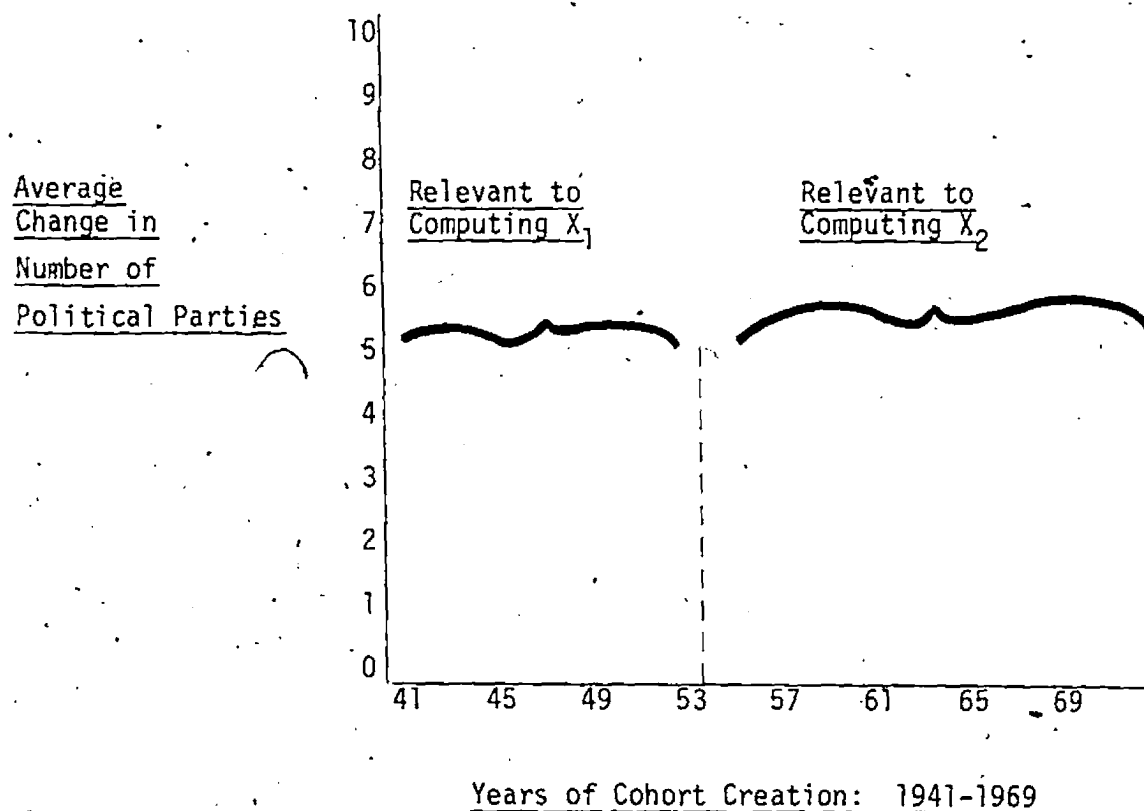


Figure 4.2

Example of Time References of Two Paired Explanatory Variables

For other years of cohort creation, other partitions of explanatory variable observations would be relevant to examination of creation and survival.

One point which is not obvious from the preceding figure is that the specific computations of values for creation related variables are not based on a complete utilization of data from all possible years which precede the generation of a particular cohort. Specifically, computations of creation variable values generally utilize data from the year of cohort creation and the two years immediately prior to that year. This computation procedure was adopted because of an assumption that any strong relationship between interest group organization creation and aspects of other political system organizations would emerge over a fairly short period of time. Alternatively, computations of values of survival related explanatory variables are generally based on a complete utilization of all possible years. That is to say, such survival related values are generally based on data for all years between the year of a given cohort's creation and the time of cross-sectional measurement. This approach to defining and computing survival variables seemed justified because the survival of an organization can potentially be affected throughout its existence. In the future, as more knowledge of the development of organizations is accumulated, other kinds of assumptions may prove to be more appropriate. However, there is little currently available information which provides a basis for specific alternative assumptions.

Another part of the problem of defining appropriate forms of explanatory variables is the decision as to whether change or level versions of such variables will be used, and this is a decision which deserves some brief discussion. Level variables, sometimes referred to as "stock" variables in certain social science literature, are variables which indicate the actual size or magnitude of some

characteristic of a unit of analysis at a given point in time. Change variables, also referred to as "flow" variables, indicate the net change in a characteristic of a unit of analysis between given points in time.

Ultimately, it was decided that the more appropriate form of most of the explanatory variables used in this study would be the change or flow version. The major reasons for this decision are as follows:

1. The dependent variable in this work is really a change variable in that it relates to new flows of surviving interest group organizations generated in a series of years, not the total level or stock of interest group organizations which may have existed at different points in time and which survived until some later point in time. Thus, it seemed reasonable to construct most of the explanatory variables using a logic which is comparable to the logic underlying the form of the dependent variable.

2. Use of the change versions of explanatory variables would reduce the correlation of such variables with various socio-economic variables which may play a role in creating changes in the scale of the explanatory variables and/or the dependent variable. By reducing those possible correlations, it becomes less likely that large correlations between the explanatory variables and the dependent variable are simply due to their joint correlation with such factors as population growth.

3. For some parts of the analysis, it is desirable, for statistical reasons, to reduce the intercorrelations of explanatory variables, and this reduction in intercorrelation can usually be

achieved more easily with change versions of variables rather than with level versions of variables.

The principal disadvantage of change variables is that their relationships with a dependent variable cannot always be described in as simple and clear a fashion as can comparable relationships which have been tested in terms of level variables. In discussing the apparent effects of change variables, one cannot always simply speak of a rise in the amount of some factor leading to an increase or decrease in the amount of a dependent variable. With change variables, one is sometimes confronted with discussing the relationship of increases or decreases in changes in explanatory variables to changes in a dependent variable, and this can be cumbersome. However, for the purposes of this work, the statistical and methodological advantages of change versions of explanatory variables outweigh occasional opaqueness in the descriptions of the relationships in which those variables may be involved.

Specific Phases of Analysis

The results presented in the next major section are divided into three major phases or stages. These phases are discussed in the next set of paragraphs.

First of all, creation and survival relationships between the dependent variable and each of the explanatory variables are examined without dividing the data according to jurisdiction. Simple Pearson correlation coefficients are used. This phase of analysis provides an overview of the relationships of interest in their most unrefined form. Jurisdiction and trend factors which may affect relationships are not

controlled in any sense.

In the second phase of analysis and presentation, the relationships noted in the preceding paragraph are reexamined in a more controlled context. Specifically, implicit controls for jurisdiction and year of cohort creation are simultaneously introduced. The rationale for considering each of these factors is provided below:

1. Examining correlations within jurisdictions constitutes an implicit control for possible fixed (non-trend) effects of socio-economic and political system scale factors which may vary across jurisdictions. The detailed fixed effect of each possible socio-economic or scale variable is not dealt with in this work for a variety of practical and statistical reasons. Primarily, such factors are not taken into account in a detailed way because of the difficulty of effectively supporting such analysis with a relatively small number of dependent variable observations. Explicit statistical control for a jurisdiction "variable" is not attempted at this point in the analysis because the categorical nature of the control variable is not consistent with a proper application of correlation techniques. However, explicit statistical control for jurisdiction effects is introduced later using dummy variables in a multiple regression.

2. All the within jurisdiction correlations noted in point 1 are converted into partial correlations in which explicit control variable is "year of interest group cohort creation". This provides an indirect control for the possible effects of trends in socio-economic and system scale variables on the relationships of central interest. Again, effective, detailed and direct control for trends

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in each possible socio-economic or scale factor is not attempted because available data would really not efficiently support such analysis. Since the data is being treated as cross-sectional data, this sort of control is not to be considered as true trend analysis. It is part of a cross-sectional control strategy which uses a variable (year of cohort creation) that positions the different cross-sectional dependent observations in relation to underlying trends that may have influenced the final structure of the cross-sectional data of interest.

In the third and final major phase of analysis, some of the implications of the total structure of correlations among major variables are identified and examined. The purposes of this part of the analysis are twofold. First, this analysis should provide some indication of the relative importance of major explanatory variables by showing how much of the variation of the dependent variable can be accounted for by the complete set of major explanatory variables. Second, it is hoped that this aspect of the analysis will provide additional insights into the possible causal structure which determines the relationships among the variables of central interest in this work. The primary statistical technique which will be used in order to pursue these two purposes of the final phase of analysis is multiple regression.

Chapter 5

RESULTS AND PRELIMINARY DISCUSSION.

Basic Relationships for the Total Data Set

Creation Relationships

The following table shows the associations between the creation versions of explanatory variables and the dependent variable, the number of interest group cohort survivors. At this point in the presentation, results are not differentiated by jurisdiction. The cohorts of interest are all cohorts created from 1941 to 1968, inclusive, in all four Canadian jurisdictions under consideration.

Viewed in terms of the signs (positive or negative) of the relationships which would be expected from earlier discussion of hypotheses, 4 out of 8 the basic creation relationships are consistent with initial expectations. However, the most important feature of these relationships is the absence of truly strong correlations. Only two correlations approach substantial strength. These are the correlations between the number of interest group cohort survivors and changes in total vote and between the number of interest group cohort survivors and the change in the number of active political parties.

This sort of result should really not be too astonishing since the strength and/or sign of some of the correlations could be

Table 5.1

Correlations Between Creation Versions of Explanatory
Variables and Number of Interest Group Cohort
Survivors

Explanatory Variable	Pearson Correlation	Number of Observations	Significance
Change in Civil Service Size	.02	93	.423
Change in Number of Government Departments	.02	93	.431
Change in Average Department Size	.07	93	.239
Change in Total Vote *	-.20	93	.028
Change in Number of Political Parties *	-.16	93	.057
Change in Average Vote Per Party *	-.05	93	.329
Change in Legislative Party Competitiveness	.06	93	.280
Change in Government Stability *	.10	93	.172

* An asterisk indicates that the relationship had a sign which was consistent with initial expectations.

affected by fixed jurisdictional factors, trend factors which are represented in the cross-sectional data in a skewed way, and a variety of other factors which have not yet been controlled.

Survival Relationships

The next table presented in this section shows results for the survival or "post-creation" counterparts of the creation relationships which were just examined.

Table 5.2

Correlations Between Survival Versions of Explanatory Variables and Number of Interest Group Cohort Survivors

Explanatory Variable	Pearson Correlation	Number of Observations	Significance
Change in Civil Service Size After Cohort Creation *	-.01	93	.480
Change in Number of Government Departments After Cohort Creation *	-.05	93	.322
Change in Average Department Size After Cohort Creation	.08	93	.235
Change in Total Vote After Cohort Creation *	-.02	93	.409
Change in Number of Political Parties After Cohort Creation *	-.26	93	.006
Change in Average Vote Per Party After Cohort Creation	.23	93	.012
Change in Legislative Party Competitiveness After Cohort Creation *	-.23	93	.012
Change in Government Stability After Cohort Creation	-.34	93	.001

* An asterisk indicates that the relationship had a sign which was consistent with initial expectations.

More than half of the correlations in that table are extremely close to zero. Again, one sees strong correlations relating to change in the number of political parties and change in average vote per party. In contrast with the correlations for the creation relationships, there are also relatively strong correlations for the survival versions of the legislative competitiveness variable and the change in government stability variable.

With respect to the signs of the larger correlations, the following points are noteworthy:

(1) As would be expected from earlier comments in this work, the relationship between number of interest group cohort survivors and the survival version of the number of political parties variable is negative. The greater the rise in the number of political parties after cohort creation, the smaller the number of interest group cohort survivors.

(2) The sign of the correlation relating to the survival version of the change in average vote per party variable is positive, and this is not in accordance with initial expectations. The number of interest group cohort survivors increases the greater the increase in the size of changes in average voter per party after cohort creation.

(3) The sign of the correlation relating to the survival version of the change in legislative competition variable is negative, and this is consistent with initial expectations. The greater the rise, or the smaller the decrease, in competitiveness during a survival period, the lower the number of interest group cohort survivors. Thus, as opposition parties become increasingly viable

instruments for the pursuit of preferences, the value of maintaining existing interest groups would appear to decrease.

(4) The sign of the coefficient relating to the change in government stability variable is negative, and this was not expected to be the case. This indicates that the greater the rise, or the smaller the drop, in governing party stability after cohort creation, the smaller the number of interest group cohort survivors. So, at this stage, it appears as though increases in governing party stability do not necessarily reduce the attractiveness of pursuing preferences through political parties and increase the desirability of maintaining existing interest groups. Perhaps increased government stability has a different relationship with the survival of interest groups than it has with the creation of such groups. It may be the case that government stability encourages the creation of non-governmental organizations as instruments of action, but continuing stability after such organizations are created impedes their success and the probability of their survival.

The Number of Surviving Pre-Cohort Interest Groups

The Presthus data can also serve as a basis for constructing an indicator of the number of interest groups which existed prior to the creation of each cohort and which survived until the time of data collection. Using this type of variable as an explanatory factor is similar to situations in which a stock or level variable is used to explain the magnitude of net changes between the values of later stock measurements. It is conceivable that this variable would be highly correlated with net changes in those later stock values or with

components of those changes. Since the dependent variable of interest in this study is essentially a component of changes in later stock values, it seems reasonable to examine the relationship between the number of surviving pre-cohort interest groups and the main dependent variable, the number of interest group cohort survivors. A reasonable case could be made for positing either a positive or a negative sign for the basic correlation between these two variables.

Respecting the possibility of a negative correlation, one could argue that a high number of interest groups which existed prior to and survived along with the cohort survivors would tend to decrease the usefulness of creating and/or maintaining additional interest groups. This might be viewed as a market saturation or diminishing returns perspective.

It could also be hypothesized that a large number of interest groups existing prior to and surviving along with cohort survivors tends to increase the number of forces against which people must protect themselves. This might create additional incentives for people to create and/or maintain more interest groups. This position might be characterized as a chain reaction argument or, possibly, a geometric escalation of competition argument.

In fact, when the correlation between the number of pre-cohort survivors and the number of cohort survivors was computed, it was found to be a high positive correlation of .46 (Sig. .001). This is by far the largest correlation encountered in the preliminary stages of analysis for this study. However, as will be evident from subsequent discussion, this is also one of the correlations which is most subject to dramatic fluctuations as other variables are

introduced as controls.

The variable for total number of surviving pre-cohort interest groups is different from many of the other explanatory variables which have been used in this work because creation and survival versions of that variable cannot be computed from the data at hand. It, like the main dependent variable, is itself a function of both creation and survival factors. One can only observe those pre-cohort interest groups which existed prior to the generation of each cohort and which survived until the time of the Presthus study. It may be a function of or related to many of the same types of variables which compose the main battery of explanatory variables used in analysing the dependent variable. So, there is some reason to think that the large correlation noted above might be markedly reduced by controlling for its relationships with other explanatory variables.

