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INTEGRATION IN NORTH AMERICA:
A STUDY OF LABOR MOBILITY AND THE GROWTH OF
REGIONAL LINKAGES BETWEEN CANADA AND THE UNITED STATES

by

Ralph William White, B.A.

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A thesis submitted to the Faculty of
Graduate Studies and Research in partial
fulfilment of the requirements for the degree of
Master of Arts
in International Affairs

The Norman Paterson School of International Affairs
Carleton University
Ottawa, Ontario
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March 7, 1978
The undersigned hereby recommend to the Faculty of Graduate Studies and Research acceptance of this thesis, submitted by Ralph William White, in partial fulfilment of the requirements for the degree of Master of Arts.

John H. Sigler, Director,
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Supervisor
ABSTRACT

Central to this study is a concern with the nature of integrative relationships between nation-states and the processes by which these relationships are created and sustained. Rather than exploring this theme on a universal scale, however, the scope of inquiry is limited to a specific nation-pair or dyad, Canada and the United States. In this regard, a summary is provided of the historical development of Canadian-American relations, and it is argued that the two nation-states form a distinct regional integration system. This contention leads to an examination of the relevance of integration theory in interpreting this development and in discerning certain dominant features of the relationship between Canada and the United States.

In the course of this descriptive analysis, attention is drawn to the highly visible and momentous growth of regional organizational linkages in the Canadian-American system, and it is suggested that the volume of transaction flows is an important environmental process conditioning the emergence of these linkages. To evaluate this assumptive hypothesis, an empirical inquiry is conducted into the impact of labor mobility on the growth of linkages in the labor sector. On the basis of this inquiry, it is concluded that labor mobility must be given serious consideration as a factor shaping integrative relationships in North America.
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CHAPTER I
INTRODUCTION: REGIONAL INTEGRATION AND WORLD POLITICS

The international system has been subjected to some momentous and dramatic changes during the twentieth century, and indeed its very character and structure has been radically altered by two dynamic forces: the fragmentation of international society before the onslaught of nationalism, and the integration of nation-states into broader and more extensive regional groupings. Obviously the most visible as well as most potent of these has been the spread of nationalistic sentiment on a global scale, and its effects have been evident in the proliferation of national actors participating in world politics. Nevertheless, this trend has been accompanied and perhaps modified by the emergence of certain regional configurations in which the member states involved have committed themselves to the pursuit of common goals and objectives through collective action. In Eastern and Western Europe, Latin and Central America, the Caribbean, and East Africa, experiments in regional integration have been undertaken with varying results. In the case of the Scandinavian countries and North America, somewhat unique regional groupings have developed, each from the largely informal but nonetheless intense communal relationships between the participating units.
Despite the noticeable growth in such large international communities particularly since the end of the Second World War, one must be careful not to lose sight of reality. Although a major source of change in the international system and an important aspect of international behavior, it would be somewhat hasty to conclude that integration has precipitated or spurred the demise of the nation-state. Quite to the contrary, one could argue that the nation-state will survive, changed to some extent but hardly obsolete.²

Four factors within the international system will probably work towards this outcome. First, the cleavages within the society of nations reflected in the uneven distribution of wealth, power, and prestige will tend to maintain the present level of fragmentation and to exacerbate existing divergencies; numerous societies caught up in the process of modernization will continue to look to nationalistic solutions.³ Second, despite growing interdependencies and increased transnational activity which have limited the freedom of action of national decision-makers and particularly those in the more developed countries, there is to some extent an "autonomy of functional contexts" which will prevent international collaboration in one sector "spilling-over" into others.⁴ Integration will be largely confined to the realm of welfare and economic well-being; its success will depend upon the
degree to which it minimizes costs and maximizes benefits for the participants in a system. Only when political leadership seizes upon these issues of welfare, politicizes and links them to outstanding issues in other areas will it be possible for integration to expand its scope. Third, the structure of the international system itself militates against regional solutions to the problems facing the nation-state. In a bi-polar world the prevailing state-of-affairs is such that:

... the relationships of major tension blanket the whole planet; domestic politics are dominated not so much by a region's problems as by purely local and global ones, which conspire to divert attention from internal affairs of the area, and indeed would make isolated treatment of these affairs impossible. As a result each nation, new or old, finds itself placed in an orbit of its own, from which it is quite difficult to move away; for the attraction of regional forces is offset by the pull of all other forces.  

And finally, the decline of the role of force in world politics restores the viability of the nation-state. The advent of the nuclear age rules out all but the limited use of force, such as "policing actions", as a means of pursuing national objectives. Hence, the dangers of nationalism as a destabilizing influence on the international system are somewhat reduced. Moreover, the decline of the role of force removes one of the primary incentives to integration: the existence of a credible external threat which compels nation-states to seek security through regionalism.
It is unlikely, therefore, that regional integration will displace the nation-state or nationalism as a major factor shaping the international system. Even within such unions, the nation-state will probably remain the basic administrative unit through which supranational and other agencies will act upon society. The loss of sovereignty experienced by the nation-state does not imply that it will eventually wither away; in fact, there is no evidence which would indicate that this process of attrition will continue unabated. Rather, one might expect that international organizations and the nation-state will strike some sort of balance in which they will complement one another particularly with respect to the tasks and functions they seek to perform.

The significance of these processes and their potential for reshaping world politics underscore the need to study integrative behavior in the international system. As a counterweight to the ravages of nationalism and as an instrument for maintaining and improving levels of welfare, regional integration has fulfilled a real function within that system. Nonetheless, the implications of this movement for the conduct of world politics does not appear wholly positive. Many authors and ideologues of the integration movement have carefully built up the illusion that regional unification will serve as a stepping stone to a universal system and world peace. The exact opposite may
in fact be closer to the truth; regional unions may tend to foster particularism and exclusivity that will in the long-run dampen any drive to integration on a global scale and severely tax the capabilities of the international system to promote peaceful change:

... to build up cohesive loyalty, national movements have often had to disinter or invent all sorts of historical, social, and emotional affinities; above all to keep alive fear of some external danger. Regionalism, starting with more differences than affinities, would have to go even further in that. 10

The effects of such a development are clear:

... it seems likely that in its first period a regional unit would be so concentrated on the task of keeping a precarious union together and creating an identity of its own that it would have little time and energy left for acquiring global vision and tackling global tasks. It would not be the first time in history when a new actor would seek strength in isolation.11

If international regionalism merely leads to the amalgamation of smaller nations into some form of super-state, closed and exclusive in its orientation, clinging to some narrow conception of a regional identity, the impact on the international system will hardly be beneficial. In fact, it may only amplify those "evils" which are already associated with nationalistic sentiment, and depending on the particular form it takes, integration may introduce a certain degree of rigidity and inflexibility into the conduct of international relations.

Hence, the study of integration is important in a number of respects: on the one hand, such an analysis will
greatly augment our knowledge of the structure and performance of both regional associations and the international order as a whole while, on the other hand, it will also allow some form of insight into what these different systems might become given certain conditions and circumstances.

Integration as a Focus of Inquiry

The visibility which the phenomenon of regional integration has attained in recent years and the growing appreciation of the possible costs and benefits involved have helped to establish it as a distinct focus of inquiry within the broader study of international relations. This recognition, however, has only tended to highlight a more general and basic problem. Simply put,

The challenges posed by contemporary developments have betrayed rather ingloriously the meagerness of our knowledge of the processes of creating and sustaining viable social relationships. How, why, and under what conditions do relatively ordered and stable patterns of community relations emerge between social entities? These are indeed perplexing questions, questions without clear answers. Yet they are important questions, for these patterns of social interaction are what eventually come to characterize and define the structure of larger social systems.12

Integration theorists have struggled with this problem for a number of years, and although progress has obviously been made, the study of this phenomenon has gone through what could best be described as "growing pains", at the heart of which has been the confusion surrounding terminology. In the past, analysis and theory-building have
not been as fruitful or productive as they might have been because of the lack of clarity in using the concept of integration. It has been framed in rather vague terms and subjected to a wide range of interpretations which have only magnified the degree of confusion. Only in recent years has there been a much more concerted effort to be precise with definitions of this concept.

Compounding these difficulties has been the natural tendency among the various disciplines in the social sciences to impart their own views and biases when defining "integration". Political scientists, for example, have focussed upon the creation of formal institutions and the redistribution of decision-making authority between the national and regional levels. Economists have been concerned with the static and dynamic effects of various kinds of economic arrangements implemented through regional organizations. In sociology, particular emphasis has been placed on the creation of symbols, images, and social norms which provide the foundation for the legitimation of authority and the emergence of a collective identity.

Obviously one cannot single out any one of these perspectives offered by the different social sciences as being more adequate or appropriate for the study of regional integration. Nonetheless, a real problem has arisen out of these divergencies in the sense that scholars and students have tended to limit the examination of the concept to the
narrow range of behavior and activity which corresponds to their particular interests and the boundaries of their discipline. Thus, the lack of precision which has characterized many attempts to analyze the phenomenon of integration has been aggravated by the lack of consistency and agreement in defining the term from one field to another.

In short, one of the major obstacles to achieving a more comprehensive and acute understanding of regional integration is the general absence of conceptual precision. What is probably needed to rectify the situation is a more complete synthesis of the views of the various disciplines which deal with this phenomenon. This paper, however, cannot undertake such a mammoth task, but it is possible to suggest some elements that should be included in a definition of integration.

In broad terms, integration presumes a particular state-of-affairs in which two or more actors become fused together into a new whole.\textsuperscript{13} Within the international and regional contexts, the principal "actors" in question are clearly nation-states, and the "new whole" is the more extensive social collectivity through which they interact and function as a single unit. The final outcome or end-state of this kind of merger, however, does not necessarily have to duplicate on a grander scale the model furnished by the nation-state, but to the contrary, it may assume a variety of forms with differing structural characteristics.
A general consensus also prevails among social scientists that integration is a process. The use of the term "process" is usually employed in this context to convey a sense of systematic, continuous, and interdependent action. Adopting this viewpoint, integration can thus be perceived as a set of relationships between actors that is characterized by an almost constant series of changes.

The preoccupation with integration as a process, however, has contributed in some ways to magnifying the sources of confusion and ambiguity which have hampered research and analysis. An adequate definition of integration should provide a concrete focal point from which the researcher can proceed to analyze patterns of interaction within particular regional groupings or some other aggregate of nation-states. Many students have concentrated almost exclusively on the dynamic aspects, and at times it would seem as if they have lost sight of the specific kind of behavior that is under examination. They have been content to describe background conditions and process mechanisms, but they have not been nearly so precise or clear in cataloguing the features which are generally associated with integrative relationships. In fact, these properties have frequently been taken as given or left implicit in most studies. This accent on the dynamics of integration has been (and will continue to be) a source of confusion because it provides no clear-cut conception of the defining
characteristics of integration. Until this shortcoming is recognized, the problem of conceptual clarification will remain to some degree.

By centering our attention almost solely upon integration as a process; as a continuous series of actions, there is a tendency to overlook that such actions, taken in their totality, contribute to a particular state-of-being, a particular condition, that prevails among the participating units. In defining the parameters or dimensions of this end-state, one can perhaps command a better perspective on the nature of the phenomenon which is being examined. Moreover, the emphasis on process does not always provide an accurate picture of the relationships between the participants insofar as it presumes that particular actors, subjected to continuous action and change, must be either integrating or disintegrating. But what of the situation in which the member states are highly integrated but experience a temporary or moderate reversal in their progress towards integration? Although the observer might conclude that the system is disintegrating, his assessment is valid only in relation to the level of integration which was previously achieved. The actors involved may continue to manifest all the characteristics of integrative behavior, and the system may still be integrated while undergoing a period of transition which may witness recurrent cycles of integration, disintegration, and reintegration. Similarly,
a particular relationship may be integrated (in relative terms) while it may not possess the potential to be truly integrative. In this respect, Naomi Black concludes:

... interacting units may look like a community without necessarily being in the process of becoming one. Suppose we have two relationships, neither of which are likely to produce integration; that is, mergers are not to be expected. It should still be possible to compare these relationships. If one relationship looks more like a community (more integrated), the other relationship may still be more likely to produce a community (more integrative). 14

The crux of the matter is that integration must also be treated as a special condition or state-of-being, which becomes manifest in certain patterns of behavior. By making the distinction between condition and process, the researcher or analyst acquires a more solid foundation from which to approach the study of integration. The dual emphasis upon condition and process opens up a number of possibilities and permits us to take in a broader range of phenomena. In addition, it provides a concrete focal point from which to proceed. While a concern with process directs attention to the dynamic aspects of integration, the notion of condition and state-of-being highlights the static qualities which are implicitly connected with integrative relationships.

Thus, in dissecting the concept of integration and in seeking to differentiate it from other phenomena in international relations, one might focus upon three distinct elements or qualities. Firstly, the concept seems to
suggest, at least intuitively, that the participating units enjoy a level of collaboration which contrasts sharply with the "normal" or traditional modes of conduct characterizing relations between nation-states. That is to say, the groups, organizations, and states which constitute a community or integration system are bound together by a complex set of relationships which are both highly differentiated and extremely interdependent. Secondly, the patterns of activity or interaction that define such relationships are not transitory in nature but are vested with an intensity, intimacy, and durability which help to mold the different actors into a cohesive unit. Thirdly, integration implies that the "new whole" encompassing the various member states must be a voluntary association in the sense that the merger of the participating units is not effected or maintained through the use of force. The mutual involvement which does exist is based upon a joint commitment to meet commonly experienced needs through collective action.

To make this sort of distinction, however, does not automatically dispel the semantic confusion surrounding the concept nor alleviate some of the major ambiguities. Indeed it is quite possible that a group of states within a region could experience a marked degree of co-operation, collaboration, or interdependence in their mutual relations, and yet they would not necessarily constitute an integrated system at least in the sense which theorists use the term.
In subsequent chapters an attempt will be made to more explicitly define the concept of integration and to delineate those features which distinguish it from other social phenomena. For the moment, however, the broad conception of integration outlined in the preceding pages will serve as a base from which to explore the subject in greater depth and to discuss its relevance for the North American experience.

Purposes and Goals of the Present Study

This paper has been prompted by an interest in the phenomenon of regional integration and the need for a more comprehensive analysis of the structure and functioning of regional systems. The study itself, nonetheless, is largely derivative, drawing heavily upon a few of the traditional and established approaches which have been employed by social scientists to describe and explain integrative behavior. It is original only in the sense that it seeks to apply those "theories" to a specific regional context which has generally been neglected in the study of integration: that is, North America. The close relationship between Canada and the United States which has become more deeply entrenched over the years offers a unique laboratory in which to analyze some of the key premises and theoretical constructs advanced in the literature and to assess the range of possible outcomes or
end-states of integrative behavior. Therefore, by focussing
on this particular region, it is hoped that this essay will
be able to contribute in some small way to augmenting the
present level of understanding of the process and condition
of integration.

In terms of format, the study is divided into two
separate and distinct parts. The first half of this thesis
(Chapters I through IV) revolves around a general discussion
of the form and substance of Canadian-American relations
and, in particular, around the whole question of whether
North America can be accurately portrayed as an integration
system. That is to say, primary emphasis is placed upon
descriptive analysis. In this context, Chapter II presents
a summary of the development and evolution of the all-
encompassing relationship between Canada and the United
States from an historical perspective. This survey leads
to a more abstract and theoretical treatment of the subject
in Chapter III which concentrates upon the problems of
defining the concept of integration and establishing its
relevance for the analysis of North America. The first
section of the study then concludes in Chapter IV with an
assessment of the dominant patterns of integration which
have emerged upon the continent.

The second part of this paper is, by way of contrast,
directed towards systematic empirical analysis of the
relationship between Canada and the United States. Rather
than attempt to cover and analyze the whole spectrum of integration in North America, however, the scope of the study is limited to the analysis of a specific dimension of that process: the growth of regional institutions and, in particular, those which have been established to cope with labor issues and problems (such as the "international" trade unions). In turn, this collective and corporate behavior is considered to be strongly correlated with a specific mode of interaction — labor mobility — which has been, in the past at least, a significant feature of the environment of the Canadian-American system. Thus, the central and primary concern of the second part of this study might be reduced to a simple assertion or proposition; that is, labor mobility between Canada and the United States has had a critical impact upon the growth of regional institutions. It is this specific relationship that will be tested by various techniques of statistical analysis, and hopefully, in this manner the general goals of the thesis will be partially fulfilled.

In a broader sense, what this study is attempting to evaluate is the effect of environmental processes and interdependencies upon communal relationships between Canada and the United States and all that implies in terms of the relational patterns between social groups in each country, the two national actors involved, and existing regional
organizations. In this context, transaction flows between the two societies can be viewed as crucial elements in structuring the environment of the Canadian-American system. That is to say, Canada and the United States are joined by a complex and intricate web of communications processes, and the mutual relevance and salience established by this environmental condition can be seen as an important factor underlying the development and maintenance of communal relationships.

This basic theme will be expanded and scrutinized in a more detailed manner in the second part of the study. The conceptual framework from which it is drawn will be subjected to further elaboration and refinement in Chapter V. Clarification of the two key variables which are incorporated in that framework — institutional capacity and labor mobility — will be provided in Chapters VI and VII along with a presentation of the operational definitions and measurement procedures which will be employed to test the hypothesized relationship. Chapter VIII is devoted to the actual statistical analysis and all that entails in terms of technical considerations, problems of validity, and interpretation of the empirical findings. And finally, Chapter IX offers some conclusions which might be drawn from the study and discusses what they suggest or reveal about the process and condition of integration in North America.
For the moment, nonetheless, the most immediate and pressing need is to elaborate on the nature of integration in North America. Consequently, the next few chapters will try to provide a more thorough treatment and analysis of the concept of integration, examining its various dimensions and exploring its relevance to the North American experience. To lend background and greater depth to that inquiry, however, it would seem appropriate to begin with some sort of historical survey of the evolution of Canadian-American relations.
PART I

INTEGRATION IN NORTH AMERICA: DESCRIPTIVE ANALYSIS
CHAPTER II

CANADIAN-AMERICAN RELATIONS IN
HISTORICAL PERSPECTIVE

In probing the history and development of Canadian-American relations, one is immediately struck by the sheer intensity of the relationship which has emerged over the years. The mutual interaction which animates the behavior of groups and organizations in both national societies is colossal in its proportions. Similarly, few countries in the world share such extensive and pervasive patterns of collective and corporate activity. Looking at this common experience, it would not seem wholly inappropriate to speak in terms of a Canadian-American system or a "continental community". Moreover, if our impressions can be trusted, it might be suggested that this system exhibits in varying degrees all the general features which are commonly associated with the process and condition of integration.

These communal relationships which set Canada and the United States apart as a distinct regional system have been shaped by a number of significant background conditions or environmental realities. Among these factors, some are constants — physical realities such as geography — while others are more aptly treated as social, cultural, and economic conditions which have gradually evolved and become entrenched over time. The latter are obviously more susceptible to change, and yet by virtue of their
pervasiveness and intensity, they must be viewed as relatively enduring and stable factors.

There are, unquestionably, important social and cultural differences between Canada and the United States, and yet these are largely overshadowed by the similarities which bind them together. The two national societies which occupy the continent are joined in common by language, similar cultural patterns, and shared traditions and institutions. In this respect, the boundary between the two countries has not served as a hard and unyielding barrier to the transmission of ideas, beliefs, and values. The flow of migrants from one country to the other and the resultant intermingling of the Canadian and American populations has produced a complex and intricate web of interpersonal contacts and kinship links.³

This extensive network of communications has been augmented in turn by the constant north-south flow of goods, capital, and resources; and of the realities shaping Canadian-American relations, perhaps none are more visible and, for that matter, more harsh than these economic forces. In contrast to the United States, Canada is a trading nation; its economic development and the welfare of its citizens are largely hinged on trade, and for the foreseeable future, this will continue to be the case.⁴ Nonetheless, it must be pointed out that the flow of goods between Canada and the United States is unrivalled in
the world. The two countries are each others best trading partners, and this fact constitutes a fundamental reality of the situation in North America.

To look merely at the absolute levels of trade, however, hides some critical elements in the overall relationship. On a year to year basis, sixty to seventy per cent of Canada's trade, both export and import, is conducted with the United States, while on the reverse side of the coin, Canada's share of American trade constitutes only twenty-five per cent of the total dollar value. No doubt there is an alarming degree of dependency involved in these relations at least from the Canadian viewpoint, and yet it must also be remembered that Canada is the single largest market for American exports and imports.

Furthermore, Canada's exports abroad tend to be dominated by a few commodities which generally fall into the category of staple products. In the past it was largely goods such as furs, fish, and wheat which furnished the basic exports to foreign markets. And with the evolution of the Canadian economy over the years, there has not been a radical shift away from this situation in terms of the proportion of export trade (in dollar value) accounted for by staple commodities. Rather than manufactured items playing the dominant role in Canada's export performance as might be anticipated, the list of staples which originally characterized the foreign trade relations of this country
has simply been augmented by other staple products — oil, uranium, natural gas, zinc, lead, asbestos, and the like. The obvious conclusion to be drawn is that Canada, like many developing nations, relies upon the export of staple products in a raw or semi-processed condition exchanging these in turn for manufactured goods from more developed economies. In the Canadian example, the United States serves as the major consumer of these primary resources as well as the major supplier of manufactured commodities.

In addition to these patterns of trade there is an immense flow of capital across the border, largely one way in its direction but not exclusively so. The dominant trend in this respect is one in which Canada has sought to finance its development by importing huge sums of foreign capital primarily from the United States. What has aggravated this basic problem is simply that the capital flows involved have taken the form of direct investment with dramatic implications for Canadian society. As the situation now stands, the bulk of Canada's manufacturing and resource-extractive industries are owned by American business interests. Indeed the degree of foreign ownership in the Canadian economy finds no parallel among modern nations. And it is precisely this state-of-affairs which has proven increasingly worrisome if not intolerable to many Canadians.

To understand the North American experience, therefore, one must appreciate the influence of factors such as these
in structuring the environment in which the relational pattern between Canada and the United States has evolved. Indeed due consideration of the environmental realities suggests that the history of Canadian-American relations might be seen essentially as a process of constant adjustment and accommodation.\textsuperscript{10} The successful revolt of the American colonies in the eighteenth century imposed an "unnatural partition" of the continent, and in the course of time, both the United States and Canada were forced to come to terms in their own way with that political division.\textsuperscript{11}

The Canadian experience in particular has been marked by perpetual vigilance and defiance against the continental thrust of the United States. The confederation of the British North American colonies in 1867 and the creation in the following years of a Canadian Dominion which stretched from Atlantic to Pacific were predicated to a great extent upon suspicion and fear of the dynamism of American society and its unbridled territorial expansion.\textsuperscript{12} East-west linkages were developed and nurtured in order to tie the disparate and widely separated elements of the new Dominion into a more coherent whole. But these efforts were not always enough. Canada had to accommodate not only diverse regional interests but to continually compromise with the irresistible north-south pull of geography and the "pressures" of American society. The constant flow of
goods, capital, peoples, and ideas across the border had to be accepted although not always without some misgivings.

The size of the United States has relieved it of much of the burden of adjustment which Canada has had to carry, but nonetheless, it has still had to face the problems of co-existence and co-habitation in North America. The simple realization that the division of the continent was permanent and that it must be shared with another power was something which many Americans found difficult to grasp. In their eyes, the existence of British North America, and later Canada, posed a threat to their growth, expansion, and security which could not be easily tolerated. Only with time and after much conflict were these perceptions gradually moderated and subdued.

The psychological re-orientation, however, was only one dimension of the problems of adjustment faced by the United States as it grew as a North American power. The partition of the continent raised serious military, territorial, and economic questions which were not easy to resolve. Moreover, like Canada, the United States has not been able to ignore the intense patterns of interaction which have essentially erased the boundary. It has been compelled to adapt to these flows between the two countries and to deal with the problems they raise by accommodating and modifying various competing interests.
In this whole process of adjustment which has characterized the development of Canadian-American relations, it must be remembered that Great Britain also performed a crucial role. Until the 1920's Canada and the United States did not conduct their formal diplomatic relations through direct bilateral contacts but rather through channels provided by the British government. Throughout this period Canadian-American relations were part of a tri-partite arrangement, a North Atlantic triangle, in which formal communications flowed between Canada and Great Britain and between Great Britain and the United States. Indeed Canada had no international identity or personality to speak of other than as a member of the British imperial system.

Within that triangle, it was Britain which generally served to moderate the tensions and conflicts which sprung from North American problems. Canada has come to pride itself as a "mediator" and "linchpin" in the relationship between the North Atlantic powers, but this conception of its role has been largely conditioned by events in the twentieth century. It would be grossly inaccurate to describe Canada's role as such when referring to the period prior to the outbreak of the First World War. For during much of that span of time the United States and Canada found themselves at loggerheads over a variety of issues. Great Britain was inevitably drawn into such conflicts, just as Canada was automatically involved when tensions engulfed
Great Britain and the United States. Yet, in most of these cases, Britain carefully pursued a policy of accommodation, the greatest obstacle to which was often the extreme demands and the stubborn postures adopted by the Canadian and American governments. Canada's position in these disputes was, in the last analysis, usually weak and untenable. Although Great Britain was determined not to throw away its remaining possessions in North America by leaving them open and defenseless before the forays of American expansionism, it was equally unwilling and unprepared to wage another war on the continent. Thus, in conflict situations, Canada often found that its interests were sacrificed to the considerations of British-American accord. In time this proved to be a source of some bitterness which fed Canadian nationalism and spurred Canadians to seek greater control over the conduct of their foreign affairs.

The North Atlantic triangle is, thus, a dominant theme in the historical development of Canadian-American relations and in the process of adjustment involved. It indicates the broad parameters in which conflicts and major points of contention were muted or resolved and in which the basis for a more solid and amicable relationship between the two North American societies was gradually established. Although the triangle is no longer the force that it used to be in Canadian-American relations, some of the remnants are still discernable, especially in public attitudes.
Keeping this in mind, the whole process of adjustment from the American War of Independence to the present can be roughly broken down into six stages or historical periods. Decisions about the division points are necessarily arbitrary, but historians generally agree on a number of events which serve as "watersheds" or "benchmarks" in the history of Canadian-American relations. 20 Each of these stages represents in terms of levels of conflict and the major issue areas constituting the agenda a somewhat distinct and unique phase in the evolution of the relationship between the two countries.

Period of Open Hostility (1776 - 1814)

The first phase of Canadian-American relations extending from the revolutionary upsurge of 1776 to the signing of the Treaty of Ghent in 1814 was marked by a degree of hostility and bitterness which has remained unparalleled in the course of their development. Within this span of approximately forty years, the United States and Great Britain were embroiled in two wars on the continent, and on both occasions, American authorities sanctioned direct military action against British North America. The first such period of open warfare precipitated by the revolt of the Thirteen Colonies left in its wake an atmosphere of hate and suspicion which poisoned Anglo-American relations for decades. Apart from the years
of actual violent confrontation, there were frequent and continual calls from certain segments of the American public for a "war of extermination" against Britain's colonial possessions in the northern portion of the continent.  

In British North America, the massive influx of American colonists, expelled from the newly independent United States because of their pro-British sympathies, introduced an element into the population that was fervently loyal to Great Britain and which tended to view the revolutionary experiment to the south with particular distaste. In such a tense and hostile environment, the likelihood of war was never remote, and in 1812, a second period of violent confrontation ensued. The Treaty of Ghent formally signalled the cessation of hostilities in 1814, and although not realized at the time, it also marked the beginning of an era of peaceful co-existence.

Despite the general animosity and acrimony which prevailed throughout this period, a positive note was struck by the signing of Jay's Treaty in 1794. It has stood out in the historical development of Canadian-American relations for several reasons. Among its numerous provisions, the Treaty specifically guaranteed the right of American citizens, British subjects, and native peoples to move freely across the border, a right which prevailed without modification for over 135 years. With respect to trade between the United States and British North America, it
also provided for the reciprocal equalization of tariffs and customs duties. In a broader sense, the agreement was particularly significant because it established a number of major precedents in Anglo-American relations. On the one hand, it attempted to deal simultaneously with a variety of outstanding issues which plagued the relationship, and on the other hand, it invoked the use of joint commissions to arbitrate in specific areas of dispute. The success of this dual formula ensured it would be employed in one form or another to resolve future conflicts between the two parties.

Period of Intense Competition and Conflict (1814 - 1871)

For the sixty-odd years following the War of 1812, Great Britain, the United States, and British North America clung to a tenuous and fragile peace. The possibility of another war which might pit the United Kingdom and its possessions on the continent against the United States was very real, and a continual string of crises brought the two primary antagonists to the brink of war on more than one occasion.\(^{23}\) The blood-letting of the previous years had not produced any unshakeable commitment to peace, and feelings of mistrust and suspicion continued to haunt the course of Anglo-American relations. There were recurrent threats and some noticeable "sabre-rattling" emanating from various governmental circles throughout this period, and some
violent although relatively minor border clashes resulted from the actions of individuals and private groups.

Much of the intense conflict experienced at this time was spawned from three basic sources. The most visible was the unending series of boundary disputes which periodically surfaced as the frontiers of settlement pushed steadily outwards from their bases in the eastern portion of the continent. The great territorial questions involving the Maine-New Brunswick border, the St. Lawrence River, the Great Lakes, Oregon, and so on, defied easy solutions, and yet each in turn was resolved through arbitration and negotiation.

A second point of friction within the North Atlantic triangle revolved around the issue of natural resources and, in particular, access to the coastal fisheries. The principal issue at stake was the traditional privileges enjoyed by American fishermen in Canadian coastal waters, privileges which British authorities felt the United States had forfeited as a result of the War of 1812. The industry was crucial to the livelihood of certain regional groups within both the United States and British North America, and consequently, the problems which did arise in this area tended to become extremely heated, often escalating into serious crises. Although negotiation between the two parties succeeded in producing a number of settlements on this question, they proved to be temporary rather than
permanent in nature. As the time limit on these agreements ran out or as conflicting interpretations emerged with respect to the meaning of specific provisions, past grievances would be rekindled. The whole situation would rapidly assume crisis proportions only to be buried once again when some new understanding was hammered out. This pattern prevailed throughout the nineteenth century, and indeed no mutually satisfactory resolution of the fisheries dispute was reached until 1912.

The third source of conflict in this period stemmed from the major internal problems experienced by the two societies on the continent. The struggle for responsible government in British North America and the questions of slavery and secession in the United States prompted intervention by parties on both sides. Such actions only helped to reinforce the sense of fear and suspicion with which many citizens of the United States and the colonies of British North America regarded the intentions of their neighbours.

Given the level and intensity of conflict during this period, it was not surprising that both British and American authorities initiated extensive military programs in North America, the bulk of the defence expenditures being funnelled into the task of constructing adequate border and coastal fortifications. In this respect, the Rush-Bagot Agreement of 1817 was somewhat of an aberration. It flowed
from the negotiations surrounding the Treaty of Ghent and was motivated by the concern of both the British and American governments to avoid a costly race in naval armaments on the Great Lakes. Contrary to the popular belief which has gained acceptance in this century, the Agreement was not designed to produce, nor did it produce, a demilitarization of the border separating British North America and the United States. It merely effected a limitation of armaments in a particular strategic sector.  

Other military preparations continued unabated until 1871 when a coincidence of factors modified the threat perceptions of both Canadians and Americans.

Another incident which stood out in sharp relief against the general background of intense conflict and tension was the premature experiment in reciprocity attempted by British North America and the United States. A significant portion of the commercial activity of British North America was focussed on the St. Lawrence River system, and in the fierce economic competition with other centers in the United States, the one real advantage which this area had in diverting the trade of the American Mid-West away from New York was the imperial preference granted by Great Britain on goods exported from the colonies. The visions of a commercial empire on the St. Lawrence which had inspired the privileged classes in the United Canadas was thus shattered when the British government dropped the
imperial preference and opted for free trade in the 1840's. In rapid succession there followed in 1848 the establishment of responsible government which to these groups seemed to sweep away the last vestiges of their privileged position and power in Canadian society. Their discontent swelled into a movement for annexation to the United States, and when this was quashed by British colonial authorities, they turned their attention to the possibility of commercial union or reciprocity.

In 1854, a Reciprocity Agreement between the colonies of British North America and the United States which provided for free trade in a wide range of natural commodities was successfully concluded. It remained in force for ten years before American authorities announced their intention not to renew the agreement. During that span of time, the colonies of British North America enjoyed a tremendous expansion in economic activity, and although that growth could not be solely attributed to free trade, it did tend to generate considerable support for the continuation of such measures. In the years following the abrogation of the Reciprocity Treaty, the question of free trade retained its vitality and periodically cropped up on the Canadian political scene. Indeed it has never completely lost its appeal and has continued to be a recurrent theme in Canadian-American relations.
Period of Continental Stabilization and Development (1871 - 1909)

The year 1871 proved to be the "Great Divide" in Canadian-American relations, ushering in a period of relative stability and steady progress. Two events in that year contributed significantly to the creation of a less hostile environment. The first of these came with the signing of the Treaty of Washington which effectively removed from the agenda of Canadian-American and Anglo-American relations the most threatening and dangerous controversies left over from the Civil War and preceding years. The second event was the withdrawal of all British regular troops from North America with the exception of the two garrisons stationed at Halifax and Esquimalt. In the absence of any real and overt threat on the border, the United States and Canada turned their attention substantially to the internal problems generated by national development. Both governments had no intention of carrying the financial burden that defence of the boundary would entail. Thus, after 1871, military preparations along the frontier ceased to all intents and purposes, and a permanent demilitarization was achieved.

These developments undoubtedly aided in softening the acute threat perceptions of the previous era and in creating a more tranquil atmosphere for Canadian-American relations, but nonetheless, the old and deep-rooted suspicions of the
past were not easily dispelled.\textsuperscript{34} The notion of "manifest destiny" had not been wholly abandoned by Americans. Its aggressive tone had been significantly modified, but that provided little comfort to most Canadians. From the vantage point of Americans, the United Kingdom still constituted the single greatest threat to their national security, and Canada because of its colonial ties and reliance upon Great Britain was treated as an integral part of that fundamental problem of security.\textsuperscript{35}

Crisis were bound to arise, but those which did break to the surface were far less frequent and usually less intense than those which characterized the period prior to 1871. Both Canada and the United States were deeply committed to the process of national development, and the monumental economic, social, and political problems which were generated by this new activity tended to overshadow most of the contentious issues plaguing their relationship. Moreover, in this great age of imperial expansion, Great Britain and the United States were inclined to focus more of their energies on "external enemies" than on one another.\textsuperscript{36}

In conjunction with these factors, this period witnessed the first substantial growth of continental linkages. By 1887, American business enterprises had established eighty-two subsidiaries in Canada, a development which was paralleled by a noticeable shift towards "international"
unionism within the labor movement. The foundation was thus being laid for a more solid and substantive relationship between the two co-habitants of the North American continent.

Period of Early Co-operation and Joint Management of Resources (1909 - 1940)

By the early years of the twentieth century, considerable progress had been made towards the improvement of Canadian-American and Anglo-American relations. Indeed a new spirit of co-operation had taken root which would prevail for much of the subsequent period. The most visible indication of that trend was embodied in the Boundary Waterways Treaty of 1909 which marked the first major attempt by Canada and the United States to establish effective joint management and control of their shared resources. The agreement represented the outcome of a long and protracted series of negotiations which had been sparked initially by American initiatives in 1902. In that year Congress broached the topic of international control of boundary waters, and the discussions with Canadian officials which followed resulted in the formation, three years later, of the International Waterways Commission. The activity of the new agency was limited purely to investigation, and this lack of authority proved to be a critical handicap which seriously impaired its performance. The failure of the Commission only underscored the need for
a more comprehensive and authoritative arrangement between the two countries. Negotiations were resumed, eventually culminating in the Boundary Waterways Treaty which called for the creation of a permanent tribunal, the International Joint Commission, to enforce its provisions. The agency was vested with broad powers to arbitrate, investigate, and report upon those problems affecting the condition and use of waterways adjacent to the border. Needless to say, in resolving those problems, the Commission has had remarkable success for over sixty years.

The implementation of the Waterways Treaty of 1909 was not, however, just an isolated incident in the development of Canadian-American relations, but rather it was the first link in a chain of events which signalled a fundamental shift in the attitudes, perceptions, and behavior of Canadians and Americans when dealing with issues of mutual concern. In 1910, another permanent body, the International Boundary Commission, was formed to deal with the recurrent technical problems raised by the need for adequate demarcation and continual maintenance of the international boundary. It also possessed the authority to arbitrate and to impose binding decisions in those cases of dispute pertaining to the location of the boundary. In 1911, an agreement was reached by the governments of Great Britain and the United States to regulate and control the fur seal industry on the Pacific Coast, thus sweeping away a
controversial issue which had first emerged in the 1890's. A reciprocity agreement between Canada and the United States was also negotiated in the same year, only to be rejected by the Canadian people in a bitterly fought election campaign. By 1912, the volatile question of coastal fisheries which had been a major source of conflict for almost a century was finally reduced to the point where the primary concern of the parties involved was directed to working out acceptable practices and procedures for regulating the industry. To this end, a joint fisheries commission was established which remained active for several years. The way had been paved by a series of agreements concluded by Great Britain and the United States in 1908 and 1909 which confirmed the rights of American fishermen and submitted the remaining points of dispute to arbitration. The decision of the Hague Tribunal in 1910 was accepted by both sides, and the fisheries question was, to all intents and purposes, resolved.

An increasingly threatening international situation added further momentum to the development of more amicable relations between Canada, the United States, and Great Britain. As the prospects of war in Europe grew more menacing, the mutual interests and concerns of the three nations rather than their common problems were given greater vent. The outbreak of hostilities in 1914 and the eventual involvement of the United States as an active
participant accelerated the general trend towards co-operation and stimulated even more extensive participation in joint activities.

Consequently, there emerged in the aftermath of the Great War a relationship between Canada and the United States which was both more intense and more complex in terms of the formal and informal linkages binding them together. The value of American investment in Canada surpassed that of Great Britain by the early 1920's, and in 1929, it was estimated that American-based firms either wholly-owned or controlled over 1000 Canadian business enterprises. Bilateral trade displayed steady gains, gradually eroding away the prominent position which Great Britain had previously held. The growth of joint institutions continued unabated, two permanent agencies being set up to regulate particular sectors of the fisheries industry — the International Pacific Halibut Commission in 1923 and the International Salmon Fisheries Commission in 1930. With the Balfour Declaration of 1926, Canada acquired formal control over the conduct of its foreign relations, thus escaping the last constitutional remnants of its dependence on Great Britain and emerging as a distinct and independent element in the North Atlantic triangle. Not surprisingly, one of the Canadian government's first initiatives was to establish a diplomatic
legation in Washington, and Canadian-American relations were put on a completely new footing.

The Great Depression, however, was to be a critical set-back which halted, or even reversed, much of the progress which had been made in previous years. The high tariff walls constructed by both countries reduced the level of bilateral trade to roughly one-third of that which had prevailed before 1929, and similarly, the amount of American investment entering the Canadian economy dropped substantially. Moreover, for the first time in over 130 years, restrictions were placed on the movement of peoples across the border. Only in the latter half of the decade were there any signs of recovery in the status of Canadian-American relations, and that basically coincided with the change of government in Canada which returned Mackenzie King to power in 1935.

Nonetheless, the period as a whole, extending from the Boundary Waterways Treaty to the outbreak of the Second World War, reflected a fundamental change in the relationship shared by the two countries. Judging by the degree of fusion and interpenetration which was achieved during these years, it would seem that a dramatic re-appraisal of the continental realities had occurred within both Canada and the United States. There was certainly a greater willingness to accept accommodation and adjustment as a mode of
conduct in their relations and a greater appreciation of the goals and objectives which they held in common.