Summary of Results Based on Total Data Set Analysis

At this point in the analysis, it cannot be said that initial hypotheses have been strongly confirmed, but a few of those hypotheses have received some preliminary confirmation. Apart from considerations of the adequacy of initial theoretical expectations, two striking interpretive highlights emerge from the preceding tables. First, it appears as though the dependent variable is more strongly related to the survival versions of explanatory variables than to the creation versions of those variables. Second, it appears as though the dependent variable is more strongly related explanatory variables reflecting party characteristics and competition than to variables reflecting the size and structure of government bureaucracies.

The next stage of analysis is focused on determining whether or not these findings are confirmed when relevant relationships are examined in a more controlled context.

Introduction of Some Explicit and Implicit Controls:
Year of Cohort Creation and Jurisdiction

The relationships which have already been examined in a preliminary fashion will now be examined separately for each jurisdiction with an explicit control for year of cohort creation. All correlations relating to both the creation and survival versions of one explanatory factor are considered, and, then, discussion proceeds to a complete consideration of another explanatory factor. This pattern is repeated until each explanatory factor of interest has been dealt with.

All correlations pertaining to one explanatory factor are presented in a single table. The correlations which were presented earlier are included in these tables in order to enhance the reader's appreciation of how initial estimates of relationships change as explicit and implicit controls are introduced.

Change in Civil Service Size and the
Number of Interest Group Cohort Survivors

Table 5.3 contains the correlations relevant to the relationship noted in the above heading. Earlier, it was suggested that one might expect this factor to be negatively correlated with the dependent variable because increases in it may indicate civil service absorption leadership and membership resources which could be utilized by interest groups.

Table 5.3

Correlations Between Change in Civil Service Size Variables
and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.02 n=93 (.423)	r=.01 df=90 (.461)	r=-.01 n=93 (.480)	r=-.07 df=90 (.243)
Federal Jurisdiction	r=.23 n=25 (.138)	r=.23 df=23 (.138)	r=.03 n=25 (.449)	r=.03 df=23 (.449)
British Columbia	r=.45 n=21 (.021)	r=.45 df=19 (.021)	r=.24 n=21 (.147)	r=.25 df=19 (.147)
Ontario	r=.16 n=25 (.229)	r=-.20 df=22 (.171)	r=.35 n=25 (.043)	r=.13 df=25 (.265)
Quebec	r=-.13 n=22 (.288)	r=-.39 df=19 (.044)	r=.49 n=22 (.011)	r=.41 df=19 (.034)

- (1) "r" refers to either a zero order or partial r in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Respecting the creation relationships portrayed in table 5.3, it is found that the within jurisdiction correlations are noticeably larger than the total data set correlations. This is not unexpected, and such inflation of correlations is a common effect of moving from total data set correlations to correlations within geographic clusters.

Initial predictions of a negative sign for the correlations in this table are borne out for Ontario and Quebec, but they are not borne out with respect to the federal jurisdiction and British Columbia.

One basis for interpreting this result can be found in the fact that the data used in this study indicates that Ontario and Quebec contain a far greater number of interest group organizations than either the federal jurisdiction (as represented by an Ottawa sample) or the British Columbia jurisdiction. It may be the case that relatively small interest group systems are not associated with negative relationships between civil service size changes and creation of interest groups because the interest group system in such settings is simply too small and undeveloped to be a critical factor in determining the availability of personnel for government positions. In small interest group universes, the number of new interest groups may rise or fall as civil service size changes simply because both are responding to fluctuations in public demands and political participation. As a jurisdiction's political system matures and interest groups become a larger factor in such a system, then negative relationships between civil service size change and interest group organization creation may emerge as a result of greater overlapping demand for human resources.

Turning to survival relationships, it will be noted that these are all counter to preliminary hypotheses in that they are all positive when viewed in terms of jurisdiction level partial correlations. This may indicate that once interest groups are created they have a symbiotic rather than a competitive relationship with civil service size

changes. Increases in the number of created and surviving interest group organizations may increase the probability of justifying new government personnel since additional staff may be needed to deal with demands and proposals emanating from an enlarged set of interest groups. Conversely, relatively small numbers of survivors from interest group cohorts may decrease the probability of justifying new government personnel.

Change in the Number of Government Departments
and the Number of Interest Group Cohort Survivors

Here, the explanatory factor was primarily viewed as reflecting changes in government demand for leadership personnel, and it was posited that this factor would be negatively related to the dependent variable.

Table 5.4 shows mixed results with respect to creation relationships. The federal jurisdiction and Quebec are associated with positive correlations while British Columbia and Ontario are associated with negative correlations. There is no straightforward explanation for this finding, but it is clear that the initial hypotheses respecting these correlations are not clearly confirmed.

Survival relationships provide somewhat greater confirmation of initial expectations. Three of the four jurisdiction level partial correlations are negative, but none of these partial correlations are very large, the largest being $-.28$ for Quebec.

Table 5.4

Correlations Between Changes in the Number of Government Departments and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.02 n=93 (.431)	r=.00 df=90 (.500)	r=-.05 n=93 (.322)	r=-.14 df=90 (.091)
Federal Jurisdiction	r=.21 n=25 (.157)	r=.22 df=22 (.146)	r=-.16 n=25 (.218)	r=-.16 df=22 (.224)
British Columbia	r=-.14 n=21 (.271)	r=-.20 df=18 (.200)	r=.13 n=21 (.290)	r=-.18 df=18 (.224)
Ontario	r=.02 n=25 (.453)	r=-.05 df=22 (.408)	r=.33 n=25 (.056)	r=.12 df=22 (.290)
Quebec	r=.25 n=22 (.128)	r=.31 df=19 (.086)	r=-.07 n=22 (.378)	r=-.28 df=19 (.107)

- (1) "r" refers to either a zero order or partial correlation coefficient in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

The mixture of signs revealed in the above table, and the relatively small size of the partial correlations which appear there could mean several things. Some possible interpretations are as follows:

- (1) The explanatory variables used are not good proxies for changes in demand for civil service leadership personnel.

(2) The explanatory variables used may be involved in relationships which would only emerge with the application of more explicit controls.

(3) The explanatory factor in question is not strongly and consistently related to the dependent variable.

Change in Average Government Department Size
and the Number of Interest Group Cohort Survivors

The explanatory factor of interest here was expected to be negatively related to the dependent variable. Again, this factor was viewed as primarily representing changes in government demand for leaders and managers.

Creation relationships are portrayed in Table 5.5 on the next page. These relationships are consistent with initial expectancies in the cases of Quebec and Ontario, but they are counter to initial expectancies for British Columbia and the federal jurisdiction. This result can be viewed in the same way as creation relationships pertaining to changes in civil service size. There is a definite difference between jurisdictions that have large stocks of interest groups and jurisdictions with relatively small stocks of those organizations. Negative relationships between the explanatory factor and the dependent variable are triggered only as interest group organizations become a fairly major part of a jurisdiction's political system.

Table 5.5

Correlations Between Changes in Average Government
Department Size and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.07 n=93 (.239)	r=.11 df=90 (.159)	r=.08 n=93 (.235)	r=.03 df=90 (.394)
Federal Jurisdiction	r=.10 n=25 (.320)	r=.09 df=22 (.331)	r=.05 n=25 (.405)	r=.09 df=22 (.346)
British Columbia	r=.37 n=21 (.051)	r=.42 df=18 (.034)	r=.08 n=21 (.373)	r=.13 df=18 (.291)
Ontario	r=-.10 n=25 (.317)	r=-.18 df=22 (.201)	r=-.25 n=25 (.115)	r=-.09 df=22 (.333)
Quebec	r=-.20 n=22 (.192)	r=-.46 df=19 (.018)	r=.52 n=22 (.007)	r=.45 df=19 (.021)

- (1) "r" refers to either a zero order or a partial correlation coefficient in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Survival relationships shown in the preceding table are generally counter to initial hypotheses. Three positive jurisdiction level partial correlations and one, small negative correlation are found in that table. This too may be weak evidence of symbiotic relationships between changes in government personnel levels and the dependent variable. However, support for this type of interpretation is not as comprehensive in this situation as it was with respect to

changes in total civil service size.

Change in Total Numbers of Voters and the
Number of Interest Group Cohort Survivors

This is the first explanatory factor to be dealt with which does not relate to civil service size and structure. Results pertaining to this factor appear in Table 5.6. This factor is primarily used to indicate changes in the number of non-leading political system participants who are involved in or attached to some party. As pointed out earlier, the specific variables used here are really only proxies for actual numbers of people directly affiliated with some party organization.

Table 5.6

Correlations Between Changes in the Number of Voters and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=-.20 n=93 (.028)	r=-.19 df=90 (.033)	r=-.02 n=93 (.409)	r=-.02 df=90 (.410)
Federal Jurisdiction	r=-.34 n=25 (.050)	r=-.34 df=22 (.052)	r=.27 n=25 (.099)	r=.28 df=22 (.091)
British Columbia	r=.12 n=21 (.305)	r=.27 df=18 (.120)	r=-.24 n=21 (.150)	r=-.07 df=18 (.386)
Ontario	r=-.17 n=25 (.208)	r=-.26 df=22 (.114)	r=.28 n=25 (.092)	r=.12 df=22 (.295)
Quebec	r=-.27 n=22 (.109)	r=-.32 df=19 (.078)	r=.01 n=22 (.475)	r=.21 df=19 (.177)

- (1) "r" refers to either a zero order or a partial correlation coefficient in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Creation relationships for the total vote variables were expected to be negative, and three out of four of the jurisdiction level partial correlation coefficients are negative. The zero order correlations and the partial correlations for the total data set are also predominantly negative. The exception to this pattern is British Columbia. It may be the case that in British Columbia party and interest group orientations are more complementary than is the case with such orientations in other jurisdictions. For example, participation in voting in British Columbia may be an expected extension of commitment to some labour or business organization rather than an alternative to or substitute for those types of commitments.

Survival relationships are predominantly positive and counter to initial hypotheses. In this instance, British Columbia is the only jurisdiction for which results are (weakly) consistent with preliminary expectancies. One could interpret the results for survival relationships as meaning that increases in party activity for non-leaders tend to preserve interest group organizations once they are created. Decreases in that sort of activity may weaken potential for interest group organization survival.

In general, it would appear as though interest groups and party oriented behaviour are alternatives with respect to interest group organization creation. However, once interest group organizations are created, they tend to survive or dissolve in a manner which is positively related to changes in participation in political parties. Relationships are competitive or countervailing at the creation stage and more symbiotic subsequent to creation.

It is worth noting that the difference between creation relationships and survival relationships which has emerged in several tables is important not only because it does not completely confirm hypotheses but also because it provides some new and potentially useful insights. Specifically, this difference between types of relationships indicates that any comprehensive model of relations among political system organizations would have to be sufficiently complex to allow a given variable to have different types of effects at different stages in time. As will be seen later, this has some interesting implications for changes in the causal role of a given explanatory factor over time.

Changes in the Number of Political Parties
and the Number of Interest Group Cohort Survivors

It was expected that this explanatory factor would be negatively related to the dependent variable with respect to both creation and survival. Table 5.7 shows that this expectancy is borne out for most computable coefficients. The only exceptions to this finding for computable coefficients is found in the coefficients for survival relationships pertaining to British Columbia.

The coefficients for the federal jurisdiction are not computable because the number of parties variable was truncated at the value 8 to facilitate coding. Unfortunately, federal elections have always involved 8 or more parties of some kind, many of them very small parties. As a result of this truncation and as a result of the actual number of federal parties, the value of the change in number of parties variable was actually constant across all federal observations, and it is not possible to compute a correlation between

a variable and a constant. However, it is possible to include federal observations in total data set computations because the existence of variation in other jurisdictions' number of parties values ensures the total data set distribution cannot be described by a constant.

Table 5.7

Correlations Between Changes in the Number of Political Parties and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=-.16 n=93 (.057)	r=-.16 df=90 (.070)	r=-.26 n=93 (.006)	r=-.24 df=90 (.012)
Federal Jurisdiction	Not Computable	Not Computable	Not Computable	Not Computable
British Columbia	r=-.20 n=21 (.193)	r=-.14 df=18 (.283)	r=.16 n=21 (.250)	r=.14 df=18 (.278)
Ontario	r=.00 n=25 (.500)	r=-.06 df=22 (.386)	r=-.36 n=25 (.037)	r=-.22 df=22 (.147)
Quebec	r=-.21 n=22 (.173)	r=-.15 df=19 (.265)	r=-.25 n=22 (.132)	r=-.20 df=19 (.200)

- (1) "r" refers to either a zero order or a partial correlation coefficient in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Changes in Average Vote Per Political Party
and the Number of Interest Group Cohort Survivors

This factor was primarily intended to be a proxy for changes in the average size of party organizations. It was hypothesized that this factor would be negatively related to the dependent variable because increases in party size might reduce the supply of leaders available for interest group organizations. Increases in party size may also have some relationship to the availability of active, non-leading participants for interest group organizations.

Table 5.8

Correlations Between Changes in Average Vote Per Political Party and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=-.05 n=93 (.329)	r=-.06 df=90 (.291)	r=.23 n=93 (.012)	r=.22 df=90 (.018)
Federal Jurisdiction	r=-.34 n=25 (.050)	r=-.34 df=22 (.052)	r=.27 n=25 (.099)	r=.28 df=22 (.091)
British Columbia	r=.16 n=21 (.248)	r=.25 df=18 (.142)	r=-.24 n=21 (.143)	r=-.09 df=18 (.354)
Ontario	r=-.14 n=25 (.254)	r=-.16 df=22 (.234)	r=.33 n=25 (.054)	r=.17 df=22 (.216)
Quebec	r=.08 n=22 (.357)	r=-.07 df=19 (.378)	r=.26 n=22 (.117)	r=.22 df=19 (.173)

- (1) "r" refers to either a zero order or a partial correlation in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Table 5.8 shows that initial hypotheses are fairly well confirmed for creation relationships when such relationships are considered in terms of partial correlations. Only the partial correlation for British Columbia is positive.

Survival relationships are not generally consistent with initial hypotheses. All but one of the partial correlations for those relationships is positive. British Columbia is, once again, the exception to the pattern.

These results give added weight to some interpretation which has already been presented with respect to other explanatory factors. It appears as though interest group organizations often have competitive or countervailing relationships with other political system organizations during interest group organization creation. Once interest group organizations are created, they tend to have some symbiotic relationships with other elements in the organized political system. At least, this seems to be true for some of the explanatory factors considered in this study.