Period of Consensus and Continental Partnership (1940 - 1968)

The Second World War was a catalyst in the development of Canadian-American relations which stimulated collective activity and consolidated the mutual involvement of the two societies. It produced not only a military partnership but a deeper association which extended into all facets of their relationship — political, economic, and social. A vast network of boards, commissions, and agencies was established in order to pool the resources of the two countries and to more effectively co-ordinate their combined war effort. Most of these bodies were disbanded at the end of the war once the rationale for their existence had disappeared, and only a few, such as the Permanent Joint Board on Defence, managed to survive. Nonetheless, they left a legacy of co-operation which acquired new meaning and form when carried through into the post-war era.

This organizational development was by no means the only feature of the new association which took root during the war years. Canada and the United States initiated a variety of joint projects, largely related to defence, among which the construction of the Alaska Highway was one of the more prominent undertakings. This activity of necessity required huge sums of capital, and the subsequent influx of
foreign investment into Canada from the south resulted in a virtual fusion of the two economies.\footnote{47}

Obviously, the events of the spring of 1940 and the panic which ensued in Ottawa and Washington with the collapse of France and the destruction of the British Army were a powerful stimulus to North American co-operation and the surge of activity which bound Canada and the United States so closely together.\footnote{48} Nevertheless, this heightened level of collaboration was not viewed as temporary, as limited to the duration of the war. In the Ogdensburg Agreement of August 1940, King and Roosevelt envisioned that the alliance between their countries was "part of the enduring foundation of a new order, based on friendship and goodwill".\footnote{49} Given this common determination and the recognition by both governments of their mutual interests, it was not surprising that a concerted effort was made after the cessation of hostilities in Europe to preserve and maintain the intense relationship which had been forged during the war years. The tensions generated by the increasing Cold War rivalry between the United States and the Soviet Union only provided further reinforcement and impetus for the growing involvement of the two nations and their societies.

In the post-war era, the formation of joint agencies and institutional contacts continued at a rapid pace, and the military partnership was incorporated into two formal structures, one multilateral and the other regional: the
North Atlantic Treaty Organization (NATO) and the North American Air Defence Command (NORAD). Some massive joint ventures were undertaken, perhaps the most noteworthy involving the St. Lawrence Seaway and the Columbia River Project, and the level of economic activity in terms of bilateral trade and foreign investment displayed steady growth. In sum, the relations between Canada and the United States had become inextricably entwined in a complex web of formal and informal linkages.

That situation was only complicated to a greater degree by the global responsibilities which the two countries carried after 1945. Canada and the United States had emerged from the war relatively unscathed in contrast to the other major participants, and consequently, both were catapulted into the international arena. Obviously, the disparity in size between them dictated that the positions and roles they might assume would be radically different, and yet, regardless of these differences, they were both compelled to take a more active part in the new international order. Neither could retreat into isolationism as was the case in the pre-war years or ignore the global responsibilities facing them. As a result, the context of Canadian-American relations was fundamentally altered. Not only were greater stress and effort directed to global concerns, but continental interests had to be continually reconciled and balanced with multilateral obligations.
Nevertheless, what marked the period as a whole was the broad consensus which prevailed in Ottawa and Washington on most issues and problems of mutual concern. In terms of defence and global security, both parties perceived the "Communist menace" in a roughly similar manner and were convinced of the need to contain it. Agreement between the two countries only tended to break down in their different assessments of the methods that should be employed to pursue those ends and combat the Soviet threat. The case for close military co-operation on the continent and in Europe was never seriously disputed by either government. Furthermore, in domestic affairs, there was general acceptance that close economic ties and joint management of continental resources were both mutually desirable and beneficial aspects of their relationship which should be maintained and, to some extent, even strengthened.

Period of Re-appraisal (1968 - ?)

The increasing level of conflict and the rapid deterioration in relations between Canada and the United States since 1968 has prompted a few observers to suggest, perhaps a bit prematurely, that the consensus of previous years has been dispelled and the two countries have entered a new phase in their relationship. Whether that may actually be the case can only be properly determined with the passage of more time and the advantages afforded by
hindsight. The sudden rapprochement between Canada and the United States which has occurred with the inauguration of President Carter, however, would seem to indicate that past difficulties might be partially attributed to the style of conducting business adopted by the Nixon and Ford administrations or even a clash of styles between the American and Canadian governments. In this respect, the breakdown in consensus perceived by some writers may not have been as real or as complete as originally thought.

Nonetheless, it would be difficult to argue that there has not been a serious re-appraisal of the relationship by both Americans and Canadians. The Canadian-American Committee has suggested that a number of new realities have reshaped the environment in which the relations between the two countries are conducted. On the one hand, five "structural" conditions — contrasting developments in each country's international economic performance, prospects of unemployment, the new significance of Canadian constitutional questions, developments regarding energy resources, and the enlargement of the EEC — have sparked a reassessment of the benefits that have accrued from years of close association in the political and economic spheres. Reinforcing this more critical approach has been a basic change in perceptions as reflected in the mounting concern for environmental quality, a growing fear of continental economic relationships among Canadians, attempts by the governments of Canada
and the United States to define new roles for their nations in world politics, and a greater emphasis in both countries on protecting home or domestic interests. The precise impact of these structural and perceptual conditions on the course of Canadian-American relations cannot be easily discerned. Although they have certainly contributed to heightening the awareness and sensitivities of both countries to the vicissitudes of North American co-habitation and continental association, they may have also redirected attention to other issue areas where co-operation may be desirable if not necessary. The demands for a more substantial commitment to environmental protection would seem to be a case in point. Similarly, many of the sources of friction which have surfaced in recent years and undermined the relationship between the two countries have been external in origin. To the extent that both parties perceive these developments in the international environment as being intolerable, there might be some basis for co-operation and joint action in order to rectify the situation. Consequently, the argument that Canadian-American relations have passed into a new era or period must still be treated with some reservation at least until recent events and developments fall into a more distinct and concrete pattern.
A Final Note

From an historical perspective, the course of Canadian-American relations has been a relatively steady progression, evolving from a period of open hostility and recurrent crises to one of intense co-operation and broad consensus. Even taking into account the level of tension and the penetrating re-appraisal which has occurred on both sides of the border in the last few years, relations between the two countries have not been radically altered. That is not to say, however, that the present state-of-affairs is static. While recent developments may not have had as dramatic or telling an effect on the conduct of Canadian-American relations as was initially predicted, there can be no doubt that the process of accommodation and adjustment continues. What distinguishes the contemporary relationship from that which existed in the past is that a variety of informal and formal mechanisms have emerged which facilitate that process and moderate much of the tension and conflict generated by the interaction between the two countries. In this context, then, Canada and the United States would certainly appear to form a distinct regional system. Whether they form an integration system, however, is another question altogether, one which cannot be satisfactorily answered by this brief historical survey of the North American experience but which demands analysis in greater depth.
CHAPTER III

THE CONCEPT OF INTEGRATION AND ITS RELEVANCE TO THE CANADIAN-AMERICAN SYSTEM

Although increasing levels of collaboration, co-operation, and collective action have been a prominent feature in the conduct of Canadian-American relations, what this development reflects is a subject open to widely divergent opinions. Certainly the basic realities of the environment in which Canada and the United States interact are widely recognized as are the broad outlines of the historical evolution of Canadian-American relations. Similarly, in judging critical events or the significant environmental factors shaping the relationship, general agreement does exist. The disputes which do arise in the analysis of these matters generally boil down to differing emphasis on specific features. The problem, therefore, is not one of establishing the facts but of interpreting them. Where one writer might contend that Canada and the United States form an integration system, others would undoubtedly take issue with the argument. In short, there is no firm basis of agreement in evaluating historical trends or the essence of the relationship between the two countries.

Accordingly, in order to establish whether North America is worthy of consideration as an integration system, a few crucial questions must be addressed. What are the alternate interpretations of the North American experience?
Are they equally valid or are some more credible? What are the defining characteristics or critical dimensions of the process and condition of integration? Is this criterion applicable to the Canadian-American system? If so, what does it reveal about the dominant patterns of integration on the continent? In the following pages, it is these questions which will serve as a focus in examining the nature of the relationship which binds Canada and the United States so closely together.

Alternate Interpretations of the North American Experience

A number of models for describing and explaining Canadian-American relations have garnered attention over the years. Basically, they have arisen out of different perceptions of the physical, socio-cultural, economic, and political realities which have shaped the relationship between Canada and the United States. In this respect, it would seem that four broad interpretations of contemporary Canadian-American relations have emerged, each embracing a wide range of opinion and reflecting a distinct vantage point adopted by a particular group of observers and analysts.

Special Relationship. An established view which still circulates among a very influential circle of Americans and Canadians contends that Canada and the United States share a "special relationship" somewhat unique in international
affairs. The feeling prevails that, given common language and traditions as well as numerous other similarities, the interplay between the two countries might be likened to that within a family. Although these bonds of "kinship" may not have prevented certain outbursts of temper and periods of acrimony in the past, it is argued that one cannot underrate the impact such ties have had in dampening conflicts and especially in creating and sustaining the atmosphere of mutual trust and respect which animates Canadian-American relations. Nowhere is this spirit felt to be more apparent than in the diplomatic activity engaged in by these states: their mutual involvement is characterized by ease of access, extensive consultation, and high levels of co-operation in pursuing common goals and objectives that range across all issue areas — military, economic, political, and social. In short, Canadian-American relations run contrary to the normal pattern of interaction between nation-states, to some extent superior and certainly deserving of emulation.

The major drawback of this interpretation of Canadian-American relations is that it is far too simplistic to offer any substantive insights into the nature of that intense relationship which has developed since the Second World War. Holsti notes that the outcomes of various conflicts between the two countries have generally fallen into three categories:
(1) mutually acceptable, negotiated compromises; (2) avoidance or "passive" settlements where each government, after spelling out its position, ignored the obvious conflicts of interest; or (3) the granting of rather significant exemptions and favors by each country to the other.\(^3\)

Obviously, it is difficult to relate such outcomes purely to a surfeit of goodwill or to the force of familial ties. An emphasis on "partnership" or "special relationship" is just not broad enough or adequate enough to describe or explain the complex patterns of interaction between the governments of the two countries and their impact in muting conflicts and promoting mutually acceptable solutions to common problems.

**Dependency.** While a corollary of the "special relationship" model is that Canada and the United States are two distinct, independent, and sovereign states, a second interpretation of the North American experience which has arisen in recent years and which has gathered increasing support particularly among Canadians suggests that the relationship between the two countries is in essence one of "dependence" in which Canada no longer retains the ability to effectively govern and administer to the needs of its own citizens.\(^4\) The writers which subscribe to this view stress in different ways and in varying degrees such themes as Canada's bondage to the United States in matters of defence and national security, the pervasive cultural penetration of Canadian society through the
activities of the American mass media, the reliance of the Canadian economy on American markets, and the staggering level of American direct investment in Canada. The crux of their argument, however, rests heavily on the whole issue of economic domination and its implications. Indeed these analysts posit both implicitly and explicitly a specific cause-and-effect relationship between economic dependence and political dependence. In its most extreme form, this school-of-thought asserts that economic factors have reduced Canada to the status of a satellite of the United States insofar as they have limited the freedom of action of the Canadian government in a number of crucial issue areas. From this viewpoint, Canadian complicity and support for American policy objectives particularly in the area of foreign affairs has been considered proof of political servitude.

The problems of the dependency argument, especially when it takes an extreme form, are patently obvious. In the first instance, it can assert but cannot prove that economic domination correlates with political domination. Some theorists even suggest that dependence in one sector has actually enhanced independent action in others. In the North American context, the point can be made that military dependence on the United States has relieved Canadians of a major burden and permitted decision-makers to pursue more vigorous policies in other areas. Similarly, Canada's
economic well-being, dependent as it is upon the American economy, is a potent asset inasmuch as it has provided decision-makers with a level of capabilities and a capacity to act which is denied many other nations.

It is difficult, nonetheless, to refute the contention of the "dependency" model that the intense economic linkages between the two countries have restricted the freedom of action of Canadian decision-makers. All forms of international economic activity whether they comprise flows of resources, goods, or capital necessarily involve certain influence relationships with potentially significant political ramifications. The constraints on governmental action which accompany these ties do not, however, automatically equate with political dependence. In a world so tightly knit together by an intricate web of political and economic linkages, all nations, even great powers such as the United States, are perceiving greater restrictions on their freedom of action and an increasing loss of control over their environments. The situation faced by Canadian decision-makers may not be unusual but symptomatic of a wider global problem.

The view that Canadian complicity and support for American policy can be cited as evidence of political dependence is also at best rather tenuous. It is far more likely that this support is essentially a reflection of the broad consensus on many issues which exists between the two
Moreover, there are numerous examples where Canada has pursued foreign policies divergent from those of the United States, and for these cases, the "dependency" model just cannot provide an adequate explanation. 9

Interdependence. A third interpretation of the North American experience focuses attention on the complexities of "interdependence". This approach is not new to the study of Canadian-American relations although it has acquired greater sophistication in recent years. 10 It is generally accepted that "interdependence" suggests a particular state-of-affairs in which "events occurring in any given part or within any given component unit of a world system affect (either physically or perceptually) events taking place in each of the other parts or component units of the system". 11 In short, the theorists and writers of this approach propose that a sort of symbiotic relationship exists between certain national actors in the international arena, and much of their behavior can be understood in these terms. 12

Extending this argument to Canadian-American relations, the observation is made that the interplay between the two countries entails a great deal of "give-and-take" where both parties are compelled to make concessions. There is no dispute with the assertion of the "dependency" model that the economic ties between Canada and the United States bear some significant political implications, especially for
the "junior" partner. The advocates of the "interdepen-
dence" model, however, take this line of reasoning one step
further. They emphasize that the influence relationships
involved in this economic interaction go in both directions.
One writer criticizing the "dependence" approach forcefully
contends that "the United States has, in effect, placed
hostages on Canadian soil" and that, consequently, the
threat of expropriation or other measures detrimental to
American investors furnishes Canadian authorities with a
degree of political influence which would not have been
available in the absence of such American involvement in
the Canadian economy.\textsuperscript{13} Although this point may be made
too strongly, the fact remains that Americans, and particu-
larly an influential segment of the economic elite, have a
vast stake in Canada.\textsuperscript{14} Furthermore, it is not incon-
ceivable that these actors have, through active lobbying
in Washington, actually helped to influence the American
government and to promote Canadian interests.\textsuperscript{15}

Obviously, as these analysts of North American inter-
dependence are quite willing to concede, Canadians are
ultimately at a disadvantage in these influence relation-
ships and stand to suffer much more in the event that
relations with the United States should break down.
Nonetheless, the outcomes of Canadian-American interaction
are shaped by a variety of factors: the particular issue
areas in question, the degree of politicization within the
politically-relevant strata of society, linkages between issues, and the types of actors involved.\textsuperscript{16} And from this perspective, the record of Canadian-American relations seems to indicate that, in the complex politics of interdependence, Canada has managed to protect its vital interests and to effectively pursue most of its policy objectives.

A more fundamental problem for those who subscribe to the "interdependence" approach may rest essentially in the very manner in which the concept is defined. It is so broad and it covers so many diverse aspects of international behavior that one begins to suspect its utility. Many actors in the international system are bound together in complex patterns of interdependence, and indeed it might be argued that all nations must now cope with a vastly interdependent world. Nevertheless, few nations or groups of nations enjoy as an intense a relationship as that which has developed between Canada and the United States. Relationships of interdependence in the international system do encompass varying degrees of intensity as they do varying degrees of symmetry,\textsuperscript{17} but the question remains whether the concept adequately describes or explains those few cases where the levels of interaction and collaboration between national actors are unusually extensive and enduring.

\textit{Integration}. This line of reasoning gives way to a fourth interpretation of the North American experience.
The concern of this approach is fixed on the "integrity of the system" and the extent to which the two national actors function as a single unit.\textsuperscript{18} Where other interpretations of Canadian-American relations tend to focus on a few key sectors or specific modes of bilateral interaction (such as the diplomatic or economic), the writers who employ the concept of "integrity" are much more inclined to take a broader perspective. In this respect, they view the economic realities and especially the prominent linkages defined by patterns of trade and levels of foreign investment as elements in a more pervasive and resilient structure which, as one author notes, is "concealed beneath the mass of the day-to-day dealings between Canada and the United States".\textsuperscript{19} Their contention seems to be that economic institutions in North America are so completely enmeshed that the analyst cannot always clearly distinguish two wholly separate and distinct economies, one Canadian and one American. In essence, there is a single continental economy in which the markets for goods, resources, and labor are merged.\textsuperscript{20}

Moreover, it is felt that to concentrate on just the realm of economics obscures the true extent and breadth of the system. Common language and traditions, ties of kinship, and the continued intermingling of the two peoples, among other factors, sustain a complex network of organizational linkages which have become significantly
entrenched and which have permitted at least a partial fusion of the two societies. One could further note that these economic, social, and cultural structures are augmented by an array of formal and informal mechanisms that contribute significantly to the political and diplomatic interaction between Ottawa and Washington. In sum, therefore, it might be said that the affairs of Canada and the United States are inextricably entwined, producing a degree of mutual although unequal dependence, the full impact of which neither country can ignore.

A word of caution must be injected at this time. The "integrity" model as presented in the literature is extremely ill-defined, and the description provided above is largely an attempt by the author to draw some of those disparate strands of thought into a more coherent whole. Indeed the concept does not constitute a concrete approach as such but rather a general orientation which a small group of scholars and analysts have considered as deserving of greater attention. Although their case lacks clarity and explicit delineation of the major points of contention, the basic assumptions underlying this viewpoint are clearly stated. In the words of one of these writers, "the treatment of the component realities will further the realization that 'Canada and the United States' is something more than the sum of its parts; it is a relationship with its own individuality and organic integrity". This basic premise
is complemented by a second notion that "one studies a system not by showing the likenesses and differences between parts, but by analyzing functions of each part for others and for the whole". In taking these specific assumptions into account as well as the dominant theme of "integrity", one cannot help but be struck by the extent to which this model, if it can be called such, roughly approximates the whole idea of "integration". Indeed the overlap between the two concepts suggests that for the purposes of analysis, it might be appropriate to treat this particular interpretation of the North American experience as an argument for studying Canadian-American relations in terms of integration and an "integration system".

By way of conclusion, it should be stressed that each of the four models retains a certain degree of validity. Similarly, no one approach is free of criticism nor completely adequate to describe or to explain the North American experience, and yet some are more adequate than others and offer a more accurate view of the state-of-affairs which does exist on the continent. In the opinion of this paper, the concept of "integration" constitutes one of the more acceptable approaches although it has largely been neglected by students and analysts of Canadian-American relations. The case for adopting this particular approach, however, cannot be left to rest on simple assertion, but
rather the relevance of the concept of integration must be clearly demonstrated and established.

The Concept of Integration

There can be no denying that American and Canadian perceptions of the nature of the relationship between the two countries diverge noticeably. While Canadians in general are acutely aware and sensitive to the impact of American politics and society upon their way-of-life, the whole question of Canadian-American relations is largely irrelevant for most Americans. Because of these different perspectives on each side of the border, the argument that North America might be viewed as an integration system has been given little attention or credence.

Even among scholars and students of regional integration, the relationship between Canada and the United States has been generally ignored or downplayed as a relevant focus for inquiry. This particular state-of-affairs can be attributed to some extent to the conceptual difficulties and definitional problems which traditional integration theories have faced in the past. In addition, the spectacular success of the European Economic Community (EEC) and the emergence of other regional groupings have undoubtedly overshadowed developments in North America. Taking these different factors into consideration, it is not surprising that where most theorists almost
automatically recognize the EEC as an integration system, the case that the North American continent should be treated from a similar perspective has not been as readily accepted. To rectify this situation the first step which the researcher must take is to ascertain what these theorists actually mean by integration and what definitional criteria they employ. In this manner, a concerted attempt can be made to determine whether the concept of integration is appropriate in the North American context and whether Canada and the United States do constitute an integration system in the "proper" sense of the term.

It has been suggested in the preceding pages that integration implies a particular process and condition whereby two or more actors merge in some form of voluntary association. Nevertheless, this notion lacks specificity, and hence, it has only limited utility for the researcher or analyst. One method which might be adopted in order to clarify the meaning of the concept and to provide a concrete focal point for analysis would be to establish the defining characteristics of the phenomenon.

In this regard, a survey of the literature on regional integration reveals a variety of different perspectives. Four "theoretical" approaches — the federalist, the functionalist, the neo-functionalist, and the transactionalist — have dominated the study of integration. Each has made its own unique contribution in defining the
concept and in providing insights into the forces which activate and shape integrative behavior among national actors and national societies. None of these "theoretical" perspectives, however, has proven to be wholly adequate for the purposes of research and analysis. Two serious deficiencies have become apparent over time. On the one hand, the lack of clarification in formulating independent and dependent variables and in describing the causal relationships involved has been a major problem which few if any of the different approaches have been able to fully overcome. Secondly, there has been a tendency for these schools-of-thought to set somewhat rigid and arbitrary boundaries on the study of integration. In essence, each has emphasized one defining characteristic or one particular set of characteristics of the phenomenon. Consequently, the full range of possible outcomes or end-states of integration has not been adequately explored, and the scope of analysis in the study of regional systems has been severely and unrealistically constrained.

This definitional problem stemming from the general lack of agreement among scholars and students on the nature of integrative relationships would thus seem to present a serious impediment to the task of ascertaining the fundamental qualities or properties of integration. In recent years, however, more and more scholars have directed their time and energy to resolving the shortcomings of the
traditional approaches. In this vein, Charles Pentland has argued that the construction of a multidimensional framework incorporating the dominant themes running through the classical "theoretical" perspectives would be conducive to remedying some of these problems and to facilitating the study of integration systems:

One way to begin tracing the lines of this creature would be to assume that several of the concepts already advanced in the literature are complementary. On this basis, we can develop a multi-dimensional model of a political community which presents us with a new perspective on the normative and analytical aspects of integration theory as well as the policy problems confronted by countries involved in integrative relationships.

By adopting this kind of multidimensional approach, four defining characteristics or properties of the process and condition of integration can be discerned: expectations of peaceful change, mutual identification and obligation, institutional capacity, and collective decision-making. Although the analysis of these properties has generally been confined to the subject of political integration, they will be considered in the following pages from a broad perspective which will highlight some of their manifestations in the social, cultural, and economic realms as well.

Expectations of Peaceful Change. The communications or transactionalist approach portrays integration as a process in which the component members of a system gradually acquire a "sense of community" based upon mutual trust, confidence,
and understanding. It is suggested that these communal feelings are translated into a desire to promote peaceful settlement of disputes and common problems, and this specific feature sets integration systems apart from other international and regional collectivities. Karl Deutsch in his study of the North Atlantic area has condensed these precepts of the transactional approach into one of the most precise and influential definitions of integration to date:

By INTEGRATION we mean the attainment within a territory, of a "sense of community" and of institutions and practices strong enough to ensure, for a "long" time, dependable expecta-
tions of "peaceful change" among its population.

By SENSE OF COMMUNITY we mean a belief on the part of individuals in a group that they have come to agreement on at least this one point: that common social problems must and can be resolved by processes of "peaceful change".

By PEACEFUL CHANGE we mean the resolution of social problems, normally by institutionalized procedures, without resort to large scale physical force.27

Thus, in drawing attention to certain expectations and perceptions shared by members of a system, this definition underscores a critical attitudinal component of integration. That is to say, a regional grouping can be considered as integrated or integrating if there exists deep-rooted expectations among the participants that conflicts will be resolved through peaceful measures rather than confrontation.

This approach taken by Deutsch and other transactional theorists also tends to focus attention on certain
structural configurations which are distinguished by the peaceful resolution of conflict and expectations of peaceful change. In this respect, two possible outcomes of the process of integration can be visualized: on the one hand, there may evolve an amalgamated security community in which "two or more previously independent units formally merge into a single large unit, with some type of common government"; or, on the other hand, the end-product of integration may be a pluralistic security community in which each of the component units "retains the legal independence of separate governments". Of these two structural arrangements, the transactionalists argue that the pluralistic model has the greatest probability of success.

If must be stressed, however, that the focal point of the communications approach is not institutional growth and development, but rather those patterns of transactions and communications which in the long-run promote the peaceful resolution of conflict between nation-states. The socio-causal paradigm of these theorists posits that rising transactions on a variety of dimensions will lead to an integrated political community. More specifically, it is assumed that in response to increases in mutual interactions, members of a system will develop common experiences, traditions, expectations, and perceptions. As long as these patterns of interaction are rewarding, or as long as the rewards from this activity are strong and frequent
enough to negate the deprivations which might also be incurred, the process of learning and assimilating new habits is enhanced.\textsuperscript{32} With continual reinforcement in terms of mutually rewarding transactions, a sense of community takes root among the participants, and it is the attainment of this "we-feeling" which marks the emergence of an integrated political community. Working from this basic premise that "intense, enduring, and rewarding" patterns of interaction are fundamental to the evolution and maintenance of integrative relationships, communications theorists further contend that by simply measuring the volume of transaction flows between the constituent units of the system, one has an important indicator of the level of community formation.\textsuperscript{33} In this regard, Deutsch observes that the boundaries of these political communities are clearly defined by "marked discontinuities in the frequency of responses".\textsuperscript{34}

These assumptions of the transactionalist approach have been the subject of close scrutiny and intense criticism over the years.\textsuperscript{35} Consequently, the problems and shortcomings which this particular school-of-thought faces, especially in terms of the conceptualization of key variables, are now widely recognized. There is, however, another critical but more insidious problem which has dogged the transactionalist approach. It would seem to share the same bias of many other "theoretical" perspectives
in this field: that is, an underlying tone that "integration is a 'good thing' *per se*, or that integration is always good for peace, prosperity, or whatever". The tendency among many observers and students concerned with this aspect of international relations is to automatically assume that integration minimizes the level and intensity of conflict in a system. For example, Deutsch asserts that "the one thing which is unlikely to accompany a high level of transaction is continued tension and conflict". In light of the conviction of communication theorists that intense and enduring patterns of interaction are critical to integration, the implications of this statement are clear. Moreover, implicit to this argument is the notion that there is an identity between peace and integration in the sense that both are characterized by an absence of conflict, violent or otherwise. Integration is viewed as instrumental in establishing and preserving peaceful relations between nation-states, and therefore, it follows that if peace is a good thing, then integration is equally desirable.

The problem with this sort of notion is that it is rooted in an inaccurate conception of peace. One naturally tends to dichotomize co-operation and conflict as modes of conduct. In this framework, peace is considered to be typified by extensive co-operation, and hence, it stands in contrast to conflict. It can be argued, however, that conflict is a dominant and constant feature of all social
formations. Thus, peace does not indicate an absence of conflict but rather a particular state-of-being in which the problems that do exist are channelled into areas where solutions can be reached without resort to violent measures.\textsuperscript{38} Whether peace will prevail is largely determined by the capacity of the system to handle the stress and strain to which it is subjected as conflicts arise. Moreover, it should be noted that conflict does not have to be a totally detrimental or harmful experience. A substantial body of opinion among social scientists maintains that both conflict and violence can be functional as well as dysfunctional within a system.\textsuperscript{39}

Integration tends to be interpreted in much the same way as the traditional view of peace. That is to say, on a scale running from co-operation to conflict, it is usually perceived as approaching co-operation. By implication, then, integration must be characterized not just by a relative absence of violent action but by an absence of other forms of conflict as well.\textsuperscript{40}

Whether this is a realistic view is certainly questionable. Initial observations seem to suggest that integration does not necessarily lead to a reduction of conflict, but in point of fact, it may even intensify cleavages within a system and create new sources of discord.\textsuperscript{41} If integration is accompanied by increases in the scale and volume of transactions between groups, points of friction may be
multiplied. As this sort of interaction grows in magnitude, established groups often experience a reversal in status and prestige. Functional relationships within the system are changed, and new occupational roles are created which in some respects threaten the old or at least appear to do so. In this sense, integration can place a great deal of stress upon participating units, and unless the system has sufficient resources and capacity to provide the mechanisms for the resolution of conflict, the load or burden of change may eventually destroy it.

A more accurate description of integration might be gained by contrasting collaboration and isolation. If one constructs a continuum with these two modes of conduct representing the extremes, then the phenomenon of integration should occupy a position on the scale approaching collaboration. Interdependence might be placed at some median position between the two poles. By perceiving integration in these terms, one might avoid some of the bias which has compelled many theorists and writers to extol the virtues of integration as a panacea for the ills of the world.

Nonetheless, one can qualify but one cannot discard the observation made by Deutsch and others that the peaceful resolution of conflict and expectations of peaceful change are a distinctive attribute of integration. It must be emphasized, however, that conflict is an endemic feature of
all social formations and that the process of integration which molds nation-states into larger international communities does not necessarily imply a reduction in the level or intensity of conflict experienced by the participating units. Integration only suggests that the conflicts which do arise are resolved without recourse to violent measures and, with this development, dependable expectations of peaceful change are created and sustained.

**Mutual Identification and Obligation.** In addition to the particular emphasis of the transactionalist approach upon a "sense of community", the concern of many traditional theorists has been directed to other aspects of the attitudinal or psychological dimension of integration. Jacob and Teune in discerning the bases of political communities have offered the view that "political integration generally implies a relationship of community ... a feeling of identity, and self-awareness". Accordingly, they have defined political integration as "a state-of-mind or disposition to be cohesive, to act together, to be committed to mutual programs". Amitai Etzioni shares a similar conviction; in his view, a political community rests upon three kinds of integration:

... (a) a political community has effective control over the use of the means of violence though it may 'delegate' some of this control to member units; (b) it has a center of decision-making that is able to affect significantly the allocation of resources
and rewards throughout the community; and (c) it is the dominant focus of political identification for the large majority of politically aware citizens.46

From the perspective of this group of theorists, the vital element of integration is that state-of-mind or psychological disposition which becomes manifest in a compelling and unique sense of mutual identification and obligation.

Within the literature, these communal feelings of identity and self-awareness are seen to rest on the development of a common set of beliefs, values, symbols, and traditions established through joint participation and collective action at the regional level. In analyzing the integration of national societies, Myron Weiner observes:

... once men endeavor to create corporations, newspapers, political parties, and professional associations because they perceive their individual interest served by common action, a new set of values is called for which provides for the integration of new structures into the political process.47

Similar arguments can be found in both traditional and contemporary theories of regional integration. J. S. Nye, for example, makes the assertion that "new attitudes can also be fostered by transnational organizations as they create new myths, symbols, and norms to provide legitimacy for their activities".48 This view is not uncommon.

Despite variations in approach and differences in emphasis, most theorists generally accept the proposition that the emergence of intergovernmental and non-governmental
organizations at the regional or international level induces a gradual re-orientation of beliefs and values, thus altering the context of political action between the participating units. In other words, this sort of collective action is considered to be a major force in shaping and creating a sense of mutual identification and obligation among key actors and individual members of a community. These feelings, in turn, may aid to some degree in legitimating new patterns of authority, justifying vast commitments of resources to the attainment of common goals, and sanctioning the diversion of human energies to the performance of crucial tasks. In short, among integration theorists it is felt that these communal feelings are essential in sustaining integrative relationships and enabling a political community to function as a cohesive unit.

Although this psychological dimension is recognized to some extent in most studies of integration, there tends to be a great deal more disagreement on the significance of communal attitudes and the role they play within a community. Some writers stress that integration requires the development of a pervasive and unambiguous sense of identity which blurs international-political boundaries and erodes the particularism of the nation-state. This seems to suggest that there must be complete identification with the community and other groups in the general population.
Such a view, however, reflects an ideal conception of the essence of a community. The communal attitudes which it considers to be essential to integration are seldomly obtained in the real world, and as a result, a new or modified perspective is needed which can more realistically describe the nature of the psychological dimension. In this vein, Charles Pentland remarks:

... while it is possible in principle for the inclusive community to displace the constituent units almost completely in the attention and affection of the population, we would not necessarily expect growth in this systemic awareness and affection to occur at the expense of the other levels of community. Integration might simply mean a relative increase, in the context of an overall expansion of public political sophistication.

Thus, the evolution of communal attitudes may not eliminate national and parochial sentiments, but rather, these different elements may exist side-by-side. In this regard, it may be more realistic to view integration as embracing multiple loyalties and competing systems of beliefs. As a minimal condition, integration implies increasing sensitivity, awareness, and trust among the members of a community. From this standpoint, the attitudinal-psychological dimension of integration taken as a whole might be portrayed as a continuum that runs from "mutual apathy and particularism at one extreme to total absorption and identification at the other."
Regardless of whether one accepts or rejects this modified perspective, a few theorists take issue with the significance conferred on communal attitudes within integration "theories", and their arguments are deserving of some consideration. In their view, the real test of integration is whether a sense of common identity and mutual obligation is converted into specific communal relationships and joint action in the pursuit of common objectives. Consequently, to obtain the most accurate picture of integration, it is felt that the focus of inquiry should be fixed on patterns of collective action rather than communal attitudes. Nye points out, however:

Some formulations deliberately deprecate the role of regional identity, and, given the limited predictive value of such attitudes and the plethora of integrative schemes among less developed countries—it is easy to see the basis for skepticism. Nonetheless, it does not follow that those low levels of identity have no role.53

Hence, one cannot simply ignore or dismiss the attitudinal and perceptual conditions which are encompassed by integration. Such a step will not enhance our knowledge or understanding of this phenomenon, and indeed it may only serve to obscure important causal relationships which shape integrative processes. Accordingly, the general assumption that a sense of mutual identification and obligation is an essential feature of integration still seems to be worthy of consideration.
Institutional Capacity. Integration theorists have traditionally placed substantial emphasis on the growth of institutional mechanisms at the regional and international levels. The prevailing view has been that some rudimentary institutional infrastructure is an essential and necessary attribute of integration.\textsuperscript{54} Not surprisingly, then, many studies have concentrated heavily on this specific feature and have incorporated within their definitions of integration some reference to institutional capacity. In this regard, one of the most prominent scholars in the study of integration, Ernst Haas, has defined integration as "the process whereby political actors in several distinct national settings are persuaded to shift their loyalties, expectations, and political activities to a new center whose institutions possess or demand jurisdiction over the pre-existing national states".\textsuperscript{55} This interpretation, emphasizing as it does the role of institutions as an indicator of integration, has been a major point of departure in research and analysis.

This traditional perspective is perhaps most extensively developed in the federalist and neo-functionalist "theories" of integration.\textsuperscript{56} Critical to these approaches is the assumption that integration demands the centralization of power. To put this matter in slightly different terms, integration is envisioned as a gradual evolutionary
process in which the nation-state is transcended and power is consolidated within some new institutional framework at the regional level. This summary, of course, grossly oversimplifies the approach taken by these writers, but hopefully, it conveys the sense in which they perceive institutional capacity. In speaking of rudimentary institutional structures as a crucial element of integration, these traditional theorists interpret it to mean that there must be some clearly-defined central authority which possesses a sphere of competence distinct from that of member states.

The classical federalist and neo-functionalist approaches, at least with regard to the interpretation they place on institutional mechanisms, seem to have two basic shortcomings. On the one hand, they do not take the political aspects of integration in their totality but concentrate almost exclusively on the intergovernmental arrangements between nation-states. Consequently, some theorists have turned their attention to processes of collective decision-making in order to obtain a more comprehensive perspective on the range of formal and informal mechanisms involved in political integration. Secondly, these classical approaches suggest in effect that a loss of sovereignty and the transcendence of the nation-state can only be attained through the transfer and consolidation of power at some new center. The problem with this contention
is that it ignores a crucial possibility: power may be diffused within a system, that is, redistributed among a variety of separate intergovernmental agencies and non-governmental actors, with the same effect, a loss of sovereignty by the nation-state.

From this standpoint, the traditional focus on institutional capacity and the concern of many studies with the whole matter is in need of re-evaluation. The point in dispute from the perspective of this paper is not the basic notion that some degree of "institutionalization" is fundamental to integration, but rather, the manner in which some writers portray the nature of institutional mechanisms and the extent to which their perspective is sufficient to describe the relevant actors in a community or integration system. The problem is in part one of definition and in part one of emphasis. In many studies of regional integration, the locus of analysis is fixed upon political integration and the phenomena associated with it. The meaning of the term "institution" is restricted accordingly to a somewhat narrow conception of formally-constituted, political-legal arrangements created by treaty or some other form of agreement between national actors. In short, our attention is directed primarily at the development of federal or confederal structures, supranational agencies, and functional international organizations. By way of
contrast, sociologists adopt a much broader approach in speaking of institutions:

Institution is a verbal symbol which ... connotes a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people ... Institutions fix the confines of and impose form upon the activities of human beings ... They may be rigid or flexible in their structures, exacting or lenient in their demands; but alike they constitute standards of conformity from which an individual may depart only at his peril. 59

From this point of view, the range of institutions in society covers a wide spectrum which includes all formal organizations — the government, the church, the university, the corporation, the trade union, and so on — as well as a plethora of formal and informal procedures, conventions, and arrangements which become established through usage and tradition — such as the moral code, the common law, the money economy, fundamentalism, and democracy. 60 The bond which ties these diverse mechanisms together is that they all serve to structure the behavior of the members of a society.

Taking this broad sociological conception of institutions and applying it to the study of regional integration has certain advantages. First, if one views institutional mechanisms from this frame of reference, it is possible to remedy some of the shortcomings which seem to be apparent in the treatment given this subject by the traditional approaches or schools-of-thought. This broad conception
permits the analyst and researcher to examine institutional capacity not just in terms of the growth and performance of intergovernmental agencies, but it also brings under consideration the activities of non-governmental groups and organizations within the system.

Secondly, such a perspective can perhaps furnish a better glimpse of what integration involves in its totality. All social systems possess certain essential structures of which the political is only one, and in this respect, integration systems are no exception. The structures of these international communities are often rudimentary and not always clearly defined at least in contrast to those of national societies, but nonetheless, they still exist. To concentrate on institutions which are elements of only one of these structures will not provide an accurate picture of the system as a whole. By broadening the notion of institutional capacity, however, in accordance with the approach taken by sociologists, one has the opportunity to more completely grasp the scope and impact of the process of integration.

Finally, this broad conception of institutions suggests that integration may embrace a range of possible outcomes involving different structural arrangements. Institutional mechanisms will certainly play a crucial role in all of these configurations, but this does not have to mean that a federal or supranational arrangement will be the focal point
of the system. To the contrary, institutional development and capacity may follow a number of different paths: conceivably, it may be curtailed within the political sector but unrestrained in others; it may be concentrated within a few sectors or spread over a number of these. In other words, there may be no single model for describing integration in different systems or the institutional configurations it subsumes.

To conclude this segment, one may simply assert that institutional capacity is a defining characteristic and distinct dimension of integration. In this respect, however, it is questionable whether formal intergovernmental arrangements and the centralization of power should be treated as the sole criteria for assessing this feature. Not only do these indicators obscure certain formal mechanisms which may be significant components of the institutional capacity of a community, but their utility is basically limited to a specific context, that is, political integration. By adopting a broader conception of "institution", however, it is possible to stretch the meaning of "institutional capacity" so that it reveals perhaps more clearly the full range of mechanisms which may animate patterns of collective and corporate activity within international communities. It is in these broad terms that the notion of "institutions" and "institutional capacity"
is employed in this study and considered as a critical
dimension of the phenomenon of integration.

Collective Decision-Making. One theorist,
L. N. Lindberg, argues that "the essence of political
integration is the emergence or creation over time of
collective decision-making processes". Although this
view may be somewhat controversial, it does reflect a
dominant theme among certain writers and among neo-
functionalists in particular. A general feeling prevails
that political integration at the regional level requires
the development of mechanisms through which national
actors can work in concert to make authoritative decisions
for the community as a whole. To be more accurate,
collective decision-making implies some degree of joint
endeavor in policy formation.