Changes in Legislative Party Competition and the Number of Interest Group Cohort Survivors

This factor was expected to have a negative relation with the dependent variable. In other words, it was anticipated that increases in party competition (as represented in the allocation of legislative seats) would reduce the need for leaders and non-leading participants to pursue desired action through interest group organizations. This type of factors is different from many of the explanatory factors already discussed in that it represents a possible element in the strategic perceptions of political actors as well as an objective characteristic of an institutional or organizational element in the

political system.

Table 5.9

Correlations Between Changes in Legislative Party Competition
and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.06 n=93 (.280)	r=.07 df=90 (.254)	r=-.23 n=93 (.012)	r=-.30 df=90 (.002)
Federal Jurisdiction	r=.42 n=25 (.019)	r=.42 df=22 (.022)	r=-.11 n=25 (.300)	r=-.11 df=22 (.311)
British Columbia	r=-.28 n=21 (.111)	r=-.24 df=18 (.159)	r=.35 n=21 (.060)	r=.25 df=18 (.147)
Ontario	r=-.03 n=25 (.451)	r=-.03 df=22 (.442)	r=-.02 n=25 (.458)	r=-.29 df=22 (.082)
Quebec	r=.03 n=22 (.439)	r=.07 df=19 (.378)	r=-.27 n=22 (.111)	r=-.32 df=19 (.081)

- (1) "r" refers to either a zero order or a partial correlation in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Table 5.9 shows mixed results for creation relations. British Columbia is represented by a reasonably strong negative relationship, and Ontario is represented by a very weak negative relationship. Correlation coefficients for the federal jurisdiction and for Quebec are positive. The correlations for the federal jurisdiction are quite large, and those for Quebec are quite small. Basically, this set of

correlations does not provide strong confirmation for initial hypotheses or for many obvious alternative hypotheses.

Survival relationships for the competition factor are, for the most part, consistent with initial hypotheses. All salient correlations are negative except for the ones associated with British Columbia. This additional example of British Columbia's divergence from the main pattern of results suggests that relationships between parties and interest groups in that jurisdiction may be affected by some scale or maturation factor that is not operative in other jurisdictions.

Changes in Government Stability and the Number of Interest Group Cohort Survivors

Degrees of party competition in legislatures can not only be viewed in terms of the actual allocation of legislative seats but can also be viewed in terms of gross electoral outcomes such as changes in governing party, reduction of governing party to minority status, lack of change in governing party and similar types of electoral results. Such gross outcomes may be a more common part of people's perceptions and calculations than the type of competition variable examined in the preceding section. So, it seemed advisable to assess correlations between a government stability variable and the dependent variable. The wisdom of this additional analysis was enhanced as a result of the mixed findings confronted in examining the legislative party competition variable.

The government stability variable is a rank order variable expressing gradations of overall change in status of the party which was in power prior to the most recent election in the case of

creation relationships. In the case of survival relationships, it is an average of changes in governing party statuses during the survival period. Correlations were computed in a manner that is appropriate for such data, but they have a somewhat different meaning than regular Pearson zero order correlations and partial correlations.

Table 5.10

Correlations Between Changes in Governing Party Stability and the Dependent Variable

Jurisdiction	Creation Relations		Survival Relations	
	Zero Order r's	Partial r's Controlling for Year of Cohort Creation	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.10 n=93 (.172)	r=.09 df=90 (.209)	r=-.34 n=93 (.001)	r=-.31 df=90 (.002)
Federal Jurisdiction	r=.30 n=25 (.074)	r=.32 df=22 (.061)	r=-.26 n=25 (.102)	r=-.27 df=22 (.099)
British Columbia	r=.50 n=21 (.011)	r=.43 df=18 (.030)	r=-.49 n=21 (.012)	r=-.42 df=18 (.032)
Ontario	r=.22 n=25 (.151)	r=.02 df=22 (.456)	r=-.23 n=25 (.130)	r=-.05 df=22 (.416)
Quebec	r=.03 n=22 (.449)	r=.07 df=19 (.380)	r=-.36 n=22 (.049)	r=-.27 df=19 (.116)

- (1) "r" refers to either a zero order or a partial correlation in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Table 5.10 shows the results of assessing relationships between governing party stability and number of interest group cohort survivors. Given the perspective on behaviour which guided the construction of this work, one would expect such relations to be positive. It was assumed that increasing stability of government would be an indication of lack of operative, effective competition. So, an increase in stability should lead to an increase in the number of interest group organizations as people seek non-party mechanisms for pursuing their preferences.

Results for creation relations confirm the preliminary behavioural perspective on which this work is based. All correlations are positive. However, it should be noted that the correlations for Ontario and Quebec are quite small.

Survival relations are consistent with one another, but they are all negative. Consequently, they are not consistent with preliminary hypotheses. The partial correlation for Ontario is quite small, and this is probably a result of the lack of variability in Ontario electoral outcomes in the 1940's, 1950's and 1960's. These results lend some credence to the view that increases in government stability tend to reduce the probability of interest group organizational survival. However, these findings can also be viewed in terms of an alternative conception of causal directions. For example, one might interpret this set of negative correlations as meaning that small numbers of newly created and surviving interest groups tend to increase the probability of government stability.

Since the analysis presented thus far is not causally oriented, this sort of interpretation is not counter to the basic

nature of the analytic techniques which have been used. However, it is an interpretation which was not at the core of the basic perspective that guided the construction of many of this work's preliminary hypotheses. It may well prove to provide a useful path to greater insight into several explanatory factors for which the signs of creation relations are consistently opposite the signs of survival relations.

Number of Surviving Pre-Cohort Interest Groups
and the Number of Interest Group Cohort Survivors

Earlier, it was pointed out that it was possible to present sound justifications for expecting either positive or negative relationships between this variable and the number of interest group cohort survivors. Preliminary analysis based on the total data set revealed a very strong positive relationship.

Table 5.11 on the next page shows that this relation undergoes considerable change as controls are introduced. Partial correlations controlling for year of cohort creation are all negative. Furthermore, jurisdiction level partial correlations and jurisdiction level zero order correlations are generally smaller than the correlations for the total data set. This contrasts with the usual changes encountered when a total correlation is broken down into correlations for its component geographic clusters. Another noteworthy point is that the negativity of the partial correlations seems to increase with jurisdiction size.

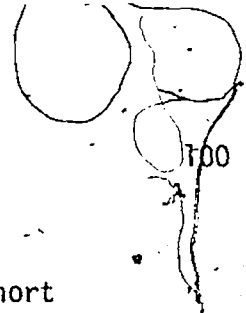


Table 5.11

Correlations Between the Number of Surviving Pre-Cohort Interest Groups and the Dependent Variable

Jurisdiction	Zero Order r's	Partial r's Controlling for Year of Cohort Creation
Total Data Set	r=.46 n=93 (.001)	r=.42 df=90 (.001)
Federal Jurisdiction	r=-.09 n=25 (.333)	r=-.52 df=22 (.004)
British Columbia	r=.28 n=21 (.113)	r=-.02 df=18 (.472)
Ontario	r=.29 n=25 (.079)	r=-.33 df=22 (.060)
Quebec	r=.24 n=22 (.138)	r=-.20 df=19 (.193)

- (1) "r" refers to either a zero order or a partial correlation in this table.
- (2) "n" and "df" denote relevant numbers of observations for purposes of significance testing.
- (3) Parenthesized figures are significance indicators.

Basically, these results probably mean that the creation and maintenance of new interest groups diminishes in value when large numbers of existing interest group organizations are already operative. However, the relation of interest is apparently fairly complex, and it would be premature to accept the pattern of the above results as definitive. If a more causally-oriented analysis were being conducted, then this relationship would be viewed as one which is embedded in a



number of major interactions with other explanatory factors, not all of which have necessarily been identified.

Initial positive estimates of the relationship between the number of surviving pre-cohort interest groups and the number of interest group cohort survivors seem to have been primarily due to the joint correlation of the two variables with underlying trends in socio-economic and system scale variables. Once the effects of such trends were, at least partially, removed the sign of the relation changed for all jurisdiction level partial correlations. The partial correlation for the total data set probably remained positive because it does not reflect the effects of the residual jurisdiction size relationship with degree of correlation negativity.

An Overview of Some of the Results of the Second Stage of Analysis

Before proceeding to the final stage of analysis, some attention will be given to the highlights of the results embodied in the series of tables just considered. The length and complexity of these tables and associated discussion create ample justification for some sort of intermediate summary.

Turning first to creation relationships, one finds that the introduction of some simple controls into the analysis generally confirms one aspect of findings in the first stage of analysis as well as some preliminary hypotheses. Specifically, the variables which remain most consistent with initial expectancies are those which relate electoral and political party phenomena. Alternatively, those variables which reflect aspects of civil service size and structure remain, for the most part, counter to preliminary hypotheses concerning

creation relationships..

In order to illustrate the preceding point, it can be noted that the creation versions of the following variables seem to behave as anticipated, although sometimes in a weak manner:

- (1) Changes in total vote
- (2) Changes in the number of political parties
- (3) Changes in average vote per party
- (4) Government Stability

In addition to these variables, one can also note that the relationship between the dependent variable and the variable for number of surviving pre-cohort interest groups is also subject to interpretation in a manner which is not inconsistent with the basic behavioural perspective which guide the direction of this work.

To illustrate the alternative point, one can observe that creation versions of the following factors either fail to confirm hypotheses or provide mixed indications:

- (1) Change in civil service size
- (2) Change in number of government departments
- (3) Change in average government department size
- (4) Change in legislative party competition.

Only the last variable primarily focuses on party and/or electoral phenomena.

It is of some value to know that the mixed results associated with at least two of the variables just listed can be linked to initial hypotheses in a meaningful way, but they do not clearly confirm the simple versions of those hypotheses. In particular, variables (1) and (3) are as hypothesized for jurisdictions with large numbers of

interest groups, but are not as expected for systems with relatively small interest group organization stocks. This may mean that these variables have some sort of special, interactive or intercorrelative relationship which cannot be clearly specified at this time in the context of a correlative analysis. However, further information about the nature of such interactions might tend to support a conception of these variables which was somewhat related to the conception embodied in the framework for this study.

Analysis of the survival aspects of relationships provides very limited support for the views outlined at the beginning of this work. Only two variables are related to the dependent variable in the anticipated way. These are:

- (1) Change in the number of government departments
- (2) Change in legislative party competition.

The variable for changes in the number of political parties produces mixed support for posited relations. Two out of three computable jurisdiction level partial correlations have appropriate signs. All other explanatory factors produce results which are counter to the structure of preliminary discussion and expectancies.

Nevertheless, the results for survival relationships do exhibit a pattern which may yield some new insights into the relationships between the number of interest groups and other political system organizations. The five variables which are not associated with the dependent variable in the expected manner are markedly and consistently opposite to expectations. This appears to mean that increases in the size and/or number of many non-interest group elements in the organized political system tend to increase rather than discourage interest group

activity once interest groups are already created. In other words, there may be a kind of symbiotic relationship among existing organizational components of the political system. This sort of relationship tends to encourage the maintenance and survival of created interest group organizations, and it is dramatically different from the types of relationships which exist between non-interest group variables and the creation of new interest group organizations. As indicated in previous commentary, many political system factors do seem to operate in a way which dampens the rate of creation of new interest groups or in a way which has a countervailing relationship with the rate of creation of such new groups.

The phrasing of the preceding interpretation of survival relationships is implicitly based on the idea that the explanatory factors of interest have some kind of causal impact on the number of interest group cohort survivors. Fluctuations in explanatory variables are viewed as somehow affecting the number of interest groups in a cohort which survive or dissolve. This idea is not a necessary part of this work's analytic technique, but it is an obvious outgrowth of a decision to regard one variable as a focus of explanation and other variables as the basis for or providers of explanation. This implicit blurring of the distinction between causality and explanation may have a sound a priori justification with respect to the analysis and interpretation of creation relations, and this justification arises from the linkage of creation variables to a time which precedes the time of creation of relevant cohorts. However, this type of justification does not necessarily apply to the interpretation of the

survival relations of interest. More implications of this distinction between the causal status of different types of explanatory variables, will be examined in parts of the following major section.

Some Regression Results and Their Implications

A Simple Equation Using All Explanatory Variables Examined Earlier

The results presented under this rubric are based on a simple regression of the dependent variable on all the explanatory variables that have been considered, directly and indirectly, in earlier discussion. Thus, the set of "independent" variables of interest for this equation consists of the creation and survival versions of each of the political system explanatory factors, dummy variables representing three out of four of the jurisdictions considered, and a year of cohort creation variable used to represent general time related factors which may not be explicitly reflected by other explanatory variables. Those readers who are familiar with the use of dummy variables in regression will realize that the omission of one jurisdictional "dummy" is dictated by standard regression construction procedures designed to allow conventional interpretation of regression coefficients.

The purpose of this sort of regression is twofold. First, it can provide a non-causal or predictive accounting of the variation in the dependent variable which can be accounted for by certain explanatory variables. Second, it can, under certain assumptions, provide some limited insight into the magnitude of direct causal paths from explanatory variables to the dependent variable. Some additional

analysis was done that is not presented here but which would possibly reveal more of the complexities of certain relationships. For instance, some interactive variables were examined. Also, the components of some of the indirect causal paths from explanatory variables to the dependent variable were examined during analysis. Ultimately, it was decided that these complexities should not be discussed in this test either because of a questionable balance between degrees of freedom and residual observations in particular models or because their implications did not have a sufficiently direct bearing on the main topic of interest in this work.

Turning first to the predictive or variance accounting aspect of a regression using all explanatory variables already discussed, one finds that such an equation accounts for almost 42 per cent of the variation in the dependent variable. The R^2 value which is equivalent to this percentage of explained variation is significant at the .01 level. So, this equation does have a reasonably high degree of predictive or multiple correlative importance. The equation was actually constructed in steps, and this procedure allows one to gain some additional insight into the relative predictive importance of different blocks of variables. Additional information on the relative predictive importance of variables was also found in examination of results showing each variables contribution to the final R^2 value.

The first step of equation construction involved using only creation versions of political system variables as predictors. This first step explained about 13.4 per cent of dependent variable variation. In the second step, survival versions of political system

variables were added, and the percentage of explained dependent variable variation went up to 35.75 per cent. Then, the variable for number of surviving pre-cohort interest groups was added to the equation, and R^2 went up to .3915. When dummy variables for jurisdictional distinctions were added, increased slightly to .4070. Finally, the addition of the variable for year of cohort creation produced the final R^2 value of .4184. This means that the variables which represent different facets of political system organization, the main explanatory factors in this work, do have a high degree of variance accounting power in and of themselves.