Within the literature, however, there is a tendency
to associate and equate collective decision-making with
institutional capacity (as it is defined by traditional
integration theory). For example, Lindberg is quite precise
in his formulation: collective decision-making processes are
defined as "political institutions to which governments
delegate decision-making authority and/or through which
they decide jointly via more familiar intergovernmental
negotiation". Obviously, both collective decision-making
and institutional capacity are manifestations of some degree
of political integration, and as such, they are closely
related. Nonetheless, there is an important distinction between these two elements. While institutional capacity is purely a structural condition, collective decision-making suggests some sort of common activity that is necessary and essential to the performance of certain basic functions of a system such as goal attainment, allocation and co-ordination of resources, and so on.

On the surface this distinction seems to be justifiable in the sense that it contributes to a more exact description of integration systems. Hypothetically at least, a system may possess rudimentary institutional mechanisms, and yet collective decision-making processes may be relatively weak or even highly developed. Such cases cannot be thrust aside. The fact is that regional institutions and intergovernmental agencies — like most other forms of social organization — tend to be highly differentiated in terms of the functions and tasks they perform. These tasks may range from the administration of purely technical and largely non-controversial matters to the making of authoritative decisions and the formulation of specific policies. Hence, the institutional capacity of a system may only encompass certain administrative and regulatory mechanisms, the activities of which are confined to technical concerns. The emergence of collective decision-making processes is not automatically dictated by institutional development. To lump these two elements together tends to impair our
perspective on the possible forms or outcomes of integrative relationships, and consequently, one has to agree with the view that institutional capacity and collective decision-making should be perceived as separate and distinctive attributes of integration.

Nonetheless, the manner in which collective decision-making is portrayed by this group of authors closely parallels the classical approach towards institutional mechanisms. In general, these writers tend to focus on the formal intergovernmental arrangements within which collective decision-making is conducted. Indeed the impression conveyed is that this kind of collective action by member states can only be pursued through these institutions. Taking this one step further, the implication is that within an integration system, "institutionalization" is essential to the performance of such tasks as the allocation and co-ordination of resources. Moreover, it is assumed that integration, viewed as the evolution of institutions for collective decision-making, demands the emergence of a central decision-making authority.

This orientation to decision-making is largely an extension or modification of the traditional approach, and as such, it is subject to the same sort of criticisms. The preoccupation with formal intergovernmental arrangements as vehicles for collective decision-making narrows the scope
of inquiry to a few select cases and obscures the full range of formal and informal mechanisms which may be adopted by national actors and the complex relational patterns between states which may result. Such mechanisms embrace a variety of practices, procedures, and conventions which become entrenched through tradition and frequent contact between governmental and administrative representatives. Among these forms of conduct, one might include the free flow of information between governmental agencies, ease of access to decision-making officials, continuous negotiation and consultation on matters of mutual concern, and so on. These patterns of collective and corporate activity which link national actors directly rather than through some intermediary also enhance collective decision-making and promote the co-ordination and allocation of resources within a system.

Similarly, integration may produce no one center possessing decision-making authority, but rather, a number of competing centers. Within an integration system, it is even conceivable that member states may retain the final authority to make decisions although the distribution of power between the national and regional levels may have been drastically altered. In short, the patterns of collective decision-making which characterize integration systems may assume a number of different forms, varying in
terms of whether they are formal or informal, centralized or diffuse in nature.

In recent years several writers have acknowledged that collective decision-making processes between the member states of a community do not have to conform to any one model or pattern. Ernst Haas, writing on the possible outcomes of integration and the problems of choosing a dependent variable, notes that the basic problem with traditional integration theory has been a general tendency to perceive integration at the regional level as duplicating the experience of the nation-state and to expect that the same processes of collective decision-making will prevail.64 Observation of different integration systems such as the Nordic area, however, would seem to indicate that collective decision-making and the formulation of common policies can be achieved in the absence of any significant degree of centralization. J. S. Nye has remarked:

It is sometimes argued ... on the basis of the experience of the OEEC and the Nordic Council, that despite weak institutions, mere consultation can be an important means of policy integration.65

Thus, rather than focus on the centralization of decision-making authority as an indicator or dimension of integration, perhaps our attention should be shifted towards "interdependence in policy formation".66 Nye has stressed that "the question here is not the legal or institutional type of decision in itself, but how much of the process of
arriving at decisions is subject to group interaction as contrasted with independent action. In viewing integration in terms of collective decision-making processes, the major criterion should be whether member states act autonomously or whether they perform as a group, working in consultation with one another and other groups at the national and regional levels to reach decisions on common objectives and major policy concerns. Moreover, by exploring the nature of this interdependence in policy formation, the analyst would have to confront the fact that there are different patterns of collective decision-making and different outcomes of integration at the international level.

Summary. In abstract terms, integration can be viewed as both a process and condition. On the one hand, it involves certain dynamic qualities; that is to say, an integration system is almost continuously in a state of flux subjected to a series of forces and pressures emanating from its environment as well as from within its very structure. By concentrating on process alone, however, one tends to lose sight of the precise nature of the phenomenon under observation. Consequently, it is necessary to look at integration as a condition, a particular state-of-being, possessing relatively stable features which distinguish it from other types of social phenomena. In this latter respect, a survey of the dominant themes in the literature
suggests that integration embraces four distinctive attributes or properties: rudimentary institutional structures, interdependence in decision-making and policy formation, a sense of mutual identification and obligation, and expectations of peaceful change. Although each of the properties outlined above has been considered at different times by different authors as being the essence of integration, this paper views them as merely distinct and basic dimensions of that phenomenon. It is felt that none of these properties taken individually is adequate to describe integration in its totality. Thus, from the perspective of this paper, it is argued that all integration systems manifest these properties in varying degrees, some more and some less than others.

Obviously, there is no international community in the world today which fits this criterion perfectly and possesses each and every one of these properties in its purest and highest form. Rather these different aspects of integration should be interpreted broadly in order to avoid the somewhat limited perspective which has typified much of traditional integration theory. In another sense, these properties, taken as minimum conditions of integration, perhaps indicate a particular threshold or "a zone that might be entered, crossed, and recrossed more than once during the uncertain progress of a community towards integration". Beyond this threshold, a group of
nations can be perceived as constituting an integration system. Nonetheless, the most important product of concentrating on these specific properties is that they provide a concrete focal point from which research and analysis might proceed.

By employing this criterion offered by the multi-dimensional approach, one can discern a number of integration systems, among which the Canadian-American experience certainly appears deserving of some consideration. Indeed it would seem that all four of the defining characteristics or dimensions of the process and condition of integration are applicable within the North American context. In the following chapter this assertion will be examined in greater depth, and a few tentative observations will be presented with regard to the dominant patterns of integration in North America.
CHAPTER IV
PATTERNS OF INTEGRATION IN NORTH AMERICA

In the previous pages the case for adopting integration as an approach for studying the North American experience has been addressed in a somewhat indirect and abstract fashion. The various constructs embedded in integration theory, however, do provide a more explicit framework in which to analyze the Canadian-American system. Integration might be defined in terms of four separate and distinct dimensions — expectations of peaceful change, mutual identification and obligation, institutional capacity, and collective decision-making. The task which remains is, on the one hand, to determine the extent to which the North American situation fits this framework and, on the other hand, to evaluate any dominant patterns of integration which have emerged.

Expectations of Peaceful Change

In examining the attitudinal or psychological component of the North American experience, nothing is perhaps more striking than the degree to which the relationship between the two countries is wrapped in a cloak of rhetoric, myth, and symbolism. This peculiar configuration of beliefs is often overwhelming and yet, in many ways, extremely revealing. At its center seems to be a particular belief, deeply ingrained in the "psyche" of both Americans and
Canadians that points of dispute between their countries will be settled peacefully without recourse to violent measures. This view may be tempered by the realization that such peaceful settlements cannot always be achieved without raising some bitterness at times. Nonetheless, the possibility of violent confrontation in North America is totally incomprehensible to the vast majority of Canadians and Americans. Even periods of relatively strained relations between Ottawa and Washington can be very traumatic, especially for certain segments of the general population. Overall, for Canadians and Americans, the peaceful resolution of conflict is considered the norm rather than the exception in the conduct of their mutual relations. It is the "natural order of things".

Augmenting this set of beliefs is the assumption that the interplay between Canada and the United States is somewhat unique and distinct from the activities of other nations. What is important in this respect is the manner in which this sense of uniqueness is articulated. One author observes that,

they Canada and the United States have talked as if they were possessed of some superior disposition to peace; or conversely, as if making and keeping the peace were simple affairs that worked themselves out without much difficulty.

At least on the surface, this kind of moral self-indulgence still appears to permeate much of the relationship between
the two countries as well as their relations with other countries.

In the minds of both Americans and Canadians, expectations of peaceful change have been symbolized, oddly enough, by the very boundary which has come to divide the continent. Expressions such as "the undefended border" and "the unfortified frontier" have been employed so frequently in speeches, editorials, essays, and treatises that they have become a widely accepted but seldom questioned ingredient in the vocabulary of those addressing the problems and issues of Canadian-American relations. Perhaps more significantly, these terms have acquired a meaning which is far removed from historical reality. They have been imbued with the feeling that the "neighbourly" and amicable relations shared by the two countries are a permanent feature and, moreover, that Canadian-American relations have been conducted in such a fashion since the earliest times.

Looking back on the historical development of the North American continent, there seems to be little basis on which to justify such beliefs about the long-standing goodwill between the two powers. Indeed, with the passage of time, it may be the case that the popular conception of Canadian-American relations has imposed its own bias on the interpretation of that historical development. Although these particular beliefs and images are not totally without
foundation, neither are they completely accurate. They are
useful generalizations which support the myths and symbols
surrounding Canadian-American relations. From a purely
historical perspective, the reality is somewhat different.

In the 160 years since the signing of the Treaty of
Ghent, Canadian-American relations have not been nearly as
friendly or amicable as some commonly believe. Indeed, to
be precise, the period of amity and intense co-operation
between the two countries which has been taken for granted
for so long has been essentially a recent phenomenon which
can only be traced back to the early years of the twentieth
century. As indicated previously, the period from 1815 to
1871 was marred by intense competition and conflict within
North America. Although subsequent years proved to be more
tranquil for Canadian-American relations, suspicion and
fears still lingered, and only after 1909 was there a
noticeable improvement in Canadian-American and Anglo-
American relations.

Thus, it would seem that expectations of peaceful
change and friendly relations have only become entrenched
in the last sixty-odd years. An awareness of the bitter
and dangerous conflicts which shaped much of the early
relations between the two countries is now largely absent.
Perhaps this situation is a testimony to the intensity with
which such beliefs are held and the extent to which integra-
tion of the continent has progressed.
In this sense, the myths and symbols surrounding Canadian-American relations are at one and the same time both functional and dysfunctional. On the negative side, they are central to many of the stereotypes which Canadians and Americans share of one another. These images and perceptions may be an indispensable element in our thought processes, but they also promote some tenuous generalizations which may impair proper understanding and appreciation of the problems and difficulties which the two societies face. On the other hand, the myths of Canadian-American relations are in many ways self-fulfilling prophecies. The historian, C. W. Brown, suggests that,

"Legend-making is by no means wholly bad, for it has done much to establish the idea of peaceful relations firmly in the public mind of both countries ... and common acceptance of the idea that things are done in a peaceful way does greatly assist in getting them done."

Mutual Identification and Obligation

Where expectations of peaceful change appear as a significant and inescapable component of Canadian-American relations, a sense of mutual identification between the two peoples is by no means abundantly clear. The existence of a strong and pervasive national sentiment within the United States nourishes an identity, perhaps ill-defined but nonetheless real, which Americans generally cherish. Similarly, a distinct Canadian national identity based upon a recognition of the dual structure of the nation and its
multicultural fabric seems to be gathering momentum after struggling to survive for many years. There is little doubt that the perceived evils of American society — violence, urban crime, racial strife, and so on — have also provided a basis on which Canadians have tried to differentiate themselves from their southern neighbours.

But even in view of the development of these two separate national identities on the continent, it would be dangerous to conclude that no mutual identification is present in the relationship. Multiple loyalties and allegiances are not uncommon features among citizens of pluralistic societies, and consequently, in the North American context, some degree of mutual identification might be expected. By way of contrast, the absence of any identification would certainly be surprising.

To uncover concrete evidence of such attitudes and feelings, however, is extremely difficult. Like the discussion of expectations of peaceful change, one must largely rely on impressions and informed opinion gathered from a variety of sources. One indicator of mutual identification may be in the sense of uniqueness which Canadians and Americans feel when viewing the relationship between their two societies. On this subject, James Bayrs observes:

There took hold in North America the tradition, more often asserted than analyzed, that Canada and the United States dealt with the world, and especially with one another, in a manner peculiarly their own. It was not just that they had renounced
war as an instrument of national policy. It was not even a matter of that famous unfortified frontier. Rather it was a conviction — stronger on the American side of the border than on the Canadian — that the relationship of the two countries was unlike any prevailing elsewhere in the world.

Hence, if one accepts the argument that a common identity may evolve from the recognition of distinguishing features which set oneself and one’s peers apart from others, then there is a basis for conjecture that some rudimentary communal attitudes have emerged in North America. To the extent that Americans and Canadians accept that their behavior is somehow unique and distinct in the broader realm of international relations, some mutual identification may be assumed.

More substantial confirmation may be derived from the public opinion surveys and polls taken by private organizations such as the American Institute of Public Opinion and its Canadian counterpart. A study undertaken by John Sigler and Dennis Goresky and employing much of this survey data offers a number of significant revelations. It must be stressed, however, that this material does not provide any conclusive evidence that a sense of mutual identification and obligation exists or is evolving in North America. First of all, the questions asked and the responses given only serve as indicators that such communal attitudes may be present. Secondly, the very instruments for testing mass opinion are not without fault. Public
opinion polls and other surveys are not always able to evaluate the intensity with which opinions are held, and without repeated questioning over time, it is difficult to determine the permanence of the views expressed or the dominant trends in opinion. 10

Nevertheless, on the basis of the data available, Sigler and Goretsky do make some tentative conclusions about the prevailing trends in public opinion, two of which are important to the whole question of communal attitudes:

(1) While a trend toward increased resentment of American economic and cultural penetration can be identified, we find no evidence to support the view of rampant anti-Americanism in the Canadian mass public. Canadians continued to feel closer to the United States than any other country, and esteem, while diminished, remains high.

(2) The American public has a high regard for Canada but little knowledge of Canada or the impact of the United States in Canada. The paucity of interest and attention in the United States may be one of the most serious asymmetries in Canadian-American relations. 11

Working from these conclusions as well as our impressions of Canadian and American attitudes, it is obvious that no pervasive and unambiguous sense of identity has emerged in North America to obscure the political distinctions and separate national identities. There is evidence, however, of a substantial measure of mutual affect, trust, and respect upon which some communal attitudes probably rest. However ill-defined and minor that sense of mutual identification and obligation may be, it is undoubtedly a
component in a wider system of beliefs that subsumes multiple loyalties and allegiances.

In terms of mutual awareness and sensitivity, a serious disparity appears to separate the two societies. Canadians in general are much more attuned to the relationship between their country and its southern neighbour while, conversely, American mass opinion reveals a noticeable lack of concern for these matters. Whether American elite opinion is equally apathetic is subject to debate. Thus, on a continuum extending from mutual apathy and particularism to total absorption and identification, caution dictates that the Canadian-American relationship should lean towards apathy.

What must be emphasized, nevertheless, is that these vague and tenuous communal attitudes do play a role in North American integration or at least have the potential to do so. Taking the attitudinal or psychological dimension of this process as a whole, it does seem that the separate components — expectations of peaceful change, mutual identification, and so on — are self-reinforcing. Faith in the peaceful resolution of conflict contributes to a sense of uniqueness which, in turn, supports communal attitudes. The reverse may also hold insofar as mutual identification rooted in a sense of uniqueness heightens the drive for peaceful settlement of disputes.
Institutional Capacity

All integrated systems can be distinguished to some extent by the development of common institutions which bind the member states into a new whole. In this regard, the process of integration must be examined in its totality. The political, economic, and socio-cultural bases cannot be treated separately without in some manner distorting the overall picture. Integration may proceed at different rates in these different spheres of activity, and a real danger lies in trying to judge progress towards integration simply on the analysis of one of these sectors. Consequently, a broader definition of institutional capacity would seem to be required. It is not enough to merely look at the formally-constituted intergovernmental entities which are so readily visible in inter-state relations. Other regional organizations beyond the public realm are equally relevant institutional mechanisms. And nowhere is the need for this recognition of the totality of the system more apparent than in the North American context.

In terms of formal institutional mechanisms, Canada and the United States in the conduct of their relations have witnessed a steady procession of different intergovernmental organizations — administrative, regulatory, and quasi-judicial in character. The first such body was a by-product of Jay's Treaty of 1794. Among its numerous provisions, the Treaty called for the creation of a
commission to arbitrate and to settle a series of volatile disputes which had arisen directly from the division of the continent. As a result of the commission's activities, a tradition was established which would become a dominant feature in Canadian-American and Anglo-American relations. Throughout the nineteenth and twentieth centuries, the principle of arbitration and the use of commissions were embodied in numerous treaties and agreements concluded by Britain and the United States to settle their disputes in North America.

All of these bodies, however, were limited in their jurisdiction and temporary in nature. The first permanent institution in Canadian-American relations was not established until 1909 when the Boundary Waterways Treaty provided for the creation of an International Joint Commission (IJC). In the years since it first appeared, the Commission has maintained an enviable record in resolving disputes and accumulated a considerable amount of prestige. Often exalted as the bulwark of Canadian-American relations, it has also become something of a symbol of the "special relationship" between the two countries.

The IJC is particularly deserving of attention not so much because of its record or its symbolic status but because it has served as a "benchmark" in Canadian-American relations and as a model for institutional development on the continent. The purview of the Commission, however, has
been largely restricted to matters of a technical nature arising out of the condition and use of boundary waters.\textsuperscript{12}

What has set the IJC apart from other intergovernmental organizations created in North America has been the authority vested in it within this particular sector. In this regard, its jurisdiction and powers as outlined in the Boundary Waterways Treaty generally fall into one of three categories:

(1) its authority is final in all cases involving use or diversion of boundary waters or of rivers crossing the boundary; (2) it may investigate and report upon questions referred to it by the governments of either country; and (3) it may settle finally any question that the two governments agree to refer to it for that purpose.\textsuperscript{13}

In practice, the two governments have never taken recourse to the third category while the other two have been used extensively. Moreover, the original judicial, investigative, and recommendory functions of the Commission have been augmented over the years by certain administrative and regulatory responsibilities with respect to specific watercourses along the boundary.\textsuperscript{14}

Beyond the specifics of structure and function, another distinguishing feature of the IJC can be discerned in the expectations and standards which have evolved among the national delegations participating in it. As early as 1929, one of the Commissioners observed:

A unique feature of this Commission, and one which differentiates it from similar organizations in the past, is that there is no casting
vote ... There is no umpire, drawn from the outside and lacking intimate knowledge of the problems, whom each side would try to influence to its point of view. These six Commissioners ... are pledged to a viewpoint that is American in a continental sense. They must regard the people on both sides of the boundary as equally entitled to their best possible judgement. There can be no "smartness" nor jockeying in such an organization. All six Commissioners represent the same broad international constituency ... 15

In short, as this institution has grown and matured, a unique international personality and a tradition of impartiality have emerged and rapidly become entrenched.

To some extent, the creation of the International Joint Commission reflected the increasing complexity of the environment in which the relations of the two countries were acted out. Technological change, industrialization, and urbanization radically altered the face of inter-state politics in North America, introducing to the agenda of Canadian-American relations new and difficult kinds of problems that were much more technical and complicated than had been previously experienced. With respect to the emergence of the IJC, these problems were largely defined by the increasing significance of water resources to the development of both Canada and the United States:

Fifty years earlier the uses of water had been comparatively few and simple. Before the end of the nineteenth century with the beginnings of hydroelectric power, the increasing size of vessels, and the rise of cities and great industries, an entirely new set of considerations developed. Water now had many more uses than formerly, and questions involving diversion,
obstruction, pollution, or division and allotment for various purposes became problems of public and international concern.16

The mounting complexities of Canadian-American relations were, of course, not simply confined to the matter of boundary waters. The co-ordination and management of other natural resources, such as the fisheries, posed serious problems while the need for demarcation and maintenance of the boundary itself begged for some form of permanent international mechanism. With the advent of the Second World War and in its aftermath the prolonged period of Cold War hostility between the United States and the Soviet Union, the requirements of planning and conducting a joint defence effort imposed a heavy burden on both countries and produced further demands for more concrete solutions to their mutual problems. The result of these trends was a network of joint institutions, eighteen in all, which have come to form the core of a "continental bureaucracy":

International Joint Commission (1909)
International Boundary Commission (1910)
International Pacific Halibut Commission (1923)
International Salmon Fisheries Commission (1930)
Permanent Joint Board on Defence (1940)
Military Co-operation Committee (1946)
NATO Regional Planning Group (1946)
Canada-U.S.A. Ministerial Committee on Trade and Economic Affairs (1953)
Great Lakes Fishery Commission (1955)
North American Air Defence Command (1957)
Senior Committee on United States/Canada Defence Production-Development Sharing Program (1958)
Steering Group of the Canada/U.S. Defence Development and Production Sharing Program (1958)
Canada-United States Inter-Parliamentary Group (1958)
Canada-United States Ministerial Committee on Joint Defence (1958)
Canada-United States Balance of Payments Committee (1963)
Roosevelt Campobello International Park Commission (1964)
Canada-United States Technical Committee on Agricultural Marketing and Trade Problems (1967)
United States-Canada Civil Emergency Planning Committee (1967)

Each of these bodies is patterned on the model of the IJC incorporating the principle of equal representation between Canadian and American sections.* But the similarities between them do not extend much beyond the superficiality of structure and composition. In terms of function and authority, the continental institutions are extremely varied. Their separate jurisdictions are spread over a wide range of issue areas from natural resources to defence and numerous economic considerations. Some are exclusively administrative and regulatory, some are limited to the tasks of investigation and recommendation on specific problems, and others are merely forums for discussion in

* The notable exception to this general rule is the North American Air Defence Command.
which high-level officials of both governments can familiarize themselves with major points of contention and determine appropriate procedures for dealing with them. As a general rule, only those institutions created prior to 1945 seem to be vested with any real power for decision-making or regulation. The differences between these agencies and their post-war successors, however, do so somewhat deeper:

Decision-making processes in the older commissions could be characterized as joint, concerned with problem solving rather than bargaining; they are technical and non-rational in the sense that differences in the commissions are seldomly based on national distinctions. On the other hand, many institutions created since World War II contain few integrative features, and decision-making tends to be based on bargaining between national teams of negotiators or just consultation. Moreover, where the older agencies have remained active within their area of jurisdiction, some of the more recent additions have already fallen into disuse and have become monuments to an era of Canadian-American relations which many writers now believe has passed.

Another inescapable impression one acquires in studying the evolution of joint institutions in North America is that it has been essentially an ad hoc process. The Second World War and the international tensions engendered by the Cold War obviously accelerated this growth, but on the whole, it would seem that the institutions which comprise the "continental bureaucracy" were established merely as..
pressing needs arose and without any grand vision or strategy of development. Although these agencies have certainly facilitated the conduct of Canadian-American relations and the attainment of common goals and objectives in certain sectors, there has simply not been, in a broader sense, any continuity to their growth:

The structure is not founded in any treaty or agreement clearly setting out problems to be dealt with and the governing principles and procedures to be followed. It is a patchwork of committees which meet now and then about this and that; in secret, remote from the public, and accounting for itself only through communiqués and press releases which are normally full of good will but empty of useful information for either the parliaments of the two countries or the public. 19

Despite the critical tone of this view, the author does touch on a crucial point: there has been no centralization of power at the regional level. The "continental bureaucracy" in North America has not evolved as a single unit.

Taking all these formal intergovernmental mechanisms into consideration, one still does not have a complete picture of the complexity of the Canadian-American system. The preceding discussion focusses exclusively on the political manifestations of North American integration, but this is only the "tip of the iceberg". This ignores the social, cultural, and economic dimensions where much of the interplay between the two societies is conducted. While intergovernmental organizations at the regional level are
certainly among the crucial elements determining the institutional capacity of an integration system, one simply cannot exclude those regional organizations created by private groups which are also oriented to the pursuit of the common objectives of their members. Such organizations do play an important role. Although not always overtly political in their behavior, on occasion some do act as "regional interest groups" seeking to protect their interests, to procure desirable programs, or to modify legislation enacted by Canadian and American authorities. More significant perhaps is that they extend the points of contact between the two societies and augment the vast and intricate channels of communication which already prevail.

If one acknowledges that these bodies are also an essential feature of the institutional capacity of the system, then the difficult problem that remains is to identify the myriad of organizational and associational linkages between the two countries. It is a formidable task as a few observers of Canadian-American relations have noted:

From businessmen to Boy Scouts, women's clubs to engineers and scientists, to little league hockey teams, Canadian and American counterparts find fraternal interests and often organizational affiliations defying description.20

These formal mechanisms touch upon most functional contexts, their concerns ranging from economic problems to scientific research, environmental pollution, social welfare, public
health, law enforcement, civil rights, consumer protection, and many other matters of social, cultural, and political consequence.21

Furthermore, one must also recognize the potential for informal linkages between Canadian and American groups. There are certainly non-governmental organizations on both sides of the border which have found common cause on different occasions and have consequently sought to establish contacts on a temporary and relatively limited basis. Although these linkages are not subsumed by the notion of institutional capacity, this structure of social relationships taken in its entirety provides further testimony to the intensity of collective action and mutual involvement in North America.

Beyond this extensive collaboration channelled through intergovernmental institutions and regional non-governmental organizations, another sphere of formal contact has materialized in recent years. The federal structure of both Canada and the United States has contributed to the emergence of a whole new set of actors within the continental system: the state and provincial governments. On this point, one author has observed:

Provincial and state governments deal directly with each other because of a felt need to collaborate within policy areas in which they possess legislative authority, because jurisdictional parameters are not clear, or because
the respective national governments choose either not to exercise their authority or to delegate power to the regional governments.22

The collaboration between these local administrations, between the provinces and the federal authority in Washington, and between the states and the Canadian government has injected some new and increasingly crucial elements into the standard formula of Canadian-American relations. First and perhaps most prominent has been the creation of a number of joint institutions which have been designed to bring state and provincial administrations together for purposes of consultation, discussion of common problems, and policy co-ordination. These agencies have addressed a variety of issues, most notably labor, agriculture, transportation, energy, and natural resources.23 Not surprisingly, the Province of Quebec has been especially active in promoting cultural ties with regions in the United States which possess large French-speaking populations.

A second aspect of these transgovernmental-subnational relations has been the rapid growth of formal contractual links between state and provincial administrations in the form of arrangements, understandings, and agreements. Although neither party retains any authority to conclude treaties or international exchanges, both Ottawa and Washington have generally acceded to this kind of activity while not always approving of it. Regardless of federal reservations, provincial and state governments prior to 1974
had been involved in 766 separate exchanges, most of which were directed to issues of transportation, natural resources, trade and commerce, social services, and environmental protection.\textsuperscript{24} What is perhaps most impressive about this growth of formal contacts at the transgovernmental-subnational level is the fact that it has largely been achieved in the short span of time since 1960. Thus, where it appears that the momentum towards institutional development has subsided if not vanished at the intergovernmental level, the process has rapidly accelerated at the level of transgovernmental-subnational relations.

In addition to these formal organizational and contractual linkages, the Canadian provinces have retained a great deal of initiative in cultivating both informal and formal contacts with state and federal governments in the United States. Liaison between different administrative agencies within the provincial and state bureaucracies has been provided on a relatively \textit{ad hoc} basis for some time, but recent developments in this area have been particularly significant:

On the Canadian side, Quebec, Ontario, and Alberta have departments devoted to intergovernmental affairs. In other provinces, the practice has been to assign the co-ordination of transnational departmental relations to an individual in the premier's office or in the cabinet secretariat. State machinery for the conduct of transborder relations is rudimentary in comparison.\textsuperscript{25}
In addition, a few provincial governments have proceeded to establish permanent bureaus and offices in the United States to promote their interests in a few key sectors such as foreign investment, trade, and tourism. Similarly, most departments of finance within the ten provincial administrations, being greatly concerned with the problems of borrowing on American money markets, have established ties with the U.S. Securities and Exchange Commission.26

Needless to say, these patterns of interpersonal contact at the transgovernmental-subnational level have further expanded the channels of communication between Canada and the United States.

In retrospect, the institutional capacity of the Canadian-American system can be viewed as progressing on three separate levels: the intergovernmental, the transgovernmental-subnational, and the trans-societal. At each level, one can discern a variety of formal institutional mechanisms through which Canadian and American groups, official and unofficial, pursue their common objectives. From this perspective, the inclination among traditional theorists to concentrate their attention upon formal intergovernmental organizations alone does not seem to be adequate in the North American context. The description of institutional capacity in these pages, however, does seem to fit the notion that progress towards integration may vary along different dimensions. Where the
impetus to formal institutionalization at the intergovernmental level seems to have subsided, the locus of activity may have become increasingly concentrated at the transgovernmental-subnational and trans-societal levels.

Collective Decision-Making

The growth of formal intergovernmental arrangements between two or more national actors provides some insight into the distribution of power within a system and, in turn, the capacity of the actors involved to act and interact in specific areas of joint concern. In this latter respect, it is also an indicator of collective decision-making processes in the political sphere and the manner in which the participating members in the system work in concert to reach mutually-binding decisions. What has worried some theorists is that institutional capacity taken by itself may not be a completely sufficient indicator of these patterns of collective decision-making between national actors. It does not reveal whether the collective decisions taken are confined to a few specific and technical problem areas or generalized over a broad range of functional sectors, whether they are salient to member societies or merely of marginal concern, or whether they are implemented and enforced by joint institutions or dependent upon the compliance of national actors for implementation. By expanding the scope of inquiry to include not only formal
institutional arrangements of a political nature but also those informal and formal linkages at other levels, one might acquire a more accurate picture of the extent of group interaction, as opposed to independent action, embraced by patterns of collective decision-making.

Within the Canadian-American system, continental intergovernmental organizations are unquestionably an integral part of the collective decision-making process in the public sector, but other formal linkages are also employed more or less effectively to ensure peaceful adjustment and accommodation to common problems. Foremost in this regard are the institutionalized contacts encompassed by traditional inter-state interaction. This particular form of behavior can be broken down into three broad classes of activity: routine diplomatic activity, summit diplomacy, and treaty relations.

The first and most visible point of contact between Canada and the United States has been that provided by their respective embassies. The flow of communications through these channels has obviously fluctuated over the years, but by all accounts, the volume of business conducted through the Canadian and American legations on a day-to-day basis has been immense in its proportions. Nonetheless, because of the demands for secrecy in this area, it is all but impossible to accurately gauge the substance and form which these diplomatic transactions have taken.
A second dimension of the inter-state contact between the two governments has been the well-established tradition of Canadian-American summitry. Between 1923 and 1973, Canadian and American heads-of-government conferred on sixty-one different occasions, the vast majority of these meetings being held within the United States. Although some of these occasions have been purely ceremonial in nature, others have provided the opportunity for substantive discussion of prominent issues in Canadian-American relations — trade, balance of payments problems, defence, natural resource development, and so on.

The impact of this kind of interaction, however, has not always been positive. Because such meetings draw immediate public attention, they often result in a great deal of posturing and very little concrete agreement. Moreover, familiarity between leaders has at times led to clashes of personality which have had serious consequences for Canadian-American relations. Nonetheless, it should be remembered that these negative repercussions (because they are so visible) have a tendency to overshadow the positive features of summit diplomacy and the benefits which may have accrued in the past.

In addition to summit conferences and routine diplomatic interaction, the treaty relations between the two countries constitute a third class of inter-state activity. Canada and the United States have engaged in an intense
diplomatic relationship in this regard, resulting in a wealth of treaties, conventions, agreements, and understandings which have tied them closer together.\(^{31}\) Between 1867 and 1924, Great Britain and the United States concluded sixty-six exchanges which were made specifically with respect to Canadian-American relations or which indirectly imposed some obligation on Canada as part of the imperial system. After 1924, the Canadian government assumed full treaty-making authority and has dealt with the United States directly. Since 1946, the two countries have entered into roughly 215 bilateral agreements as well as 500 general and multilateral treaties through which they have assumed certain common obligations. The treaty structure binding Canada and the United States together has also covered a number of different issue areas. Among these, questions of defence, boundary claims, natural resources, and transportation have been most prominent, but many other sectors of mutual concern have also been considered in some depth.

Complementing the range of formal linkages which constitute such a visible feature of Canadian-American relations is a complex web of relatively informal practices and procedures governing the interaction between governmental officials on both sides. Perhaps these patterns are best summarized as the "diplomatic culture" of Canadian-American relations. This concept, formulated by Kal Holsti, is designed to describe those "amorphous factors" in
Canadian-American relations which "help to mute conflict and prevent disagreements and irritations from reaching crisis or confrontation proportions". More specifically, the author suggests that "vast, intricate, and open channels of communication" have been vital in shaping the outcomes of Canadian-American interaction. In this regard, five basic elements of the "diplomatic culture" in North America can be discerned: (1) a propensity towards complete openness and frankness in joint negotiations, (2) a significant amount of freedom in the flow of information between governmental officials, (3) a marked preference to isolate conflicts between the parties and to work through "regular channels" removed from public view, (4) a profusion of unofficial understandings at the administrative level, and (5) easy access between officials of government agencies in each country.

All of these elements would seem to be established practices, procedures, and habits which have evolved over the years. They are sustained by a variety of mechanisms. Personal contact between officials either through direct telephone communication or through frequent excursions to Washington or Ottawa is not particularly uncommon. The House of Commons Standing Committee on External Affairs and National Defence reports that for 1968 alone, a total of 8462 visits were undertaken by Canadian and American officials on matters of government business. Moreover,
there are forty-nine government agencies in Canada and the United States which retain direct contact with each other in order to pursue mutual concerns.36

Taking into consideration all these types of formal and informal institutional contacts between Ottawa and Washington, the general impression one gains is that some degree of collective decision-making and interdependence in policy formation does exist in the Canadian-American system. The precise nature and extent of this collective process is, however, somewhat more difficult to judge. In order to evaluate the level of collective decision-making which has emerged in North America, it might be profitable to focus upon three "ranges of variation": the scope of collective decision-making activity, the range of participation in various stages of the decision-making process, and the decisiveness of the process within the public sector.37

With respect to functional scope, one must take a comprehensive view of the vast array of institutional arrangements between the two governments which have a potential impact upon policy formation. Although it is often impossible to determine the substantive issues dealt with through these different mechanisms, they still indicate that the interplay between Canada and the United States touches upon a variety of different policy domains and a broad range of issue areas. Certainly some "hard" issues such as defence and trade dominate a significant portion of
the agenda, but joint participation is by no means confined to these areas alone. Similarly, the problems considered are not always technical but frequently do concern important aspects of general policy—environmental protection perhaps being a prominent example. The lack of significant "institutionalization" in many of these salient issue areas is probably more of a reflection of the disparity in size between Canada and the United States than of a lack of motivation for co-operation and policy co-ordination. Canadian decision-makers are inclined to be less optimistic about the benefits of "institutionalization" and more aware of the costs of being trapped by a rigid structure which might stifle Canadian interests and reduce their flexibility in dealing with Washington. Consequently, by opting for manoeuvrability, policy integration (to the extent it is desirable) has to be pursued through other channels.

In contrast to the broad functional scope of the collective activity in which Canada and the United States engage is the relatively limited range of stages involved in much of this decision-making. On examining the North American experience, one cannot avoid the observation that most of the decision-making activity in the collective area is focussed primarily on the pre-decisional stage of problem recognition. As previously indicated, the notable exception to this limitation in the range of decision stages
is revealed in the activities of some of the early joint commissions which were provided with sufficient authority and resources to effect binding decisions. Nevertheless, their jurisdiction is restricted to a few specialized and highly technical problem areas. Otherwise, the prevailing trend in Canadian-American relations, especially since 1940, is one in which the collective decision-making process is largely confined to the definition of common problems and exchange of information.

To some extent, these activities do entail certain features generally associated with the decision stage. Consultation, negotiation, and bargaining between Canadian and American officials are both extensive and crucial in finding alternative solutions to common problems. It must be remembered, however, that the ultimate authority to make decisions is retained, if not carefully guarded, by the two separate national governments. After consultation and negotiation, collective decisions in areas of mutual concern are made through mechanisms such as executive arrangements, concurrent legislation, and the like. Similarly, the application and implementation of most collective decisions relies heavily upon the instrumentalities of each state and the adherence of national authorities to the letter and spirit of bilateral agreements.

These observations on the distribution of authority between the national and regional levels brings to the fore
the whole question of the decisiveness of the collective arena in Canadian-American relations. To what extent does participation in collective decision-making pre-empt domestic decision-making processes? Is there evidence that this collective activity has produced a significant re-allocation of resources with respect to particular issue areas? In the North American context, a survey of the performance of the two governments in most functional sectors would probably reveal that activity at the national level is dominant. The degree to which national activity dominates varies, of course, from one issue area to another, and the collective activity that does exist (although often substantial) is focussed in most cases upon the consideration of primarily technical matters or the formulation of specific measures to regulate unique aspects of the relationship. Taking a long enough time span, one can probably discern a gradual shift in the locus of activity from the national to collective level and a re-allocation of resources to promote joint ventures. Nonetheless, all that can accurately be said about this development is that the national perogatives of both governments in a number of issue areas have been modified but by no means pre-empted by their mutual involvement. In Canadian-American relations, the role of collective processes is noticeably limited in relation to the amount of activity still conducted autonomously by national actors.
In sum, the level of collective decision-making activity in the public sector, analyzed in terms of these three ranges of variation, presents a complex picture. The observations in the preceding pages suggest that within the Canadian-American system, joint participation in the making of decisions is extremely broad in its functional scope but largely limited in the range of decision stages involved and in its relative decisiveness vis-a-vis national processes and the public allocation of resources. Moreover, it does appear that to some degree each of these dimensions may have developed independently; the functional scope of collective activity in North America has steadily increased while the range of decision stages and the decisiveness of the collective arena has levelled off after an initial surge. What the future may hold in this regard is open to debate.

Considering the profusion of linkages between the two countries and their traditionally close relationship, however, one might have expected that the development of these patterns of collective decision-making activity would be somewhat more intensive and impressive. And yet, the limitations that do exist in this area should not be wholly surprising. The very similarities between Canada and the United States may have militated against any momentous growth in collective decision-making processes. The relationship which has emerged in North America has in many
respects paralleled that between the Nordic countries. Because the national societies involved have already come to share certain common expectations and goals, policy co-ordination and harmonization have been achieved without the creation of a massive bureaucracy of formal institutions through which decision-making authority is redistributed. Further collective action or a more ambitious regional experiment would not advance these goals nor produce any substantial gains without also incurring some equally significant costs. The similarities between the two societies have generated a symbiotic relationship which has in turn contributed enormously to interdependence in policy formation.

Another important element in this relationship has been the "demonstration effect": that is, citizens and policy-makers in one country have looked upon their counterparts in the other as a reference group.\textsuperscript{41} For example, representatives of the labor movement in Canada have frequently pointed out that once American authorities have launched new programs in the field of labor relations, it is only a matter of time before Ottawa comes forth with some reasonable facsimile.\textsuperscript{42} The recent implementation of wage and price controls in Canada would suggest another possible example of this phenomenon.

Notwithstanding these features, what is important to remember is that decision-making activity in the Canadian-
American system has been subjected to group interaction. There has been a noticeable degree of interdependence in policy formation and frequent attempts to secure policy co-ordination. This phenomenon would, therefore, appear to underscore another prominent dimension of political integration in North America.