It is certainly possible that the predictive power of the main explanatory variables is primarily a result of their relationship with jurisdictional dummies, year of cohort creation or some of the factors which they implicitly represent. In order to assess the importance of this possibility, each variables contributions to the final R^2 value was examined under the assumption that the variable assessed was the last variable to be added to the equation. It was found that the role of the creation versions of variables did not change immensely when subjected to this sort of scrutiny. However, in the case of the survival versions of variables, it was found that only two survival variables appeared to have much predictive power once the effects of other variables had been allowed for. These two variables are "change in average size of government departments" and "change in the number of political parties". Thus, the large increase in explained variance which was noted when survival variables were added to creation variables is probably not evidence of an independently important role for survival variables in general. This large increase was likely due to the effects of just two of the survival variables

and the relationships which the set of survival variables have with some of the other explanatory variables. The importance of the variable for number of surviving pre-cohort interest groups jurisdictional dummies and year of cohort creation do not change markedly as a result of an examination of their contributions to the final R^2 value.

Causal aspects of the individual variables can also be meaningfully examined under certain fairly restrictive assumptions. The major assumption which must be made in order to make a causal assessment of regression coefficients is that either all direct causal variables are included in an equation of interest or that any excluded variables with a direct impact on the dependent variable are uncorrelated with the independent variables which are used. If one chooses to make this assumption, then it becomes possible to interpret regression coefficients as path coefficients representing direct causal paths from independent variables to the dependent variable. Of course, other assumptions must be made just to conduct a reasonable application of regression techniques regardless of the mode of their interpretation. For example, the statistical logic of valid regression applications is based on the assumption that independent variables are not highly intercorrelated and that the overall distribution of the dependent variable is approximately normal with little change in variability with respect to different combinations of independent variable values (homoscedasticity). For the most part, these basic statistical assumptions appear to be well satisfied by the data for this study. However, it is quite difficult to know whether or not the

assumption of inclusiveness of independent variables which underpins causal interpretation is actually met in a given situation. One can be sure that there are variables that have a direct impact on the dependent variable and which have not been included in the set of independent variables which were utilised. However, one cannot be sure that such excluded variables are not related to the utilised independent variables.

In any case, the results of this first regression for individual independent variables are available, and they appear in Table 5.12 on the following pages. Those results show that the creation versions of explanatory variables tend to have more significant impacts on the dependent variable than the survival versions of such variables. Several of the other variables of interest approach fairly high degrees of statistical significance, but only one of them, the dummy variable for Quebec, actually reaches a significance level which is conventionally regarded as being noteworthy. Some of the survival versions of political system organization variables do have reasonably large B and Beta coefficients, but those coefficient values are generally associated with high standard errors so that one cannot have a great deal of confidence in their use as a basis for clear interpretation of results.

Some useful points can be derived from an examination of the extent to which regression coefficient signs are consistent with the preliminary hypotheses for this analysis. The coefficients provide a different kind of indicator of relationships than the correlations already examined because the regression coefficients represent predictive and/or causal relationships once each independent variable

Table 5.12.

Summary of the Results of Regressing the Dependent Variable
on All the Explanatory Variables Used in this
Work

Variables	Coefficients	Standard Errors	F Values
CREATION VERSIONS			
Change in Total Civil Service Size	B = -.0005 Beta = -.2755	.0004	1.492
Change in Number of Government Departments	B = 3.2772 Beta = .3648	1.4343	5.221 **
Change in Average Government Department Size	B = .0177 Beta = .2520	.0155	1.291
Change in Total Number of Voters	B = -.00005 Beta = -.8795	.00003	3.730 **
Change in Number of Political Parties	B = 5.7747 Beta = .1577	8.0200	.518
Change in Average Vote Per Party	B = .0004 Beta = (virtually 1)	.0002	3.756 **
Change in Legislative Party Competition	B = .7794 Beta = .1504	.6806	1.312
Change in Government Stability	B = 1.2002 Beta = .1896	.9594	1.565
SURVIVAL VERSIONS			
Change in Total Civil Service Size	B = .0002 Beta = .0757	.0021	.005
Change in Number of Government Departments	B = 3.4609 Beta = .2466	6.0561	.327
Change in Average Government Department Size	B = -.0067 Beta = -.0642	.1045	.004
Change in Total Number of Voters	B = (virtually 0) Beta = -.0019	.0001	0.0
Change in Number of Political Parties	B = -29.6988 Beta = -.3080	48.0527	.382

Table 5.12 (cont)

Summary of the Results of Regressing the Dependent Variable
on All the Explanatory Variables Used in this
Work

Variables	Coefficients	Standard Errors	F Values
SURVIVAL VERSIONS (cont)			
Change in Average Vote Per Party	B = .0001 Beta = .1720	.0006	.042
Change in Legislative Party Competition	B = -2.4732 Beta = -.1028	4.1842	.349
Change in Government Stability	B = -6.6880 Beta = -.2190	8.4936	.620
OTHER VARIABLES OF INTEREST			
Number of Surviving Pre-Cohort Interest Groups	B = -.0566 Beta = (virtually -1)	.0455	1.548
Dummy for Federal-Provincial Distinction	B = -13.8630 Beta = -.7713	11.7009	1.404
Dummy for Ontario Jurisdiction	B = -13.3349 Beta = -.6997	10.4144	1.640
Dummy for Quebec Jurisdiction	B = 14.4088 Beta = .8017	9.4640	2.318 **
Year of Cohort Creation	B = .4744 Beta = .4138	.4032	1.384
Regression Constant = 9.7288			

(1) Double asterisks by an F value indicate that the associated coefficients are significant at the .01 level.

has had the effects of its relations with other independent variables removed. Among the creation variables, it can be seen that the change in total civil service size, change in total number of voters and change in government stability have coefficient signs which are consistent with initial expectations. Changes in total number of voters also has a coefficient which is highly significant. Within the set of survival variables, one sees that change in average government department size, change in the number of political parties, and change in legislative party competition have coefficient signs which are consistent with preliminary hypotheses. Change in the total number of voters is also consistent with initial hypotheses, but the coefficients for that variable were so close to zero that it does not seem justifiable to clearly associate them with any sign.

Some Tentative Causal Interpretation

The regression results just discussed do indicate that political system organization variables do explain a statistically and substantively significant amount of the variation in the dependent variable. However, those results also produce some evidence that such variables are far more potent in explaining the creation of interest groups than they are in explaining the survival of such groups. The very limited statistical significance of the coefficients for the survival variables is the primary component of this evidence. The limited importance of survival variables is not inconsistent with some of the results of simple correlation analysis discussed earlier. Some additional discussion of that correlation analysis will suggest some noteworthy possibilities respecting the causal status of many of the variables of interest in this work.

A key to understanding this additional discussion of correlations and their implications for causal interpretation is found in the fact that simple correlations between an explanatory variable and a dependent variable can be decomposed into direct causal paths, indirect causal paths and some additional amount of non-causal correlation between the two variables. Thus, the simple correlation coefficient can, in a sense, reveal more about the overall magnitude of possible causal links between variables than a regression coefficient since the regression coefficient can only indicate a portion, the direct-portion, of the possible causal impact of the variable. Of course, the correlation becomes a less useful guide to causal interpretation when it is extremely weak or when its non-causal component dominates its possible causal components. In any case, some of the features of correlations already examined may provide a partial basis for developing a clearer picture of underlying causal relations of interest. Even if one is not inclined to proceed to tentative causal interpretations, the implications of correlations can be valuable in defining more economical ways to predict or account for variation in the dependent variable.

One of the most interesting facets of earlier examination of correlations was the finding that survival versions of an explanatory factor often had correlations with the dependent variable which were opposite in sign from the correlations of the creations version of the same factor with the dependent variable. There is really no convincing reason for this to be the case unless the two versions of such explanatory factors have quite different kinds of relationships with the

dependent variable or unless the relationship measured by the correlations is weak and subject to a great deal of random fluctuation around zero. If two versions of a given explanatory factor do differ with respect to their correlation with the dependent variable, then it may be the case that those two versions have different causal statuses with respect to the dependent variable. This difference in relationship signs for two versions of the same explanatory factor is also manifested in some of the regression coefficients which were displayed in the preceding section. It is not always manifested in a way which is strictly consistent with the patterns revealed in correlative analysis, but this is to be expected because the regression coefficients are produced by only a portion of the causal impact of the relevant variables. Alternatively, as noted previously, correlations are produced by a full range of the causal and non-causal relationships between an explanatory variable and a dependent variable.

Since the survival versions of explanatory factors are based on data which reflect events between the time of interest group cohort creation and the time of measurement, it is possible that the nature of any of their causal relations with the dependent variable could be classified in any of four ways. A survival variable could be viewed as having absolutely no causal relationship of any kind with the dependent variable. It could be viewed as having a causal impact on the dependent variable, or it could be viewed as being caused by the dependent variable. Finally, a given explanatory variable could be viewed as having a non-recursive or two way causal relationship with the dependent variable. In other words, the survival variable could be thought of as both causing and being caused by the variable which has thus far been

designated as the dependent variable in this study. As subsequent remarks will show, there may be some merit in considering the possibility that this designated dependent variable does not really have a simple causal dependence on some of the explanatory variables and that it may even act upon some of those variables as an independent causal factor.

As was noted already, the survival variables are generally correlated with the dependent variable in a manner which is opposite in sign from the correlations for the creation variables, and this fact provides one basis for accepting the view that the survival variables should not be considered as simple causes of the dependent variable. If the creation variables have any causal relation with the dependent variable, they must act as causes of the dependent variable. This is true because the creation variables are related to events which occurred prior to the creation of relevant interest group cohorts. So, when survival variables are related to the dependent variable in a manner which is opposite of probable causal variables, it is likely that those survival variables have a different causal status with respect to the dependent variable. They may have no causal relationship with the dependent variable. They may be caused by the dependent variable, or they may be involved in some complex non-recursive relationship with the dependent variable.

A second basis for thinking that the survival variables do not act as simple causes of the dependent variable is to be found in the regression results already presented. The regression coefficients for the survival variables are not statistically significant once other variables have been introduced into the regression equation. This

indicates that these survival variables do not have a strong, direct causal impact on the dependent variable. Again, the survival variables may be caused by the dependent variable. They may not have any major causal relationship with the dependent variable, or they may have a complex non-recursive relationship with the dependent variable.

A third consideration which is pertinent to the problem of interest is the fact that the survival variables were often positively correlated with the dependent variable. This fact was tentatively interpreted as meaning that there may be a symbiotic relationship between various political system organizations and interest group organizations which have already passed through the creation phase. The causal model which would probably provide the best representation of this sort of symbiosis would not likely be a simple one way causal model in which survival variables were portrayed as having a major causal impact on the dependent variable. Symbiosis, being a kind of simultaneous and/or two way process, would find its most obvious representation in some form of non-recursive model.

So, in summary, it appears as though it would not be misleading to designate creation variables as causes or true independent factors which impact on the dependent variable for this work, but it would be unlikely that it would be fruitful to classify the survival variables in a similar way. In light of earlier remarks, this means that three possible alternative causal roles for the survival variable remain. These are the lack of existence of any causal relationship, the possibility that the survival variables are a one way function of the dependent variable and the possibility that the survival variables and the dependent variable are linked in non-recursive causal relationship.

Given the present computation and definition of the survival variables, it seems most appropriate to classify the relationship between the dependent variable and the survival variables as a strictly non-causal relationship.

It is true that some of the survival variables had reasonably strong correlations with the dependent variable. However, those correlations did not translate into significant regression coefficients once a full range of variables had been introduced into the regression. This suggests that initial strong correlations were primarily due to the joint correlations of the dependent variable and the survival variables with some of the independent variables used in the earlier regression. Given present definitions of the survival variables, there is no reason to assume that such joint correlations would not be removed in a different kind of causal model. So, it seems as though the best tentative conclusion is that there is no major causal relationship between the dependent variable and the survival variables using present variable definitions.

It is possible that some complex indirect causal paths generated by the survival variables could still be supported by analysis using current variable definitions, but the nature of the variables which caused the collapse of the significance of the survival variable regression coefficients makes this unlikely. When a variable which can only act as a cause of the survival variables causes a major decrease in the survival variables' regression coefficients, it is not possible for the reducing variable to serve as part of a route by which the survival variables come to cause or be caused by the dependent variable. This was the case in the present analysis since the collapse of the size of the survival coefficients was primarily caused by variables that could not be influenced in a major way by the survival

variables.

Yet, it is very important to note that the preceding summary was conditioned by references to "present" variable definitions. If it were possible to unfold some of the data in this work in a way which would permit the use of alternative definitions, then it would be possible to test some alternative causal models which, using new variable definitions, might support the acceptance of some form of causal relationship between the survival variables and the dependent variable. Specifically, computing survival variables values using relatively short, standard length time intervals could provide a basis for testing and, possibly, confirming some types of causal relations other than those which can be tested using current variable definitions.

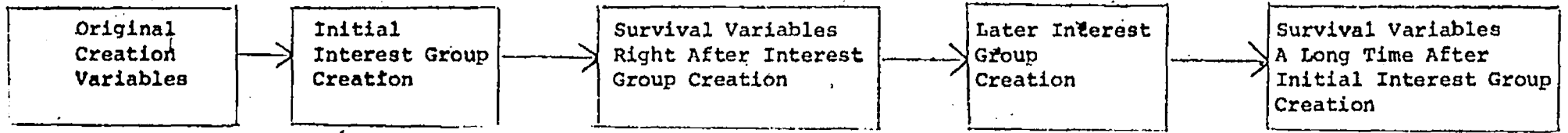
In order to appreciate the nature of this last point, it should be recalled that the present versions of survival variables were computed using data relating to periods of time between interest group cohort creation and the time of data measurement. The length of such periods will vary depending upon the year of cohort creation since the time of data measurement is essentially fixed. A period of this kind would be quite long for some of the older cohorts, and it would be considerably shorter for those cohorts which were generated in the years just prior to the time of data measurement. It is conceivable that some of the data relating to very long periods might contain several cycles of causal relationships, and those cycles cannot be directly examined using available data. An example of the type of cyclical phenomena which might be embedded within some of the longer periods used in computing variable values is provided in the figure

on the following page.

This figure illustrates a scenario in which creation variables may impact upon the original dependent variable, the dependent variable would then impact upon newly defined survival variables, the survival variables would then take on the role of creation variables with respect to a slightly later phase of interest group creation and this would lead to yet another replication of this cyclical process. This cyclical phenomenon could be described in several ways. For any given short period of time, one could describe the process as one in which creation variables had a one way causal impact on the original dependent variable, and; in turn, the original dependent variable then impacted on survival variables, in their redefined form. However, if one were interested in characterizing and capsulizing the dynamic of this process over a long period of time, then it could also be portrayed as a very complex set of non-recursive causal linkages. A full examination of some of the possibilities contained in this hypothetical interpretation will have to await the presence of suitable data.

A Second Regression With Fewer Variables

The commentary which has just been completed shows that the analysis which can be fruitfully conducted using available data is analysis which emphasizes the role of creation versions of variables. The lack of immediate statistical and substantive importance which can, using current data, be attributed to survival variables examined in a regression dictates that an attempt should be made to estimate regression coefficients for creation variables unencumbered by



ORIGINAL CREATION PHASE

ORIGINAL SURVIVAL PHASE

Figure 5.1
POSSIBLE UNFOLDING OF MAJOR CAUSAL PATTERNS
OVER TIME

possible distortions introduced by the bulk of the survival variables.

In order to produce the type of estimate just noted, a second regression was constructed, and the independent variables in this regression were all of the creation versions of explanatory variables, three dummy variables to represent jurisdictional distinctions, a year of cohort creation variable, a variable for number of surviving pre-cohort interest groups and two of the survival versions of explanatory variables.

The two survival variables which were maintained in the second regression were the ones relating to change in the average size of government departments and change in the number of political parties. These two survival variables were used because they were the only survival variables which had correlation patterns which, for the most part, were the same as the correlation patterns for their creation variable counterparts. In other words, a correlation between one of these survival variables and the dependent variable usually had the same sign as the comparable correlation between its creation variable counterpart and the dependent variable. It will be remembered that such similarities can be used as a partially accurate indicator of the comparative causal statuses of two variables, assuming they have any active causal role.

This second regression equation accounted for 38.6 per cent of the variation in the dependent variable. This compares with 41.8 per cent explained variation attributed to the first regression equation. As a result of the exclusion of most of the survival variables from the second equation, it contains 6 fewer independent variables than were contained in the first regression. Clearly,

in terms of explained variation in the dependent variable, not very much is lost by excluding the bulk of the survival variables from regression analysis.

The individual coefficients for the independent variables in the second regression are contained in Table 5.13 on the following page. The results in that table show that the exclusion of most of the survival variables allows the probable direct causal effects of the remaining independent variables to emerge in a more palpable manner. Seven out of fifteen independent variable regression coefficients are significant at the .01 level of significance. This compares with four significant coefficients out of a total of 21 coefficients in the first equation.

This second equation will be taken as the bench mark to be used in comparing regression results to earlier correlational findings and to initial hypotheses. With respect to initial hypotheses, it is found that five of the ten creation and survival variables used in the second regression have signs which are consistent with initial hypotheses. The five variables of note here are the creation version of change in total civil service size, the creation version of change in total vote, the creation version of change in government stability, the survival version of change in average government department size and the survival version of change in number of political parties. The coefficients for change in total civil service size and the survival version of change in average government department size are not highly significant.

Table 5.13

Summary of the Results of Regressing the Dependent Variable
on a Reduced Set of Explanatory Variables

Variables	Coefficients	Standard Errors For B's	F. Values
CREATION VERSIONS			
Change in Total Civil Service Size	B = -.0003 Beta = -.1614	.0003	.881
Change in Number of Government Departments	B = 2.6642 Beta = .2966	1.3262	4.036 **
Change in Average Government Department Size	B = .0131 Beta = .1867	.0147	.792
Change in Total Number of Voters	B = -.00004 Beta = -.6672	.00002	3.027 **
Change in Number of Political Parties	B = .5423 Beta = .0148	6.8510	.006
Change in Average Vote Per Party	B = .0003 Beta = -.7455	.0002	2.732 **
Change in Legislative Party Competition	B = .9165 Beta = .1767	.5533	2.744 **
Change in Government Stability	B = 1.6875 Beta = .2665	.6957	5.883 **
SURVIVAL VERSIONS			
Change in Average Government Department Size	B = -.004 Beta = -.0382	.0134	.089
Change in Number of Political Parties	B = -53.0887 Beta = -.5505	21.276	6.226 **
OTHER VARIABLES OF INTEREST			
Number of Surviving Pre-Cohort Interest Groups	B = -.0238 Beta = -.5228	.0378	.398

Table 5.13 (cont)

Summary of the Results of Regressing the Dependent Variable
on a Reduced Set of Explanatory Variables

Variables	Coefficients	Standard Errors For B's	F Values
OTHER VARIABLES OF INTEREST (cont)			
Dummy for Federal-Provincial Distinction	B = -3.0403 Beta = -.1692	8.6878	.122
Dummy for Ontario Jurisdiction	B = -6.3491 Beta = -.3332	8.4149	.569
Dummy for Quebec Jurisdiction	B = 12.2117 Beta = .2855	8.0489	2.302 **
Year of Cohort Creation	B = .3273 Beta = .2855	.3661	.799
Regression Constant = 2.2885.			

(1) Double asterisks by an F value indicate that the associated coefficients are significant at the .01 level.

Another point of interest is that five of the seven significant regression coefficients relate to explanatory variables which are associated with party and electoral phenomena. The only variable which is significant and which relates to civil service size and structure is the change in number of government departments. The only one of the "other variables of interest" which has a highly significant regression coefficient is the dummy variable for Quebec. In general, these findings are consistent with general patterns already revealed.

Chapter 6

A SUMMARY OF FINDINGS

Creation Variables

In early, very simple correlation analysis, the creation variables did not appear to behave in the manner posited. In fact, these variables showed little evidence of strong consistent relationships with the dependent variable. However, with increasing complexity of analysis, these variables emerged as being strongly related to the dependent variable, relative to some other variables. These strong relationships were not always consistent with preliminary hypotheses, and they were generally apparent only for those variables which relate to aspects of party and electoral phenomena rather than to dimensions of civil service size and structure. Variable by variable summaries are provided below.

Change in Total Civil Service Size

This variable had a simple positive correlation with the dependent variable. In more complex correlations in the second stage of analysis, it was related to the dependent variable in a mixed fashion. It had the negative relationship which had been expected for jurisdictions with large interest group stocks, but it had positive correlations with the dependent variables in other jurisdictions.

Finally, in the second, more economical regression which was tested, this variable had a negative regression coefficient. This would be consistent with preliminary hypotheses. However, the regression coefficient was not highly statistically significant.

The above findings indicate that the direct relation of change in total civil service size to the creation of interest groups is probably negative and weakly consistent with initial hypotheses. However, its total relationship with the dependent variable is not necessarily consistent with initial hypotheses. Its interactions and intercorrelations with other factors make its total relationship with the dependent variable fairly complex and relatively weak. In causal terms, it is reasonable to assign this variable the role of a cause of negative change in the dependent variable.

Change in Number of Government Departments

It was expected that this variable would be negatively related to the creation of interest groups. This expectancy is not borne out in a major way at any stage of analysis. However, this variable had highly significant, positive regression coefficients in both of the regression analyses discussed earlier.

Change in Average Government Department Size

It was anticipated that this variable would also be negatively related to the creation of interest group organizations. This was not confirmed during the first phase of analysis in which simple correlations were assessed. Mixed results were in evidence when more complex correlations were computed. Again, relationships were as

expected in jurisdictions with large sets of interest groups and counter to expectancies in other jurisdictions. The regression coefficient for this variable in the second regression tested was weak and positive.

The soundest conclusion to be reached respecting "change in average government department size's" relation with the dependent variable is that it does not seem to be strongly and consistently related to the dependent variable in any clear fashion.

Change in Total Vote

It was hypothesized that increases in this variable would produce and/or correlate with a fall in the number of created interest groups. This was strongly and consistently confirmed throughout all stages of analysis. This variable can reasonably be viewed as a probable cause of negative variation in the dependent variable.

Change in the Number of Political Parties

In the first stage of analysis, this variable had a clear negative relation with the number of interest group cohort survivors, and, by virtue of its placement in time, would be viewed as being negatively related to interest group organization creation. This finding was, for the most part, replicated when more detailed correlations are computed. However, second stage analysis encountered some computational problems with respect to data for the federal jurisdiction, and this mitigates the force of second stage results. Yet, in the final, regression-oriented stage of analysis, it was found

that this variable had a positive regression coefficient. Furthermore, this coefficient was fairly small.

These findings and some of the implications of stepwise regressions which were conducted suggest that this variable has very little direct relationship with the creation of interest groups. It may have some notable indirect relationships with the dependent variable through other variables. However, it would be advisable to view these conclusions as being quite tentative because of the manner in which this variable was truncated and because of the possible effects of that truncation on the data for the federal jurisdiction.

Change in Average Vote Per
Party

It was expected that increases in this variable would have a negative relationship with the dependent variable. This was the case, in very weak form, in the first phase of analysis. The second phase of analysis produced more detailed correlations which, on balance, confirmed initial findings, but this confirmation was somewhat mixed and weak in certain jurisdictions. In the second regression conducted in the third and final phase of analysis, earlier findings were contradicted by the association of this variable with a positive and highly significant regression coefficient.

The results for this variable indicate that its direct relationship with the dependent variable, once other variables have been controlled, is essentially positive. The weak and/or inconsistently apparent negative relationships found in the earlier phases of analysis are probably the result of other variables masking this direct relationship. If one were to ascribe some causal interpretation to

results for this variable, then it would be reasonable to say that it appeared to have a positive, direct impact on the creation of interest groups. It probably does not have well-defined indirect impacts on the dependent variable.

A substantive interpretation of the possible direct impact of this variable would be that it reflects fluctuations in the intensity of people's public concerns and interests in an organized context. When such interest decreases to the point where certain fringe parties cease to exist, the average vote per the remaining parties is inflated. At the same time, those who previously acted through marginal election oriented parties, tend to drift into non-electorally oriented affiliations such as interest group memberships. Hence, there is a positive relationship between the increase in average party vote and interest group creation. In a sense, this is consistent with the general thrust of the behavioural assumptions on which this work is based, but it is not consistent with the sign which was initially posited for the relation of this variable with the dependent variable. The preliminary position taken with respect to this variable was formed without any detailed assumptions as to the relationships among the explanatory variables. The interpretation just presented is based on the basic idea, as originally set out, that changes in the magnitude of one type of organization will effect changes in other types of organizations, and it is also informed by the fact that there is a very strong negative relationship between average vote per party and the number of parties. This last point is not in evidence in any of the tables already presented, but it emerged in some of the secondary analysis which underlies this work but has not been explicitly included

in the text.

Change in Legislative Party
Competition

It was thought that increases in the competitiveness of the allocation of seats among parties in legislatures would be negatively related to the creation of interest group organizations. Increases in competition should increase the value of parties as instruments of action and decrease the value of creating new interest group organizations to be used as a means for pursuing public action.

Correlational analysis of this variable produced weak and heterogeneous results which did not clearly confirm or disconfirm the preliminary hypothesis. However, the final regression equation described in earlier comments on regression results altered this uncertain picture somewhat. In that regression, the competition variable was associated with a positive and highly significant regression coefficient.

The results just noted tend to support the view that the direct relation between the competition variable and interest group organization creation is essentially positive and, thus, not as expected. Increases in the degree of competition manifested in the allocation of legislative seats tends to produce increases in the number of interest group cohort survivors, and the temporal position of this particular independent variable leads one to assume that its impact is primarily in the realm of interest group creation. Again, this type of finding may still be consistent with the perspective on behaviour which guided the construction of this work, but the sign of the relationship of interest may not be as expected because of the

relation between the competition variable and other explanatory variables. Specifically, as was the case with the average vote per party variable, the competition variable has a strong negative relation with the number of political parties variable. So, even though the direct relation between competition and the dependent variable is positive, its overall relationship with the dependent variable may be quite complex and subject to description only through a detailed analysis of possible causal paths among various explanatory variables. In general, it appears as the change in number of political parties variable is somehow causally prior to some of the other creation variables, and, had this been anticipated in early commentary, somewhat different expectations would have been developed respecting the probable sign of the relations between several explanatory variables and the dependent variable.

Change in Government Stability

It was expected that this variable would have a positive relationship with the dependent variable. This proved to be the case at every stage of analysis. Correlations between this variable and the dependent variable were not always of great magnitude, but some of the more detailed correlations were reasonably large. Also, the regression coefficient for this variable was positive and highly significant.

In part, it was expected that this variable would have a clearer relationship with the dependent variable than some other electoral phenomena variables. It was thought that its potency and clarity of effect would arise from the ease with which it can probably

affect people's perceptions of political realities. This seems to be supported by analysis, and it may also be supported by the fact that its relationships with the dependent variable are not greatly meshed in derivative or interactive relationships with other explanatory variables.

Survival Variables

A General Comment

In the first phase of analysis, it was found that several of these variables had fairly large simple correlations with the dependent variable. Furthermore, five out of eight of these original correlations had signs which were consistent with the preliminary perspective described at the beginning of this study. In the second stage of analysis, more detailed correlations did not support the results of the first phase of analysis. In fact, it was found that within jurisdiction correlations and partial correlations often revealed patterns which were completely opposite of initial findings and preliminary expectations. In the first regression tested in the final phase of analysis, it was found that none of the survival variables had highly significant regression coefficients. The signs of their coefficients showed a mixture of results with respect to their consistency with initial hypotheses.

A further finding which emerged from the second phase of analysis was the fact that many of the correlations for the survival versions of variables had signs which were the opposite of their creation counterparts. This finding, in conjunction with the very

weak regression coefficients for the survival variables served to indicate that the relationship of the survival variables to the dependent variable might be quite different from the relationships between the creation variables and the dependent variable. A detailed discussion presented earlier showed how these two sets of variable may even have somewhat different causal statuses with respect to the dependent variable.

This earlier discussion of differential causal statuses provided one basis for excluding the present form of the survival variables from further detailed consideration in this work. A second regression equation which excluded most of the survival variables provided another basis in that it had about the same explanatory power as an initial equation which did include all of the survival variables. Clarity of results for specific variables in the second regression also attested to the merit of moving the majority of the survival variables out of the main focus of the final part of the discussion. Nevertheless, it was noted that alternative forms of the survival variables, which cannot be computed from available data, might be usefully included in future analyses. Some specific comments on those survival variables which were maintained in the second regression equation are provided below.

Change in Average Government Department Size

In the first phase of analysis, this variable had a small positive correlation with the dependent variable. It had been predicted that it would have a negative relation with the dependent variable. In the second phase of analysis, within-jurisdiction correlations and

partial correlations continued to be positive except for correlations relating to Ontario. Also, second phase survival correlations for this variable were of the same signs as their creation counterparts, except in the case of Quebec. It will be recalled that this was one basis for selecting this variable as a candidate for the final part of regression analysis. In the final regression, this variable had a very small, negative regression coefficient.