In a broader context, one might also ponder the significance and impact of collective decision-making processes beyond the realm of inter-state politics. Just as a preoccupation with intergovernmental arrangements can mask the true nature and extent of integrative relationships in a regional system, a similar result can be obtained by concentrating exclusively upon collective processes at this particular level. The wealth of formal and informal contacts which have blossomed in recent years between provincial, state, and federal administrations in North America indicates that joint action and participation in policy formation has taken on new dimensions, becoming an increasingly prominent factor in terms of transgovernmental-subnational activity. Similarly, the development of regional organizations in the private sector raises some interesting questions about the degree to which various groups in both societies work in consort in order to co-ordinate their actions and to define common problems, goals, and objectives. Although this matter is largely open to conjecture, it would certainly appear that the
process of collective decision-making at the trans-societal level is well-entrenched.

Overall, therefore, the conclusions to be drawn from an analysis of collective decision-making processes in the Canadian-American system generally correspond with those concerning institutional capacity. In brief, the North American situation presents a complex picture of patterns of collective decision-making. The evolution of these collective processes has not been uniform or unidirectional, but rather it has proceeded at different rates at the intergovernmental, transgovernmental-subnational, and trans-societal levels. While group interaction at the intergovernmental level has affected policy formation in a wide range of issue areas, this impact has not been particularly decisive in precluding or eroding the prerogatives of national actors. By way of contrast, collective decision-making processes seem to have made profound inroads at "lower" levels, and the extent of this collective activity tends to distinguish the Canadian-American system more than any other single feature.

Summary

Several different perspectives can be adopted to describe the relationship which has evolved between Canada and the United States. Of these some would appear to be more adequate and accurate in the way they portray that
relationship and in the insights they provide. In this respect, to catalogue the vast, intricate, and complex web of linkages which bind the two countries together would suggest that they can be properly viewed as constituting an integration system. Moreover, by simply employing the major constructs which integration theorists have formulated to describe such systems, some definite patterns of integration can be identified within the North American continent. The Canadian-American relationship has experienced both stable and enduring expectations of peaceful change over a considerable period of time and extensive institutional development in the collective arena. More limited, but nonetheless significant, has been the growth of interdependence in policy formation and the emergence of communal attitudes to sustain a sense of mutual identification. In short, given these properties, integration theory must at least be given serious consideration as a valid and relevant approach to understanding Canadian-American relations.

Perhaps the most unique feature of the North American experience has been the diffusion of power throughout the system. Integration has essentially been achieved without the instrumentality of formal intergovernmental arrangements or the centralization of authority. The structural growth which has occurred in the collective arena has been largely
related to quasi-governmental or non-governmental regional organizations.

Possible explanations of this somewhat unusual pattern of development are undoubtedly numerous and diverse. In the North American context, one can certainly hypothesize that the similarities between the two societies and the disparity in size have had some impact on the process of integration and the form which the system has taken. Such considerations, however, go beyond the scope of this inquiry. Although closer scrutiny of this matter would undoubtedly prove to be interesting, the primary concern at this juncture is not with the analysis of the pattern of development but simply with the examination of the major factors which have stimulated integrative relationships in North America. These will be addressed in the empirical study which comprises the second part of this paper.
PART II

LABOR MOBILITY AND THE GROWTH OF REGIONAL INSTITUTIONAL LINKAGES: AN EMPIRICAL INQUIRY
CHAPTER V

SPECIFICATION AND ELABORATION OF KEY CONCEPTS:
INSTITUTIONAL CAPACITY AND TRANSACTION FLOWS

While the task of defining and describing the concept of integration has been given a great deal of attention, it represents only the first step in dissecting the phenomenon and in broadening our knowledge of it. At the heart of the study of regional integration systems are those fundamental questions dealing with how and why enduring communal relationships emerge between nation-states. In this regard, the four broad "theoretical" approaches which can be found in the literature have focussed upon a multitude of attitudinal, structural, behavioral, and relational factors which contribute either directly or indirectly to the creation and maintenance of communal relationships. The transactional or communications school, however, has advanced a general hypothesis which is of particular concern to the present study; that is, the greater the rate of transaction flows between the constituent units of a system, the greater the level of integration which will be experienced. Expanding upon this, one would also expect that as transaction flows decline, the greater the likelihood that the process of integration will stagnate or that disintegration will occur. The remaining chapters of this thesis are devoted to an examination of this dual proposition. In essence, it furnishes the basic theme,
focus, and direction of the empirical inquiry which is to be undertaken. In the following pages, the conceptual framework from which the hypothesis is drawn will be given further elaboration, the relevant variables specified and discussed, operational measures developed, and the resultant indices subjected to statistical analysis. First, however, a few words with respect to the nature of this study would seem to be appropriate.

General Parameters of the Study

Throughout the next five chapters, a great deal of stress will be placed upon systematic empirical analysis. Such emphasis is necessary because of the problems of conceptualization which have plagued theory and research in the study of regional integration. To avoid these problems, four major imperatives of systematic empirical analysis will be given considerable attention. First, this research method demands that the premises and key assumptions underlying a "theoretical" perspective must be fully explicated. Only in this manner can one observe whether uniform criteria are being employed to determine and analyze the sort of behavior deemed relevant by the researcher. Second, the independent and dependent variables which are central to the study must be sufficiently clarified in order to prevent any form of confusion over what is being explained. Similarly, the key variables must be adequately conceptualized; that is to say, in the task of formulating both the dependent and
independent variables, one must clearly and explicitly demonstrate the relationship between them and the extent to which they vary. Finally, the procedures which are adopted to operationalize the various concepts and to observe them in the real world must be made specific. If research techniques are elaborated, then it is possible to replicate the research as well as to determine whether the data gathered for this purpose adequately and properly reveal the nature of the phenomenon under examination.

By embracing these tenets of systematic analysis and by applying them as rigorously as possible, it is hoped that the findings of this inquiry will be empirically incisive as well as credible. A few words of caution, however, would seem to be appropriate. The universe of analysis is confined to a dyadic relationship, Canada and the United States, although the conceptual framework presented in the following pages may be general enough to be applied on a comparative basis to other dyads. The time frame which is covered in this section of the study extends over a period of approximately one hundred years, from 1867 to 1974, with the bulk of attention being focussed on a specific type of transaction flow, labor mobility, and the effect it has had on the development of regional institutional linkages in North America, especially in the labor sector. Given these qualifications, it should be clear that the empirical generalizations or findings which emerge or follow from this
research cannot be treated as having universal validity. To the contrary, they are conditional in the sense that they reflect a particular time frame as well as a discrete relationship between two modernized, pluralistic, and developed societies.

Choosing A Dependent Variable: Institutional Capacity in the Labor Sector

Over the years, integration theorists have not only had to wrestle with the general definitional problem which has plagued the study of this phenomenon but also with the monumental task of specifying and operationalizing a dependent variable. Obviously, the two problems have been closely related, the lack of agreement in one area compounding difficulties in the other. As late as 1970, Ernst Haas was forced to remark that "we still need a dependent variable".

To meet this challenge, researchers and analysts in recent years have increasingly stressed the multidimensional nature of integrative relationships between nation-states. The pioneers in this development in integration theory have endeavored to disaggregate the phenomenon of integration, breaking it down into basic elements or dimensions. From this point, they have proceeded to formulate "concrete measurements" or "indicators" which might clarify the concept and reveal the nature of the relationships between the component units of integration systems.
This attempt to separate and specify the different dimensions which define the nature of integration at the regional level has not necessarily led to the resolution of some of the major theoretical problems. Indeed one could argue that it has merely aided in obfuscating these issues by introducing further complexity into the study of integration. One author has critically appraised these multidimensional definitions and discerned some of their weaknesses:

This approach has the virtue of papering over the disagreement over the appropriate mix of independent and intervening variables that are embedded in the various theoretical approaches to regional integration studies. It recognizes that we do not know what the mix is, nor whether it is the same for all situations. But it stresses simple observation for the careful development of hypotheses justifying and linking various independent variables — which in turn require some kind of theory.6

Moreover, these multidimensional approaches have been unable to adequately clarify the possible outcomes of integration. In this respect, the application of quantitative techniques to observe the phenomenon of integration has not alleviated the problem.7

In spite of these criticisms, it must be said that the multidimensional perspective has permitted a more comprehensive view of integration. Theorists have increasingly recognized the possibility that progress towards integration along any one dimension may lag behind, stagnate, or even suffer a reversal in relation to developments on other
dimensions. The long-standing view that integration was unidirectional and irreversible once the process was initiated has largely been abandoned.

Furthermore, the multidimensional approach suggests a number of different types of dependent variables which might be employed to analyze and observe qualities or characteristics of the process of integration between nation-states. This study, however, cannot hope to specify and operationalize all these variables or to aggregate them into some form of multivariate measurement of the phenomenon of integration. Given the limited goals and purposes of this thesis, the scope of inquiry must be restricted of necessity to a relatively specific area of concern in examining those communal relationships which define the Canadian-American system.

Nevertheless, to pursue that end, a dependent variable must still be provided. What is needed in this regard is a concept broad enough to capture as many of the nuances of the process of integration as possible and yet sensitive enough to reveal not only evolution and progress towards community formation among the participating units but also the deterioration or stagnation of these relational patterns. Moreover, this concept must be able to generate or indicate possible outcomes of integration which correspond in some measure to real-life situations.
In light of these considerations, this study proposes that the concept of "institutional capacity" offers a particularly suitable and appropriate point of reference from which to proceed. The rationale behind the choice of this concept is fairly straight-forward. On the one hand, it is not a new or radical departure in the study of integration, and it fits in with a number of contemporary works on international communities. In this respect, the four dominant schools-of-thought in the field have all addressed this question of "integration as institutional capacity" in one form or another, and almost invariably, the final outcome of the process of integration has been pictured as encompassing at least some formal institutional mechanisms vested with the authority to make binding decisions for the participating units. Although exception can be taken to such a narrow and confining perspective, there is no doubt that this traditional emphasis upon intergovernmental arrangements constitutes a point of convergence for the disparate strands of integration theory.

Secondly, the concept of institutional capacity seems, intuitively at any rate, to subsume the many different patterns of collective and corporate activity which writers and observers continually associate with the phenomenon of integration. Indeed the evolution of collective decision-making processes is often viewed and evaluated in terms of the activities of regional organizations. Moreover,
implicit to the analysis of the psychological and attitudinal dimensions of integration is the notion that institutional growth is inextricably entwined with the development of communal attitudes and, for that matter, expectations of peaceful change. Certainly problems of inference arise in relating "institutionalization" to these psychological factors, but this does not dispel the fact that it does play a role in this respect although one cannot be absolutely clear about what that role might be.

In sum, an underlying theme running through the various theoretical approaches is that integrative relationships embrace a broad spectrum of institutional mechanisms. That theme is, in another sense, a thread which seems to tie together different aspects of the phenomenon of integration. From the standpoint of this work, the concept of "institutional capacity" is considered to describe and sum up all those organizational linkages which define the substance of communal relationships.

Among the most prominent organizational linkages within the Canadian-American system are those rooted in the mutual involvement and collaboration of labor groups and other actors directly concerned with labor-related problems. Although these mechanisms within the labor sector are often overshadowed by political and economic linkages, and especially the presence of the multinational corporation, it should be noted that they are a well-established and
entrenched feature of the Canadian-American system which pre-dates most other structural arrangements including the emergence of the "multinationals". Hence, to focus on this specific functional area would seem to afford the opportunity to gather certain insights into the structural complexities of the process of integration and the historical development of the Canadian-American system.

Moreover, from a practical standpoint, this concentration upon the labor sector offers a few real advantages. To examine the institutional capacity of the system in its entirety raises a number of major technical problems particularly with respect to the range of variables which must be considered, the acquisition of data, and procedures for operationalization and measurement. By restricting the scope of empirical inquiry to collective and corporate activity in the labor sector, some of these problems can be avoided or resolved in a more satisfactory manner. This limited perspective permits both greater simplicity in the analysis of institutional mechanisms and greater confidence that the data available will be complete. Accordingly, institutional capacity in the labor sector has been designated as the dependent variable to be subjected to statistical analysis.
An Ecological Model of Regional Integration

Given this concern with patterns of collective and corporate activity between Canada and the United States, it can be said that the general orientation of this empirical study is essentially systemic. The burden of emphasis is placed upon the analysis of organizational linkages at the regional level rather than on the description and explanation of the externally-directed, foreign policy behavior of each state. Obviously, the specific policies, practices, and procedures which the two governments adopt and pursue in dealing with one another are important elements in the relational pattern which has evolved, but from the perspective of this work, these actions reflect only one aspect of the highly differentiated and extremely interdependent system which embraces not only the two national actors — that is, the governmental officials involved in the decision-making process at the national level — but also the plethora of regional groups and organizations which draw their support and membership from segments in both societies. Indeed it is difficult to appreciate the full extent and scope of the communal relationships in North America without recognizing that these pervade all spheres of activity — political, social, cultural, and economic.

To explain this phenomenon, some consideration must be given to the environmental processes which have conditioned
and shaped the behavior of various actors in the system. In this context, the approach adopted here can be described as a study in "ecology" or the "relation of organisms or groups of organisms to their environment". With respect to the subject of regional integration in North America, the "organisms" in question are national actors, quasi-governmental agencies, and non-governmental groups. The key point to be made, however, it that these social entities do not exist in a vacuum. They are situated in an environment which consists of a complex set of relationships, and in order to grow and survive, they are compelled to adjust and adapt to the environmental stresses imposed upon them.

Within a regional system, the total environment can be dichotomized into two analytically distinct contexts, the domestic and the external. In both spheres the dominant environmental factors are more than just specific actions and events to which national groups, organizations, and actors hasten to respond. They also include the interdependencies and self-sustaining processes that issue from patterns of interaction which link groups and individuals together.

The impact of the domestic and external environments upon the behavior of participating units can essentially be seen in terms of changes in these processes and interdependencies. Because the maintenance of the basic
structures of the system are dependent to some extent upon environmental processes, changes in that environment may "influence" the perceptions, calculations, and judgements of national groups. To put this in a slightly different perspective, it can be suggested that environmental stimuli arising out of changes in domestic and external processes assume the form of stresses, tensions, and demands which prompt the members of the system to take corrective or remedial action in order to ensure their growth and survival. By focussing upon these changes, therefore, one can obtain a possible explanation or interpretation of the behavior exhibited by various social "organisms" in seeking to adapt to their environment.

Given this broad conceptual framework, environmental processes and interdependencies might be viewed as important variables in relation to the emergence and maintenance of communal relationships. In this respect, one can argue that as tensions arise and as demands are generated within the domestic and external environments, the tasks facing the system and its members are expanded. More resources must be devoted to co-ordinating various functions and to initiating new courses of action. These needs, in turn, result in a search by the participating units for increased collective capabilities.

From this frame of reference, regional integration might be perceived as one of a number of different modes of
adaptation which these actors might adopt in dealing with environmental change. While not specifically addressing this point, Karl Deutsch has observed:

When a system is functioning to maintain its own fundamental patterns by adapting itself to various changes in the environment and pursuing one of several goals, problems arise concerning the integration and co-ordination of various messages and allocation of facilities or functions inside the system. The integrative function requires something be done to prevent different operations of the system from interfering with each other in a frustrating or destructive way. The maintenance of compatibility and shift from mutual inhibition to mutual facilitation of fundamental efforts are all tasks of an integrative system.  

In this context, the emergence of different types of integrative relationships such as those associated with institutional mechanisms can be categorized among the adaptive responses of regional groupings or communities of nations to environmental stress. These responses include not only the authoritative decisions of governmental actors to preserve or amend a particular environmental situation but the actions of non-governmental and subnational groups as well.

In a few important respects, the ecological model outlined above is paralleled and complemented by the approach of transactional or communications theorists to the study of integration. Four fundamental assumptions underlying that theoretical perspective are particularly relevant: First, it posits that intense, enduring, and
rewarding patterns of communication are the basis for the development and maintenance of all international communities. Second, these patterns entail certain costs — that is, loads and burdens — for the participating units which severely tax the administrative capabilities and resources they possess. Unless sufficient resources can be diverted and committed to meeting these costs, the capacity of the units to act and interact within the system and, thereby, their capacity to sustain communal relationships is threatened. A third and crucial assumption is that if a wealth of communications exists, then the activities of each member of the system become increasingly relevant and salient to the others. Insofar as these communication processes can be equated with mutual transactions and interactions, it can be said that "transaction flows ... establish the mutual relevance of actors". And finally, communications theorists argue that the mutual relevance of the participating units as determined by transaction flows and the burdens generated by communication processes leads to the creation and consolidation of institutions, practices, and procedures for the co-ordination and control of joint activities.

By incorporating these four basic assumptions of the communications approach into the ecological model put forth in the preceding pages, it is possible to flesh out or refine some of the ideas underlying that model and to relate
it more clearly to the analysis of integration. On the one hand, communications theory implies that there is a link between integration — as reflected in such phenomena as "institutionalization" — and certain background or environmental conditions. Communications processes or transaction flows, therefore, might be treated as a particular subset of the patterns and interdependencies which are encompassed by the environment. From this vantage point, transactions between participating units would constitute elements of the internal or "domestic" environment while processes involving actors outside the community would be "external" features.

The communications approach also lends support to the assertion that environmental processes place demands and stresses upon the system, thereby accenting mutual problems of the participating units and providing a stimulus for action. In general, the responses generated by these demands can be described as adaptive behavior, but one must hasten to add, however, that all modes of adaptation are not necessarily integrative in nature. Just as transaction flows are only one aspect of any environmental situation, so the integrative relationships unifying the members of a system are representative of only one form of adaptation. All that is suggested here is that integrative behavior or performance can be related in part to a specific environmental context defined by transaction flows.
By way of conclusion, it can be said that the model presented in the preceding discussion, like many others which attempt to describe and explain intricate social phenomena, possesses certain obvious deficiencies and inadequacies. Its basic fault is that it tends to transform complex relationships in the real world into a very abstract and sometimes overly simplistic set of concepts and theoretical constructs, the utility of which is not always readily apparent. Nonetheless, the ecological model, despite these faults, still has some value as a heuristic device for organizing thought and for aiding in the analysis of a phenomenon of overwhelming complexity.

The broad generalities in which the approach is phrased may also be the source of a second major deficiency to the extent that they contribute to a certain degree of misunderstanding or misinterpretation. Consequently, a few specific points in the way of qualification must be made in order to partially remedy or alleviate some of these problems. First, it must be stressed that this particular model is not intended to appear as deterministic. This study does not assume that the activities or responses of national groups and actors is invariably determined or compelled by environmental factors. Rather it emphasizes that environmental conditions and processes, insofar as they place demands upon these social "organisms" and structure the alternatives from which they may choose, increase the
likelihood or probability that certain types of action will occur. This observation raises a second point; that is, the link between environmental factors and the behavior of actors in the system is not a cause-and-effect relationship in the proper sense but more conditional in nature. Hence, with respect to the study of integration, communication processes can be envisioned as a specific and perhaps necessary condition which sustains the integrative potential of social organizations. Given these qualifications, the ecological model outlined in this section is presented in graphic form in Figure I.

Labor Mobility as an Independent Variable

In examining the environmental processes and interdependencies which affect the integrative potential of regional groupings of nation-states, it is possible to identify three broad categories of transaction flows:

... communications — the interchange of messages; trade — the exchange of goods and services; and mobility — the movement of persons and/or frequency of personal contacts. 16

Taken in conjunction, the rate and level of interaction along these different dimensions determines the mutual relevance and salience experienced by the members of a regional system. Accordingly, to acquire a complete picture of the impact of environmental processes upon the emergence of communal relationships, one must consider the "mutually reinforcing effects" of all three types of transaction
FIGURE I
A MODEL OF ENVIRONMENTAL PATTERNS AND PROCESSES AFFECTING REGIONAL INTEGRATION SYSTEMS

Communication Processes
(a) transaction flows within the domestic environment
(b) transaction flows between domestic and external environments
(c) transaction flows within the external environment

Inputs (demands, stresses, tensions)

Output (collective and corporate activity)
flows. Nonetheless, in choosing an independent variable, this study focusses upon a particular subset of that class of transactions involving the movement of persons: the geographic re-allocation of manpower or labor mobility.