It would appear as though this variable does not have major direct or indirect relationships with the dependent variable. The only instance in which reasonably large relationships did appear was in the case of the detailed correlational analysis for Quebec.

Change in the Number of Political Parties

In the first phase of analysis, this variable had a very strong negative correlation with the dependent variable, and this was as expected. This result was partially but not completely confirmed during the second phase of analysis. Furthermore, the correlations in the second phase of analysis exhibited the kind of consistency of signs between creation and survival relations which marked this variable as a reasonable candidate for inclusion in the final regression analysis. The results of that regression analysis showed that this variable had a very significant negative correlation coefficient.

In summary, this variable is related to the dependent variable in a manner which is completely consistent with preliminary hypotheses. Increases in the number of political parties tend to be negatively related to the survival of interest group organizations. In so far as

this relationship can be viewed as a causal one, it appears as though the number of political parties variable has a very strong, negative and direct impact on the dependent variable. This stands in contrast with its creation counterpart which appears to play an important indirect causal role with respect to the dependent variable but which has very little direct impact on the dependent variable.

Other Variables

Here, the variables of interest are the number of surviving pre-cohort interest groups, the year of cohort creation, the federal-provincial dummy variable, the Ontario dummy variable and the Quebec dummy variable. Results for these variables are discussed briefly below.

Number of Surviving Pre-Cohort Interest Groups

In the first phase of analysis, this variable was found to have a very strong positive correlation with the dependent variable. In the second phase of analysis, the relation between this variable and the dependent variable became negative in partial correlations controlling for year of cohort creation. In regression analysis, when interrelations with a fuller range of variables were controlled, this variable was found to have a negative regression coefficient. However, it was not a significant coefficient.

There was no single definite expectation regarding the probable sign of this variable's relation with the dependent variable. However, it appears as though it has a weak, negative and direct relationship

with the dependent variable. It may also be involved in a variety of complex indirect relationships with the dependent variable through its relations with other explanatory variables. In general, it is not an extremely important variable once its relations with other variables have been taken into account.

Year of Cohort Creation

This variable used not because of major substantive considerations but because of its importance in controlling for the effects of the passage of time on relationships between other variables. It proved to be useful in unfolding aspects of some relationships examined during the second phase of analysis. In regression analysis, it had a small positive regression coefficient.

Jurisdictional Dummy Variables

These variables were also used primarily in order to control and place in context the relations between the political system organization variables and the dependent variable. These dummy variables essentially serve as proxies for relatively fixed socio-economic and, perhaps, cultural differences among jurisdictions.

These variables were implicitly introduced in the second stage of analysis when correlations were computed on jurisdiction by jurisdiction basis, and their introduction did provide some additional information about the nature of relations between other explanatory factors and the dependent variable. The dummy variables were explicitly introduced regression analysis. Only one of these variables had a significant regression coefficient, and that was the dummy variable which did have a significant regression coefficient.

These results mean that the dummy variables and, possibly, the socio-economic factors they represent do not consistently have large direct effects on the dependent variable. The exception, of course, is the Quebec variable. A more substantively important way to interpret the role of these variables is to note that, once they are introduced as controls, the importance of the creation variables and one of the survival variables does not completely disappear. Hence, political system variables do have some direct and independent importance with respect to the dependent variable. Quite likely, this importance would persist even if more explicit representations for socio-economic differences among provinces were used in analysis.

Finally, it is worth noting that even though these dummy variables do not by any means completely determine variation in the other explanatory variables, they do have some impact on them. This was revealed in several supplementary regressions in which other explanatory variables were regressed only on the set of dummies. Variables which relate to relatively long periods of time such as the number of surviving pre-cohort interest groups and some of the survival variables were particularly subject to strong influence by the set of dummies. This may mean that the causal impact of underlying socio-economic factors on political system variables is most clearly manifested over long periods of time. Political system phenomena relating to short periods may well be most effectively modelled in terms of other political system factors. In any case, more analysis of this sort of consideration is suggested for the future, given the availability of appropriate data.

Final Overview

The major findings of this study are summarized in the following points:

- (1) Most of the creation variables relating to electoral and legislative phenomena do seem to have major impacts on the creation of interest group organizations. The sign of their relationships with the dependent variable is usually either consistent with initial expectations or consistent with the perspective on behaviour which guided the design of this study.
- (2) The creation variable for number of political parties does not have a strong direct impact on the creation of interest groups, but it appears to exercise an indirect influence on interest group creation through other creation variables.
- (3) Creation variables relating to the size and structure of civil services do not appear to have a major impact on interest group organization creation. There are some minor exceptions to this point.
- (4) The survival variables do not generally appear to act as direct causes of interest group survival, but they do occasionally exhibit correlative relationships with the dependent variable. The signs of these relationships generally differ from the signs of comparable creation relationships.
- (5) An exception to point (4) can be found in the survival version of change in number of political parties. It may very well have a strong direct causal impact on the survival of interest group organizations, and it probably has some indirect impact on their survival as well.
- (6) Variables other than the creation and survival variables are not completely insignificant, but they do not completely determine the variation in the creation and survival variables.

In general, it does appear as though certain political system variables do have an independent impact on the creation and, to a much lesser extent, the survival of interest group organizations. Furthermore, these variables almost entirely relate to electoral and legislative phenomena.

Chapter 7

SOME IMPLICATIONS OF RESULTS FOR THEORY AND RESEARCH

Overview

In order to more fully understand the implications of the results of this work, it is advisable to relate those results to various general theories and perspectives, some of which were discussed in earlier chapters. The reader will recall that conventional pluralism, alternatives to conventional pluralism, rational choice perspectives and functionalist perspectives received some attention in the opening chapters, and these theoretical categories will provide part of the frame of reference for comments in this chapter. However, these comments will actually be organized in terms of types of variables. Implications of political party and electoral variables will be discussed first. Then, implications of civil service and government agency variables will be considered. This structuring of the chapter seemed advisable primarily because the actual results of this study can be very naturally separated into a political party/electoral pattern and a government/agency civil service pattern.

Alternatively, the implications of results cannot always be fruitfully separated in relation to types of theoretical perspectives.

It is important to note that there is a reason why the results in this work do not always have straightforward implications for the validity of one theoretical perspective as opposed to another. The reason is simply that the dissertation was not designed to illuminate differences among contending perspectives. It was intended to test some tentative hypotheses that were consistent with a theme which is common to several theories. That theme consists of the position that some types of human resources necessary for the functioning of political system organizations are a fairly small part of the population of many political systems. All major empirical political theories accept this point. However, there is some disagreement among theorists as to just how rare the set of politically active people is and as to how important their scarcity is. Admittedly, because of such variations in emphasis, one can sometimes say that a particular analytic result in this study is more consistent with one school of thought than another. Such confirmation of minor differences will be noted when they are relevant, but they are not always the most important kind of information to be extracted from this analysis.

The major implications of this dissertation for existing theory are to be found in its elaboration of some of the structural consequences of restricted participation in political system organizations and the consequences of competition for and choices

by participants in such organizations. Since this is an area that has not received a great deal of attention in the past, the contribution of this work is not so much to differentiate among theories as to suggest some dimensions of political system organization that might fruitfully be added to the scope of most general theoretical perspectives on modern political systems.

Political Parties and Interest Groups

Specific results of the final regression discussed earlier show that the creation versions of change in total number of voters and change in government stability have signs and significance which are directly consistent with initial hypotheses. The survival version of change in number of political parties is also strongly consistent with those hypotheses. As revealed in earlier comments, the creation versions of change in average vote per party and change in legislative party competition can be viewed as being consistent with initial hypotheses when their relations with change in number of political parties are taken into account.

Since the impacts of these variables are generally consistent with initial hypotheses, one can say that they tend to confirm the selectivity of political participation that is noted in most major theories. To the extent that the critics of conventional pluralism and the rational choice theorists place the greatest emphasis on such selectivity, it could be contended that the results of this work are more consistent with the views

of those theorists than with the theories of conventional pluralists and the functionalists. However, it is also important to note that parts of the results pertaining to political party/electoral variables reflect phenomena which do not necessarily relate to the choices and actions of extremely rare parts of the population. For example, variables such as change in the total number of voters and change in government stability are, in large part, a function of or a cue for the behaviour of major segments of a population, and these variables had some of the clearest and most consistent relationships with the dependent variable.

The preceding point can be interpreted to mean that, loosely put, there are both elite and mass dimensions of the conditions necessary to produce various patterns of structural relations among political system organizations. Some aspects of mass phenomena may not be closely linked to active membership or leadership in an organization. For example, the relationship between this work's dependent variable and change in the total number of voters not only reflects decisions of active organizational members but also reflects decisions of people who have simply chosen to have an attitudinal affiliation with one type of organization rather than another. Yet, even such subjective attitudinal commitment to one type of organization can restrict the availability of people to create or maintain other types of organizations.

Interpreting the impact of political party/electoral variables in terms of a distinction between elite and mass effects

has parallels with Kornhauser's perspective on mass society.* Such parallels mean that the results of this work are somewhat consistent with the important linkages between pluralism and functionalism that are embodied in Kornhauser's work. However, the results of this dissertation provide a basis for an interesting elaboration of Kornhauser's ideas. Specifically, the negative relationship between the creation version of change in total vote and the number of interest group cohort survivors may mean that increases in the number of people with formal or informal commitments to political parties can lead to a reduction in tendencies to form the types of relationships which are the basic material of pluralistic communities. Under this interpretation, increases in voting take on the same function as increases in the prevalence of the types of classic mass behaviour described by Kornhauser. Admittedly, if voting is viewed as a form of classic mass behaviour, it is a comparatively innocuous form of such behaviour.

Perhaps the most important implication of the political party/electoral findings in this study, and one which follows from preceding comments, is that political parties and interest groups do not have a static structural relationship in which an interest group is always serving certain purposes in relation to a political party and vice versa. Judging from the results of this work, interest groups and political parties are, to some extent, alternative foci for certain kinds of commitments and orientations. Sometimes they probably meet the same kinds of needs, but one type

of organization provides a more attractive mechanism for meeting those needs. At other times, they may serve different needs, but the needs associated with one type of organization are viewed as being more important than the needs associated with the other type of organization at a given point in time. In short, interest groups and political parties should probably be viewed as competitive structural alternatives for commitment and orientation in political systems, not as simultaneously complementary structures that have a largely unchanging relationship.

The concept of competitive structural alternatives contrasts with the treatment of political parties and interest groups in much existing literature. In conventional pluralism, critiques of conventional pluralism and functionalism, interest groups and political parties are seen as serving distinct, non-competing purposes and as having static structural relationships with each other. In most existing work, interest groups are seen as arising in order to meet challenges dictated by socio-economic changes and increased complexity. Interest groups generate responses to such challenges and political parties aggregate such responses or demands and compete among themselves for formal control of government. The interpretation of the rational choice theorists in this matter is less obvious. However, simply because parties compete for votes and interest groups have other concerns, interest groups and parties are generally treated by rational choice theorists as serving consistently different and non-competitive purposes. They are not explicitly portrayed as

alternative foci for commitments from the same set of people. So, existing literature emphasizes the separate and complementary aspects of interest groups and political party phenomena. This dissertation contains a preliminary justification for also considering the possibilities that interest groups and parties may compete to serve similar purposes or may serve different purposes which are alternative ways of meeting similar needs.

Before closing this commentary on political party/electoral variables, a secondary point concerning the degree of labour intensity inherent in the activities of modern political parties should be dealt with. It has been pointed out to this writer that some of the results in this dissertation are striking because they seem to run counter to the views of those who suggest that mass media, rather than human beings, are the important resources used in the activities of modern political parties. The fact that this pattern of media dominance does not appear to be consistent with aspects of this work may be partially due to the fact that much of the data used in its analysis relates to a time period which preceded the mass utilization of television. However, there is probably a more fundamental reason why the results of this study emphasize the importance of human resources in political system organizations.

The reason of interest is that much comment and literature on modern political parties is concerned with examining campaign related activities while the present work focus on the creation and maintenance of organizations. Of course, the mass media are extremely important tools in modern campaigns, but they are not

necessarily particularly important in creating and maintaining whatever formal organizational structure is embodied in a political system organization. Alternatively, by definition, people are important in making initial decisions to form an organizational entity. Furthermore, in order for people to be important inputs into organizational creation they do not have to act in great numbers. In fact, as a result of existing literature reviewed elsewhere, we expect the founders of organizations to be a fairly small group, and rational choice theorists might even contend that it is better for a group of founders to be small in size. Yet, despite the scarcity of people involved in actual formation of organizations, they are still an important resource since no organization can be founded or maintained without some people. Campaigning may not be as labour intensive as was the case in the past, but forming an organization and maintaining its basic structure will always be relatively labour intensive in the sense that human resources, though not large in absolute terms, will generally be proportionately more important than other resources in preliminary organizational activity.

Government Agencies and Interest Groups

Basically, tentative expectations concerning relations between these variables and the number of interest group cohort survivors were not borne out. In correlational analysis, some evidence of positive relationships between these variables and the dependent variable were found, but, for the most part, negative

relationships were hypothesized. In regression analysis, only one civil service/government agency variable had a statistically significant impact on the dependent variable. The variable of interest was the creation version of average change in the number of government departments. Its regression coefficient was positive rather than negative, and this was counter to initial expectations.

Even though results respecting civil service/government agency variables do not confirm the general perspective that guided the development of this dissertation, some of those results are quite consistent with earlier, well-established perspectives that appear in existing literature. In particular the positive regression coefficient associated with the creation version of average change in the number of government departments is quite consistent with some of the critiques of and alternatives to conventional pluralism. This specific finding has implications for the corporate pluralist theories of people such as Lowi and McConnell. It can also be directly and consistently related to some of Presthus's analysis of elite accommodation in Canadian political systems.

The reader will recall that the corporate pluralist perspective stresses the close cooperative, almost symbiotic relationships between interest groups and government agencies. Particular emphasis is given to the ways in which government agencies often experience reduced autonomy because of the direct influence which interest groups have on the activities of such agencies. However, it is also possible for interest groups to

be dependent upon and highly influenced by the activities of government agencies, and this point probably does not receive sufficient emphasis in the corporate pluralism literature. In the findings contained in this dissertation, the positive impact of the creation version of average change in number of government departments on the number of interest group cohort survivors can be interpreted as meaning that government departments may be directly involved in creating interest groups. This constitutes evidence that the influence of agencies on interest groups is a topic which may deserve more attention in future development of corporate pluralist theory as well as in the development of other alternatives to conventional pluralism such as public pluralism.

It is of interest to note that one could also interpret the relation between change in number of government departments and the dependent variable in terms of an aspect of conventional pluralism which is primarily associated with Truman. Specifically, Truman thought that interest groups sometimes arose in response to perceived threats in the expansion of government or change in government policy. Thus, an increase in the number of government departments might be interpreted as a threat which would lead to creation of new interest group organizations. Of course, this type of interpretation stands in contrast with the type of interpretation already discussed in which interest groups are a positive and conscious result of the activities of government agencies. There is probably some

validity in each interpretation, but the interpretation which emphasizes cooperative and positive interactions between interest groups and government agencies is more in keeping with Presthus's analysis of elite accommodation in Canada.

In his analysis of relationships among Canadian political elites, Presthus found that about half of the senior civil servants in his sample felt that their departments had participated in the creation of interest group organizations.¹ Clearly, this finding supports the view that relationships between interest groups and government agencies are, with respect to interest group creation, motivated more by cooperation than by response to perceived threats. This is added confirmation of the limitations of conventional pluralist interpretations of relations between interest groups and government agencies, and it provides a preliminary justification for not emphasizing Truman's ideas in interpreting the impact of civil service/government agency variables in this work. Alternatives to conventional pluralism such as elite accommodation, a refined corporate pluralism or public pluralism appear to provide the best basis for discussing and explaining the limited but important impact of government agencies on the creation of interest groups as revealed in the results of this dissertation.

¹Robert V. Presthus, Elite Accommodation in Canadian Politics (New York, N.Y.: Cambridge University Press, 1973); pp. 79, 213

A final general point which is worth noting is that interest groups and government agencies do not appear to be competitive structural alternatives. They appear to have a somewhat symbiotic structural relationship. This, of course, contrasts with earlier comments on the structural relationships between political parties and interest groups. One could speculate that part of the function served by interest groups in relation to agencies is that the former serve as queuing areas for resources which the bureaucracy cannot immediately incorporate but which are of importance to the leaders of the bureaucracy. Thus, interest groups may use resources which are of value to the bureaucracy, but they do so in a way which does not compete with the immediate thrust of government agencies and which may even simplify the environment faced by such agencies.

Concluding Notes on Further Recommended
Analysis Having Theoretical Implications

There are several important issues which could not be addressed in this work but which are recommended areas of future analysis and which may have important theoretical implications. Analysis of these issues would generally require data which were not available for use in this dissertation.

One of the issues which could be a major focus for future analysis is the extent to which the impact of political system variables is altered when specific socio-economic variables are included in analysis. Since this work was based on a fairly small number of dependent observations, it was not advisable to include a large number of specific socio-economic variables in

regression equations. Instead, the combined impact of such factors was represented in a fairly gross way by jurisdictional dummy variables and a linear time variable. Use of detailed socio-economic variables would permit a more precise assessment of the conventional view that interest groups arise primarily as a result of changes in socio-economic complexity and structure.

As indicated earlier, the causal structure of the data used in this study could only be partially assessed because of the lack of certain true time series data, and causal structure issues deserve more attention in the future. Causal analysis issues could be addressed much more directly and comprehensively in future work with true time series data for the dependent variable.

Another type of data that could be used to address issues of theoretical importance is more detailed micro-data on political participation in general and degrees of political leadership in particular. The availability of such data would accommodate a more refined analysis of the allocation of time and choices of major actors in political system organizations. Such analysis would be of particular interest to those who are interested in comparing the usefulness of major existing theoretical perspectives on political system organization.

Finally there are several kinds of analysis which could be pursued without variables above and beyond those used in this study but which would have been of limited importance in light of the relatively small number of observations used in this study. For example, the nature of relationships between government agency

variables and numbers of interest groups could have been examined in a more refined way by controlling for policy areas in which interest groups and agencies were involved. Also, there are indications that some useful insights could be gained by conducting a comprehensive analysis of possible causal linkages among some of this study's major independent variables. These types of analysis can be pursued effectively in the future as data sets with relatively large numbers of dependent observations become available.

Despite the limitations imposed on this study because of the structure and scope of available data, its results constitute a useful initial phase in attempts to better understand the overall organizational structure of the political system. More specifically, those results provide some new and important information about the relationships of political system factors to the number of interest group organizations. Hopefully, future work will use the results and issues identified in this dissertation as a foundation for further examination of relationships among major types of political system organizations.

WORKS CITED

- Almond, G. and S. Verba, The Civic Culture. Boston, Mass.: Little Brown and Co., 1963
- Bachrach, P. and M.S. Baratz, "Two Faces of Power", American Political Science Review, 56 (Dec., 1962), pp. 947-952
_____, "Decisions and Non-Decisions", American Political Science Review, 57 (Sept., 1963), pp. 641-651
_____, Power and Poverty: Theory and Practice. New York, N.Y.: Oxford University Press, 1970
- Bales, R.F., Talcott Parsons and Edward A. Shils, Working Papers in the Theory of Action. New York, N.Y.: The Free Press of Glencoe, 1953
- Banfield, E.C., Political Influence: A New Theory of Urban Politics. New York, N.Y.: Free Press, 1965
- Berry, J., Lobbying for the People. Princeton, N.J.: Princeton University Press, 1977
- Breton, A. and Raymond Breton, "An Economic Theory of Social Movements", The American Economic Review 59 (1969), pp. 198-205
- Chandler, M.A. and William M. Chandler, Public Policy and Provincial Politics. Toronto, Ont.: McGraw-Hill Ryerson Ltd., 1979
- Curry, R.L. Jr. and L.L. Wade, A Theory of Political Exchange: Economic Reasoning in Political Analysis. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968
- Dahl, Robert, A Preface to Democratic Theory. Chicago, Ill.: University of Chicago Press, 1956
- _____, Who Governs. New Haven, Conn.: Yale University Press, 1961
- _____, Pluralist Democracy in the United States: Conflict and Consensus. Chicago, Ill.: Rand McNally & Co. 1967
- _____, Polyarchy: Participation and Opposition. New Haven, Conn.: Yale University Press, 1971
- _____, Democracy in the United States: Promise and Performance (a 2nd ed. of Pluralist Democracy in the United States). Chicago, Ill.: Rand McNally & Co., 1972
- Dion, Leon, Societe et Politique: La Vie Des Groupes. Quebec., P.Q.: Les Presses de L'Universite Laval, 1971

- Dye, Thomas R. and L. Harmon Zeigler, The Irony of Democracy: An Uncommon Introduction to American Politics. Belmont, California: Wadsworth Publishing Company, Inc., 1970
- Economic Council of Canada, Living Together: A Study of Regional Disparities, 1977
- Engelmann, F.C. and M.A. Schwartz, Political Parties and the Canadian Social Structure. Scarborough, Ont.: Prentice Hall of Canada, Ltd., 1967
- Featherman, David L., Retrospective Longitudinal Research: Methodological Considerations (Reprint 382). Madison, Wis.: Institute for Research on Poverty, 1980
- Frohlich, Norman, Joe A. Oppenheimer and Oran R. Young, Political Leadership and Collective Goods. Princeton, N.J.: Princeton University Press, 1971
- Girod, R., "Geography of the Swiss Party System", Eric Allardt and E. Litunen, eds., in Cleavages, Ideologies and Party Systems. Helsinki: Academic Bookstore, 1964
- Hamilton, Richard, Class and Politics in the United States. New York, N.Y.: John Wiley & Sons, 1972
- Hausknecht, Murray, The Joiners. New York, N.Y.: Bedminster Press, 1962
- Hyman, Herbert H. and Charles R. Wright, "Trends in Voluntary Association Membership of American Adults", American Sociological Review, 36 (April, 1971), pp. 191-206
- Inkeles, Alex, "Participant Citizenship in Six Developing Countries", American Political Science Review, 63 (Dec., 1969), pp. 1132-1133
- Kariel, Henry S., The Decline of American Pluralism. Stanford, Cal.: Stanford University Press, 1961
- Kelso, William A., American Democratic Theory: Pluralism and Its Critics. Westport, Conn.: Greenwood Press, 1978
- Key, V.O. Jr., Politics, Parties and Pressure Groups (5th ed.). New York, N.Y.: Thomas Y. Crowell and Co., 1964
- Kornhauser, William, The Politics of Mass Society. Glencoe, Ill.: Free Press, 1959

- Lijphart, Arend, "Consociational Democracy", World Politics, 21 (January, 1969)
- _____, The Politics of Accommodation. Berkeley, Cal.: University of California Press, 1970
- Lindblom, Charles, "The Science of Muddling Through", Public Administration Review 19 (Spring, 1959). pp. 79-88
- _____, The Intelligence of Democracy. New York, N.Y.: Free Press, 1965
- Lowi, Theodore, J., The End of Liberalism. New York, N.Y.: W.W. Norton & Co., 1969
- Mahood, H.R., Pressure Groups in American Politics. New York, N.Y.: Charles Scribner's Sons, 1967
- McConnell, Grant, Private Power and American Democracy. New York, N.Y.: Alfred A. Knopf, 1966
- Mitchell, William C., Sociological Analysis and Politics: The Theories of Talcott Parsons. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1967
- Olson, Mancur Jr., The Logic of Collective Action: Public Goods and the Theory of Groups. New York, N.Y.: Schocken Books, 1968
- Parsons, Talcott, The Structure of Social Action. New York, N.Y.: McGraw-Hill, 1937
- _____, The Social System. New York, N.Y.: The Free Press of Glencoe, 1951
- _____ and Edward A. Shils, eds., Toward a General Theory of Action. Cambridge, Mass.: Harvard University Press, 1951
- _____, Politics and Social Structure. New York, N.Y.: The Free Press, 1969
- Presthus, R.V., Elite Accommodation in Canadian Politics. New York, N.Y.: Cambridge University Press, 1973
- _____, Elites in the Policy Process. New York, N.Y.: Cambridge University Press, 1974
- Riker, William H., The Theory of Political Coalitions. New Haven, Conn.: Yale University Press, 1962
- Salisbury, Robert H., "An Exchange Theory of Interest Groups", Midwest Journal of Political Science, 13 (1969), pp. 1-32

- Schattschneider, E.E., The Semi-Sovereign People. New York, N.Y.: Holt, Rinehart and Winston, 1960
- Tocqueville, Alexis de, Democracy in America. Garden City, N.Y.: Doubleday and Co., Inc. 1969 (copyright)
- Truman, David, The Governmental Process. New York, N.Y.: Alfred A. Knopf, 1951
- Verba, Sydney and Norman Nie, Participation in America. New York, N.Y.: Harper and Row, 1972
- Wagner, Richard, "Pressure Groups and Political Entrepreneurs", Papers on Non-Market Decision Making, (1966), pp. 161-170
- Wilson, James Q., Political Organizations. New York, N.Y.: Basic Books, Inc., 1973
- Wolff, Robert Paul, Barrington Moore, Jr. and Herbert Marcuse, A Critique of Pure Tolerance. Boston, Mass.: Beacon Press, 1965
- Wootton, Graham, Interest-Groups. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1970

APPENDIX A

SUMMARY STATISTICS ON MAJOR
VARIABLES

The tables contained in this appendix show the basic properties of the dependent variable and the major explanatory variables. These tables are taken directly from computer print-out, and variables are represented by short mnemonics. In order to interpret the tables it is necessary to know the name of the variable associated with each mnemonic. This information is provided in the first table.

Table A.1
Variable Names Associated with each
Print-Out Mnemonic

Mnemonic	Full Variable Name
Y1	Number of Interest Group Cohort Survivors (Dependent Variable)
CREATION VARIABLES	
TCSDC	Change in Total Civil Service Size
NUDPDC	Change in Number of Government Departments
AVDPDC	Change in Average Government Department Size
TVDC	Change in Total Number of Voters
NUPRDC	Change in Number of Political Parties
PRSZDC	Change in Average Vote Per Party
CMPDC	Change in Legislative Party Competition
ELOUTC	Change in Government Stability
SURVIVAL VARIABLES	
TCSDD	Change in Total Civil Service Size
NUDPDD	Change in Number of Government Departments
AVDPDD	Change in Average Government Department Size
TVDD	Change in Total Number of Voters
NUPRDD	Change in Number of Political Parties
PRSZDD	Change in Average Vote Per Party
CMPDD	Change in Legislative Party Competition
LOUTDD	Change in Government Stability
OTHER VARIABLES OF INTEREST	
Y2	Number of Surviving Pre-Cohort Interest Groups
DUM1	Federal Jurisdiction Indicator
DUM2	Ontario Jurisdiction Indicator
DUM3	Quebec Jurisdiction Indicator
YR1	Year of Cohort Creation: Linear Time Variable

Table A.2
Summary Statistics for A11
Variables

FILE DEIG1 (CREATION DATE = 11-JAN-80)
SUBFILE A B C D

VARIABLE	MEAN	STANDARD DEV	CASES
Y1	9.0005	2.0112	93
Y2	493.7927	175.7555	93
TCSDC	1691.7742	4134.3173	93
HUCFDC	0.3333	0.5918	93
AVDPDC	21.7491	114.3413	93
TVCC	54305.1519	141004.5700	93
HUPKDC	-0.00323	0.2185	93
PKSZDC	9898.5106	22255.3151	93
CMPEC	0.1341	1.3460	93
ELEUTC	1.6452	1.2853	93
TCSDC	3472.2730	4010.9315	93
HUCFDC	0.6061	0.5707	93
AVDPDC	60.2631	76.3589	93
TVCC	59579.2550	74330.0587	93
HUPKDC	-0.0399	0.0831	93
PKSZDC	11754.2049	12166.9232	93
CMPEC	0.0623	0.3329	93
ELEUTC	0.0825	0.2624	93
TCSDC	55.7204	67.9361	93
HUCFDC	0.2668	0.4457	93
AVDPDC	0.2258	0.4204	93
TVCC	0.2668	0.4457	93

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Table A.3
Correlations Among All Variables

FILE CR101 REFORMATION DATE = 11-JAN-60;
SUBFILE 4 A B C D

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CORRELATION COEFFICIENTS
A VALUE OF 0.900000 IS PRINTED
IF A COEFFICIENT CANNOT BE COMPUTED.

	Y1	Y2	TS5DC	NU5FDC	AV5PC	TV5C	NU5RDC	PR5ZDC	CA5PC	LO5TDC	VA1	DW1	DW2	DW3	EL5DC	TS5DC	NU5FDC
Y1	1.00000	0.547243	-0.292243	-0.112226	0.077431	-0.19553	-0.16485	-0.24443	-0.11302	-0.13302	-0.13302	-0.13302	-0.13302	-0.13302	-0.13302	-0.13302	-0.13302
Y2	0.46043	1.00000	-0.64942	0.13015	0.60199	-0.62412	-0.00345	-0.02384	0.06795	0.02384	0.06795	0.02384	0.06795	0.02384	0.06795	0.02384	0.06795
TS5DC	0.02243	-0.64942	1.00000	0.13015	0.60199	-0.62412	-0.00345	-0.02384	0.06795	0.02384	0.06795	0.02384	0.06795	0.02384	0.06795	0.02384	0.06795
NU5FDC	0.01526	-0.16232	0.13015	1.00000	0.05933	0.07233	0.03000	0.05869	0.02104	0.02104	0.02104	0.02104	0.02104	0.02104	0.02104	0.02104	0.02104
AV5PC	0.07451	0.113302	0.13015	0.05933	1.00000	-0.83311	-0.01025	-0.11307	0.03139	0.03139	0.03139	0.03139	0.03139	0.03139	0.03139	0.03139	0.03139
TV5C	-0.19553	-0.13460	-0.02412	0.07233	-0.07233	1.00000	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	0.02384
NU5RDC	-0.18455	-0.11333	-0.00000	0.03031	0.03031	0.03031	1.00000	-0.44345	0.35447	0.35447	0.35447	0.35447	0.35447	0.35447	0.35447	0.35447	0.35447
PR5ZDC	-0.04335	0.02165	0.02355	0.05869	-0.11307	0.12486	-0.44345	1.00000	0.44120	0.44120	0.44120	0.44120	0.44120	0.44120	0.44120	0.44120	0.44120
CA5PC	0.06907	0.00312	0.09599	-0.02104	0.02104	-0.02104	0.02104	0.02104	1.00000	0.02792	0.02792	0.02792	0.02792	0.02792	0.02792	0.02792	0.02792
LO5TDC	-0.00521	0.11611	0.02424	-0.02384	-0.02384	0.02384	0.02384	0.02384	0.02384	1.00000	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736
VA1	-0.04349	0.11611	0.02424	0.05869	-0.02384	0.02384	0.02384	0.02384	0.02384	0.02384	1.00000	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736
DW1	0.02017	0.03578	0.03578	0.03578	0.03578	0.03578	0.03578	1.00000	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736	0.02736
DW2	-0.27139	-0.49242	0.29731	0.19596	-0.09773	-0.09773	0.09889	0.15249	0.03306	0.03306	0.03306	0.03306	0.03306	0.03306	0.03306	0.03306	0.03306
DW3	-0.23563	-0.43116	-0.19605	-0.07249	-0.08513	-0.15719	0.05006	-0.18650	0.05175	0.05175	0.05175	0.05175	0.05175	0.05175	0.05175	0.05175	0.05175

Table A.3 (con.)
Correlations Among All Variables

3-JUL-80

PAGE 2

FILE DPG1 REPRINT DATE 11-JAN-80
SUBFILE 1 H C

	AVDPC	TVCC	APP-DC	PKS2DD	CPDC	LGUTDD	YF1	DUM1	DUP2	DUM3
AVDPC	-0.22769	-0.32825	0.45211	-0.40731	0.37351	0.35640	0.39106	0.67665	0.22050	0.30948
TVCC	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
APP-DC	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
PKS2DD	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
CPDC	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
LGUTDD	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
YF1	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
DUM1	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
DUP2	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430
DUM3	0.30175	0.03864	0.31250	0.02358	0.25054	0.27493	0.33377	0.37380	0.03430	0.03430

APPENDIX B

DEFINITION AND CALCULATION
OF MAJOR VARIABLES

I. CREATION AND SURVIVAL VERSIONS OF INDEPENDENT VARIABLES

A. Source of Data

(1) Variables Relating to Electoral and Legislative Phenomena

Both the creation and survival versions of these variables were calculated from data available in issues of The Canadian Parliamentary Guide. The relevant issues are those pertaining to the period of 1941 to 1971, inclusive. Data from all of these years were put into computer readable files, but, because of the timing of collection of the dependent variable data, it was usually not necessary to use variable values for 1970 and 1971 in analysis.

Since The Canadian Parliamentary Guides contain complete, unsampled data, there is no sampling error involved in generating values for legislative and electoral variables. Furthermore, the comprehensive and frequently updated nature of data from the Parliamentary Guides ensures that there are no attrition or maturation problems which affect the variables of interest.

(2) Variables Relating to Civil Service and Government Agency Phenomena

Both the creation and survival versions of these variables were calculated from data available in civil service reports from the jurisdictions of interest in this dissertation. An attempt was

made to put all data from these reports pertaining to the period of 1941 to 1971 in machine readable files. This was accomplished for all but a few years of that period. Again, because of the time of dependent data collection, variable values pertaining to 1970 and 1971 were not actually used in analysis.

Reports pertaining to employees of the Quebec provincial government during the 1940's and 1950's were not readily available in English Canada. Even the National Library did not have a comprehensive collection of early Quebec reports. So, by special request, the National Library obtained copies of most early reports from the Government of Quebec. Copies were transmitted to the author of this dissertation and originals were kept for the National Library's own collection.

Civil service or public service reports are intended to provide comprehensive, unsampled data on government employment and structure. Thus, no sampling error is associated with variable values for civil service/government agency variables used in this study. Furthermore, there are no major attrition or data maturation problems which affect time series constructed from such data. Occasionally, minor definitional problems occur in constructing time series from this data. For example, changes in the scope of employees covered by civil service provisions may create minor definitional problems for time series construction.

B. General Computational Framework

(1) Creation Variables

A common algorithm was used to compute all creation variables regardless of whether they related to civil service/government agency phenomena or to political party/electoral phenomena. This algorithm is described below in point form. Computing initial input variable values is the first part of this algorithm. The specific content of these initial variables is discussed elsewhere.

1. Determine initial input values for each final analytic variable for each year in each jurisdiction in the data set. Thus, if the variable of interest were "average change in total vote" one would first determine the total vote in a given jurisdiction for each year in the data set.
2. Transform initial input values into change variables. In computing creation variables, it was decided to use change during the two years preceding a given year as a focus for calculation. So, for each year in each jurisdiction, and for a given input variable, one finds the value for the input variable two years before the given year, and one then subtracts this earlier value from the value for the same input variable two years later.

By way of illustration, if one is interested in

computing a change variable from an initial input variable which was simply the total vote in a jurisdiction, then the change variable value associated with, for example, 1943 would be the total vote in a 1943 election, or the first election before 1943, less the total vote in 1941 or the first election prior to 1941.

As the preceding example suggests, transforming initial input values into change variable values reduces the number of usable independent variable values. This results from the fact that a data set which goes back only to 1941 cannot be used for computation of two year changes for periods ending in 1941 and 1942. 1943 is the earliest year which such two year change values can be calculated with this type of data set.

3. Transform change variables into average change variables. This simply involves dividing the change variable values referred to in point 2. by a factor of 2.

Computing average change values is one way of adjusting for the effects of computing variable values over time periods of variable length. Variable length time periods are not actually a problem within the set of creation versions of independent variables. However, such variable periods do occur in computation.

of survival variables, and it is best to ensure that all variables in the total set of independent variables are computed on a standard time period. Converting all change variables to standard yearly average change is one way of achieving this.

The average change variables generated in phase 3 are the final analytic variables used in regressions and other analysis. Some values at the late end of the time frame covered by the data set are ultimately excluded because they relate to periods of time that occurred shortly after the collection of relevant dependent data.

(2) Survival Variables

Again, a common algorithm is used to compute all survival variables. Initial input variable values discussed elsewhere are used in the process defined below in order to arrive at final analytic versions of survival variables.

1. Locate initial input values for each final analytic variable for each year in each jurisdiction in the data set. These initial inputs are exactly the same as those used in the first part of the computation of creation variables.
2. Transform initial input values into change variables. Here, one is concerned with change computed on variable periods of time. The change

value of a variable that is associated with a particular year is the initial input value of that variable for the year when dependent data was gathered minus the value of the initial input variable for the particular year of interest. Essentially, with change variables for survival, one is computing change between the time when particular dependent observations were generated and the time when they were finally observed. If one were dealing with a situation in which dependent data was collected in 1968, then the change associated with 1950 would cover eighteen years. Alternatively, if one were concerned with change that has occurred since 1960, the change variable value would relate to a period that was eight years long.

Pursuing the preceding example a bit further, initial input variable values pertaining to years after 1968 would not be used in change variable computation. Also, survival related change values relating to 1941 and 1942 would not be used in analysis because, as indicated earlier, creation related change values cannot be computed for those years. Thus, they cannot be included in analysis in a balanced and symmetrical fashion.

3. Transform change variables into average change variables. This simply involves dividing change variable values referred to in point 2. by the number

of years in the period of time on which the calculation of each change value was based. This is an adjustment for the variable time periods used in computing survival versions of change variables.

The average change variables computed in phase 3 are the final analytic versions of survival variables used in regressions and other analysis.

C. Specific Definitions of Initial Input Variables

The common starting point for the calculation of final analytic versions of both creation and survival variables are variables which have been referred to as "initial input variables". Although the definitions of some of these variables may be obvious, some of them are fairly complex and deserve further comment. All of these initial input variables are listed below with detailed comments when relevant.

1. Total Civil Service Size --- The basic definition of values for this variable in a given year in a given jurisdiction is obvious.

The only point worth noting with respect to this variable is that it does not generally include all employees of the government of a particular jurisdiction. It only includes those who are true "permanent" civil servants. The reason for this is that existing records do not consistently record

total government employment (civil service and non-civil service) in a way which fits into the overall structure of analysis in this dissertation.

2. Number of Government Departments --- Here, government departments are agencies which are distinct ministerial portfolios but which are not crown corporations.
3. Average Government Department Size --- This is simply variable 1 divided by variable 2.
4. Total number of Voters --- The meaning of this is straightforward.

The only complexity to note here is that when a value was being assigned to this variable for a year in which no election in the relevant jurisdiction occurred, then the total number of voters in the election occurring just prior to that year was used.

5. Number of Political Parties --- This relates to all parties obtaining any votes in the election which occurred during a year of interest or just prior to a year of interest.

As noted elsewhere, this variable was truncated at the value of "8". So, the value "8" means "8 or more parties". It should also be noted that, in computing this variable, multiple "independent" candidates were counted as one party.

6. Average Vote Per Party --- This is simply variable 4 divided by variable 5.

7. Legislative Party Competition --- A detailed description of the calculation of this variable is provided in a footnote on page 68 of the main text. The only additional point to be noted here is that the competition variable value for a given year relates to the actual allocation of seats among parties as reported for that year in The Canadian Parliamentary Guide.

8. Government Stability --- Several versions of this variable were considered. The results reported for this variable in this manuscript relate to a rank order variable with the following categories (1 = high stability, 5 = low stability):

- 1 = No change in government status.
- 2 = A minority government was raised to ruling minority status.
- 3 = A majority government was reduced to ruling minority status.
- 4 = A new minority government was formed.
- 5 = A new majority government was formed.

With respect to a given year, the relevant change or lack of change in government status is determined by the election which took place during that year or, if no such election occurred, by the election that occurred just prior to that year.

II. VARIABLES DERIVED FROM PRESTHUS DATA ON CANADIAN INTEREST GROUPS

A. Overview

Two variables used in this dissertation were derived from Robert Presthus's data on Canadian interest groups. One of these variables was the dependent variable which has been termed "number of interest group cohort survivors". The other variable was used as an independent or explanatory variable, and it reflected "number of pre-cohort surviving interest groups". Each of these variables will be briefly discussed in the subsequent sections of this part of the appendix.

The reader who is interested in the details of the data collection involved in producing the Presthus data will find that these have been well documented in the methodological appendix to Presthus's book, Elite Accommodation in Canadian Politics. Also, some comments on the interest group definitions applied by Presthus are contained in the opening pages of this dissertation. As a result of this existing documentation, those details will not be fully reiterated here. However, a few particularly salient features of the Presthus data that relate to both of the variables of interest are as follows:

- (1) Domain of Groups Included --- Presthus used sampling frame definition criteria which ensured that his study would cover a wide range of

formally organized groups. This criteria are mentioned in the opening part of this dissertation as well as in Presthus's methodological appendix.

The important point to note about the domain of groups covered by Presthus's study is that it does include both groups that have direct transactions with government and groups which do not have such transactions. This, as noted earlier, is an advantage for this dissertation because the focus of this work was on the aggregate structural and resource interdependencies of political system organizations, not on direct interactions and transactions. Aggregate structural interdependencies can exist among organizations which use similar resources but which do not have leaders who engage in direct interaction.

- (2) Sample Data --- The Presthus data is sample data. Thus, it does contain an element of sampling error. This, of course, contrasts with the data used to generate most of the independent variables discussed earlier in this appendix.

In order to increase the usefulness and interpretability of unstandardized regression coefficients appearing in the results of this work, the two variables based on the Presthus data were multiplied by the inverse of the sampling fraction

used by Presthus in generating his sample of interest groups. This inverse is four.

(3) Cross-Sectional Data --- The Presthus data is cross-sectional, but it can be linked to temporal phases which occurred prior to the collection of the data. This was the basic method used in constructing the dependent variable and in relating it to most of the independent variables.

B. The Dependent Variable

Each dependent variable score, or unit of analysis, is the number of interest groups which were created in a given year in a given jurisdiction and which survived until the time when the Presthus data was collected. The dependent variable distribution is a whole set of such scores arrayed across a series of years and relating to several jurisdictions. As indicated earlier each score in the dependent variable distribution is also partially the result of the application of a uniform sample weight.

A given dependent variable score or number of interest group cohort survivors can be influenced both by events that occurred prior to the year its component interest groups were created and by events that occurred after that year but prior to the time of data collection. Independent variables reflecting the former type of influence on the dependent variable were termed "creation variables". Independent variables reflecting

the latter type of influence on the dependent variable were termed "survival variables".

Explaining dependent variable variation in terms of creation and survival variables is very similar to the use of temporally phased explanatory variables to explain the political activity of a cross-sectional sample of people. The major difference is that the application of temporal phasing in this study relates to an aggregate unit of analysis, cohort survivors, not to an individual unit of analysis.

C. Pre-Cohort Interest Group Survivors

This was used as an explanatory variable. Its value for a given year in a given jurisdiction (and thus for a given dependent variable observation) was determined by adding all the interest groups which had been created in that jurisdiction prior to that year and applying the sample weighting factor mentioned earlier.

It is important to note that a given value of this variable does not include the interest groups counted in the value of the dependent variable to which it relates. Ultimately, the two values will be added together to create an explanatory variable value for a later year, but they are mutually exclusive values for the same given year. Thus, the relationship of the explanatory variable to the dependent variable is not an example of the classic methodological error in which a dependent measure is regressed on an independent measure which includes the dependent measure as one of its components.