While some form of multivariate approach incorporating the full range of indices and variables suggested by transaction analysis would undoubtedly provide the most appropriate means of explaining the phenomenon of integration, it would be dangerous to assume on this basis that the different variables in question contribute equally to producing integrative relationships. That is to say, certain transaction patterns can be far more potent than others in shaping this sort of outcome. Depending upon the magnitude, intensity, and degree of concentration of such variables, their impact and consequences for the system in general or for specific actors may be extremely significant. By focussing on them, some valuable insights into the nature of regional integration might be gained. Labor mobility appears to be such a variable, especially when considering the Canadian-American experience.

Communications theorists in general have long recognized the significance of labor mobility as a key factor in sustaining the drive towards integration within international communities. Although some analysts discount the importance of this communication process as a critical variable, the transactionalist approach has treated it as
an essential condition for the success of any integration system. With respect to mobility in general, Karl Deutsch in his analysis of the North Atlantic area concluded:

Another condition present in all our cases of successful amalgamation was the mobility of persons among the main units, at least in the politically relevant strata. It is quite possible that this condition, too, may be essential for the success of amalgamation. In any event, our cases have persuaded us that mobility of persons among the main units of a prospective amalgamated security-community should be given far more serious consideration than has often been the case ... Taken together with our finding that the free mobility of commodities and money, like other economic ties, was not essential for political amalgamation, our finding of the importance of the mobility of persons suggests that in this field of politics persons may be more important than either goods or money.18

In addition to the impact of labor mobility upon communal relationships, it might also be noted that such transaction flows receive impetus as each new threshold in the integration process is reached and surpassed. There is a continuing cycle in which mobility and integration mutually reinforce one another. Integration not only expands the potential market for labor and the opportunities for employment, but it also affords the mobile worker a greater sense of security through common manpower policies and other agreements which protect his rights. In sum, the process of integration tends to increase the propensity to move within the labor force.19 It does not follow, however, that integration automatically leads to more substantial flows between member states.20 Given similar
economic conditions among participating units in the system, there may be no real benefits to be achieved through mobility, and hence, migration rates may be low.

Furthermore, it cannot be said that labor mobility in and of itself guarantees a successful outcome for the merger of nation-states. Integration is a complex phenomenon embracing many different mechanisms, and under certain circumstances, it is conceivable that the stresses generated by environmental processes and interdependencies such as labor mobility may disrupt a regional system. J. S. Nye observes that,

... if a regional integration scheme leads to an unexpectedly large rise in transactions (trade, capital movement, communication), member states may be faced with an overburdening of the common institutions created for dealing with such transactions.21

Similarly, the interpersonal exchanges and contacts precipitated by transaction flows may also heighten latent prejudices and tensions between members of the system.22 The point to be made is simply that labor mobility does not directly affect patterns of integration but, rather, it merely amplifies the integrative potential of the system. It is in this latter sense that mobility is viewed as an independent variable in relation to the development of communal relationships.

Within the North American context, one can argue that the constant flow of manpower across the border has become
a major environmental reality. For various governmental and non-governmental actors, this reality has magnified the need for adjustment and adaptation, the response to which can be seen in the emergence of intense patterns of collective and corporate activity, especially within the labor sector. It is unlikely that many of the institutional arrangements which are now an integral part of the system would have been implemented if the movement of human resources between the two countries had been negligible or sporadic. Thus, to the extent that labor mobility has contributed to the mutual relevance of the members of the Canadian-American system, it has added a powerful stimulus to the process of integration and, more specifically, to the growth of institutional mechanisms.

Nonetheless, this latter assertion must be treated as merely an assumptive hypothesis. While the preceding analysis has attempted to specify the key concepts under examination and to elaborate upon the manner in which environmental processes affect collective and corporate activity, the relationship between labor mobility and institutional capacity posited by the conceptual framework cannot be accepted a priori. Rather, the specific task at hand is to establish whether that hypothesized relationship can be empirically verified through statistical analysis. In this regard, the problems of operationalizing and measuring the key variables must first be addressed.
CHAPTER VI
REGIONAL INSTITUTIONAL LINKAGES IN THE LABOR SECTOR:
OPERATIONALIZATION AND MEASUREMENT OF
THE DEPENDENT VARIABLE

Integration in North America has progressed on a
different dimensions, among which the evolution
of a regional infrastructure comprising a vast array of
institutional mechanisms is undoubtedly the most visible.
Nonetheless, to proceed with the evaluation and measure-
ment of integration in terms of this institutional growth
automatically raises certain methodological and technical
considerations concerning principles of operationalization.
As T. R. Gurr notes:

... to operationalize is to decide how to measure
variables. It requires numerous decisions about
which specific data to collect, and how to treat
them. There are a great many requirements for
good measurement, and they are often at odds with
one another. Usually there is no firm basis for
saying that it is more necessary to meet one
requirement than another. One result is that
almost every kind of measurement, even the
simplest, is subject to criticisms from some
technical point of view.

Although the discussion contained in the preceding chapter
introduced the concept of institutional capacity, it did not
provide any specific analytical or definitional criteria
which might be utilized to describe, identify, and measure
the range of collective and corporate activity involved.
It is precisely this matter which demands further clarifi-
cation and elaboration. Before any attempt at statistical
analysis can be undertaken, some critical decisions have to
be made with respect to the basic indices of the dependent variable, sources of data, and procedures for measurement. In this regard, it would seem appropriate to begin with an examination of the various analytical attributes of institutional capacity in regional integration systems. In the following pages, this will take the form of a general survey looking at the concept in its entirety while the specific application of the analysis to the question of institutional capacity in the labor sector will be left until the concluding sections of this chapter.

Analytical Attributes of Institutional Capacity

While many theorists have chosen to concentrate upon intergovernmental linkages in accordance with their desire to more fully understand political processes in integration systems, the concept of institutional capacity is employed in this study in a broad and comprehensive manner. It alludes to the total structural configuration of a regional system — that is, the complex network of intergovernmental agencies, private associations, and other formal organizational linkages occurring at the regional level. In short, the concept encompasses both political processes involving governmental actors as well as those equally relevant manifestations of collective activity in the social, cultural, and economic spheres which bind national societies together. To add substance to this view and to attain
greater analytical precision, one can focus upon three attributes of institutional capacity: types of regional linkage, locus of collective and corporate activity, and functional scope.

Types of Linkage. Within an international community or integration system, mergers between national groups and organizations may be achieved through a number of different structural arrangements. On this matter, Karl Deutsch has argued that institutional attempts at co-ordination and collective decision-making coalesce into one of two basic system types:

Amalgamated system ... Delegation of a particular function to an individual, to a group, to an office, to a bureaucratic organization, leaves co-ordination to the internal processes of an amalgamated agency. Inside an amalgamated agency it is assumed that there will be tight control of the power structure.

Pluralistic system ... There is a second pattern of accomplishing co-ordination. Neither specialized functions nor the over-all function of making a general class of decisions is amalgamated; instead sovereignty of decision competence is left with the components of the system. In this process the communications equipment and capabilities of the components of the system are increased to exchange messages sufficiently to ensure co-ordination. ²

Thus, by taking this notion into account, it is possible to categorize international political communities as either amalgamated or pluralistic systems.

From the standpoint of this work, however, there are two basic problems with such an analytical distinction.
On the one hand, it envisions regional integration systems in terms of the efforts of national actors to achieve some degree of co-ordination. An amalgamated system is one in which national actors delegate particular functions to some intergovernmental agency. By way of contrast, in a pluralistic system these actors retain their sovereignty and decision-making authority, but in order to pursue certain common objectives and to co-ordinate their activities, they divert resources to the expansion of the channels of communication with other member states. Nonetheless, if one accepts the argument that governmental bodies are not the only relevant actors in a system, then it is conceivable that while a particular group of actors such as national governments may be bound up in an amalgamated system, other types of actors may have become linked in a pluralistic one.

This latter possibility highlights a second major problem with the analytical distinction suggested by Deutsch: that is, the two types of decision systems do not seem to be mutually exclusive categories. Deutsch stresses that a system must either be amalgamated or pluralistic, and yet, in hypothetical terms, it may be possible that a system can embrace both of these processes. In short, one might argue that national actors may not only delegate particular functions to some new agency but also expand communications equipment and capabilities in the course of their relations
with other participating units. The same assumption might be made with regard to other actors as well.

The crux of the matter is that the institutional capacity of a community or an integration system involves a complex and intricate web of linkages between participating units. To trace the nature of this regional infrastructure, one has to recognize that it can include two distinct and separate types of linkage: (1) the creation of formal organizational linkages, that is, amalgamated agencies which bring together national groups from different member states, and (2) formal contacts between existing organizations which serve as a means of facilitating communication and, hence, the co-ordination of joint activities. If this perspective is adopted, it becomes apparent that the structural composition of regional systems can radically differ in accordance with the impact of unique factors, and this coincides with the argument that institutional capacity cannot be gauged by simply examining one class of linkages such as intergovernmental organizations. What must be stressed, however, is that the processes entailed in the creation of amalgamated and pluralistic linkages are essentially complementary phenomena. Both presuppose the emergence of certain formal arrangements which are relatively permanent in nature and which impose, directly or indirectly, certain sanctions, guidelines, and
restrictions upon the behavior of the individuals and groups which constitute their membership.

Locus of Activity. It is impossible to fully evaluate the structural complexities of an integration system by merely concentrating upon the types of linkage involved. The preceding discussion, however, implicitly suggests that institutional capacity might also be analyzed in terms of the different spheres or levels of activity at which linkages occur. In this regard, the observations of Jacob and Teune are particularly relevant:

At all levels, integration ultimately involves relationships directly among persons; at higher levels, individuals are organized into communities and nation-states; but even at lower levels, the major part of the integration process involves intergroup relationships establishing patterns of overriding corporate endeavor among a vast array of primary and secondary groups which are themselves integrated social units. 3

To overlook or ignore these intergroup linkages which emerge at "lower" levels would thus cut out what may be a significant portion of the communal relationships within a system.

On this latter point, the "world politics paradigm" formulated by Keohane and Nye is very instructive, offering a unique perspective which has special relevance for the study of integration. 4 As noted previously, traditional integration theory has placed an inordinate amount of emphasis upon intergovernmental arrangements and in particular upon three basic institutional archetypes: regional federations, supranational agencies, and functional
international organizations. Given this preoccupation, the impact of non-governmental and quasi-governmental actors upon the relational pattern between nation-states has been minimized. By way of contrast, the "world politics paradigm" asserts that the growth of transnational relations between societies has fundamentally altered the context of inter-state politics. Elaborating upon this basic premise, Keohane and Nye note that, although transnational behavior is by no means a new phenomenon in international relations, it is of increasing concern in this day and age because of the rapid improvements in technology and communications which have transformed certain groups into very powerful actors on the international stage. In short, it is suggested that intergovernmental arrangements can no longer be treated as the only principal feature in the interaction of nation-states; rather, patterns of inter-state activity are increasingly being shaped by transborder contacts and dealings between individuals, groups, and organizations operating in a non-governmental capacity.

In more precise terms, transnational relations are defined as "the movement of tangible or intangible items across state boundaries when at least one actor is not an agent of a government or an intergovernmental organization". From this standpoint, it is obvious that the concept of "transnational relations" is employed to describe a broad range of seemingly diverse activities. Therefore, in order
to distinguish more specific types of behavior, the concept is broken down into two component elements: trans-societal relations, or the interactions of private groups and organizations across state boundaries; and transgovernmental relations, or "the interactions of governmental sub-units across state boundaries".  

Within the context of this inquiry, these analytical distinctions provided by the "world politics paradigm" are used to define different spheres of collective and corporate activity. From this perspective, the institutional capacity of a regional integration system encompasses organizational linkages and contacts on three separate levels: the intergovernmental, the transgovernmental, and the trans-societal. Although formal arrangements at the intergovernmental level may certainly be the most prominent and visible feature of the regional infrastructure, they do not necessarily represent the dominant locus of collective and corporate activity. That is to say, transgovernmental and trans-societal activity involving both pluralistic and amalgamated linkages may be more significant and relevant to promoting the common goals and objectives of the participating units and to shaping the outcome of the process of integration.

Given these different possibilities, a preliminary indication of the structural composition of a regional system and its institutional capacity might best be obtained
by combining both sets of attributes concerning locus of activity and type of linkage. In Figure II an attempt is made to graphically portray these relevant linkages within an integration system and the patterns of collective and corporate activity they subsume. It must be noted, however, that this outline of institutional capacity is only partially complete. In order to acquire a more comprehensive view, one must take into consideration the range of functional tasks performed by regional groups and organizations.

**Functional Scope.** A general trait which tends to set different organizations apart from one another is their functional differentiation. From the standpoint of integration theory, however, the key factor is not just the type of functionally specific tasks which particular organizations pursue. Of equal importance is the manner in which these tasks, taken in their totality, are distributed over a range of functional sectors. As many writers have noted, "a community is the sum of the functions performed by its members", and this maxim is especially relevant with respect to the study of integration systems. Therefore, to fully grasp the degree to which the member states act as a single unit, some conceptual framework for appraising the functional scope of collective and corporate activity is needed.

To construct such a framework, some rather arbitrary decisions have to be made about what constitutes a
FIGURE II
LINKAGES AT THE REGIONAL AND NATIONAL LEVELS

functional sector and what specific tasks should be included. Fortunately, the literature on integration contains several attempts to systematically formulate and classify functional areas. Most notable among the recent contributions are those by J. S. Nye and L. N. Lindberg.\textsuperscript{10} While the efforts of these two scholars must be altered to suit the specific purposes of this inquiry, the list of functional sectors employed here does not radically depart from the models or general guidelines which they have developed.\textsuperscript{11} This framework comprising twenty-three functionally-specific tasks is presented in a concise and manageable form in Figure III.

Although the activities summed up by these functional tasks are somewhat self-evident, there are certain features of the framework as a whole which need further clarification and explanation. First, the predominance of economic functions implies that primary emphasis is placed on this type of activity. This impression is certainly not intended. Within the framework, the relative weight given to these economic functions merely reflects the greater degree of specificity which economists have achieved in categorizing diverse types of economic activity.\textsuperscript{12} In other functional contexts there is nothing comparable in the way of rigorous classification of different tasks.

Nonetheless, in view of the disproportionate number of functional tasks in the economic sector, an unintentional
FIGURE III
A LIST OF FUNCTIONAL SECTORS

External Relations Functions
1. Military security
2. Diplomatic influence and participation in world affairs
3. Aid to other polities (i.e., military, economic, technical, etc.)
4. Commercial relations with other polities

Political-Constitutional Functions
5. Public health and safety
6. Maintenance of order
7. Political participation (i.e., symbolic participation, voting, office-holding, etc.)
8. Public affairs (i.e., civic rights, property rights, etc.)

Social-Cultural Functions
9. Cultural affairs (i.e., ethnic, fraternal, nationality, etc.)
10. Recreational affairs
11. Education
12. Research (i.e., science and technology, exchange of information, etc.)
13. Social welfare
14. Conservation and environmental quality

Economic Functions
15. Money and credit
   a. domestic credit (i.e., banking and financing)
   b. balance-of payments (i.e., lending and borrowing abroad, capital movements)
   c. current financing (i.e., governmental expenditures, budgetary policy)
   d. currency (i.e., exchange rates)
16. Agriculture
17. Labor relations
18. Industrial competition
19. Trade and commerce (i.e., free movement of factors of production, tariffs and quotas, etc.)
20. Economic development and planning (i.e., regional policies, aid to depressed industries, etc.)
21. Transportation
22. Communication (including post office, television, radio, etc.)
23. Natural resources (i.e., energy, water, etc.)

bias is automatically incorporated into the analysis of functional scope. As a means of remedying this situation, a few specific tasks which are economic in nature (balance of payments, currency, and domestic credit for example) are aggregated into somewhat broader categories rather than being registered as separate functions. Furthermore, the twenty-three functional sectors discerned by this study are divided along lines recommended by L. N. Lindberg into "sub-lists" or classes of functions. On inspection it is clear that many of the sectors are inherently related, and in fact, four general functional classes can be designated: external relations functions, political-constitutional functions, socio-cultural functions, and economic functions. This additional classification scheme is necessary because "individual issue areas are palpably unequal in importance, salience, and controversy." Without this sort of procedure, the tasks which are substantially technical and non-controversial in nature are given the same status as those which may be crucial to the growth and maintenance of the entire integration system. Similarly, by putting individual functional tasks on an equal footing, the imbalance between the economic and other sectors is preserved, if not accentuated. These inequities and biases can be ironed out, however, by grouping specific functional sectors into broader classes of activity and utilizing these as a basis for analysis and measurement.
In spite of these modifications, a few problems still arise in actually classifying different regional linkages and in applying the framework. The activities of many regional organizations are not limited to a single functional sector or even a class of functions. In other words, they are multifunctional in their performance, and accordingly, to categorize them in relation to a specific functional task is not only difficult but also misleading to some extent. Nonetheless, it must be stressed that, for these regional linkages, there is usually one functional area which is central to their existence and other tasks tend to be of secondary importance. On this basis, the researcher might proceed to classify these linkages by making certain subjective judgements about the crucial functional sectors in which their activities are concentrated.

Whatever the problems encountered, however, the list of functions and issues presented above is an indispensable tool for judging the development of institutional mechanisms in integration systems. Depending on the manner in which it is applied, this kind of framework can furnish valuable insights in at least three significant areas:

... (1) the scope of common activities (how many functional sectors are treated in common), (2) the extent of common activities (how much of the sector is treated in common), and (3) the salience of common activities (how important the sectors are).

It must be noted that these common activities are conducted through a number of different regional linkages, and by
analyzing these mechanisms in terms of the functional sectors which they address, the institutional capacity of a regional system can be described and evaluated more precisely.

To conclude, it might simply be stated that, for the purposes of this study, the decision has been made to concentrate upon a single dimension of the process of integration, institutional capacity, rather than to undertake any ambitious attempt at multivariate analysis. This concept is designed to sum up at an abstract level some of the important elements that shape integration systems and to provide a frame of reference from which to evaluate and measure them. To facilitate this analysis, institutional capacity can, in turn, be broken down and discussed in relation to three separate and distinct sets of attributes: (1) types of linkage — whether the regional linkages in question are amalgamated or pluralistic in nature; (2) locus of activity — whether linkages occur in an intergovernmental, transgovernmental-subnational, or trans-societal context; and (3) functional scope — the nature and extent of the functional tasks to which collective and corporate activity is directed. By employing these constructs, it is possible to impose some order on the analysis of the infrastructures of regional integration systems.
Basic Indices of Institutional Capacity

Implicit to the preceding examination of analytical attributes is the assumption that the institutional capacity of an integration system can be measured in terms of the mix of organizational linkages and contacts which evolve from the search for collective capabilities by national groups and actors. In order to further clarify this approach, it is necessary to develop certain definitional criteria which can be employed to differentiate between the range of linkages subsumed by the system and to single out those which are concordant with the phenomenon under examination. Stated in rudimentary terms, a linkage can be defined as a relatively stable and enduring formal arrangement which prescribes certain standards of conduct for the groups and individuals it encompasses. Obviously, a broad spectrum of collective and corporate activity is suggested by the definition but only a segment of this is relevant to an examination of the institutional capacity of regional integration systems. Therefore, to gain a greater degree of accuracy in distinguishing regional mechanisms, two further definitional criteria have to be considered: (1) the linkages or arrangements in question must involve individual or collective participation from all national societies within the community, and (2) they must be designed to promote the common interests, goals, or objectives of the participating units.
In the task of identifying specific linkages within regional configurations of nation-states, the application of these criteria might be merged with the analytical distinctions elaborated in the preceding pages. Thus, with respect to amalgamated mechanisms, consideration is limited to formally-constituted agencies which draw their membership from individuals or groups in the various states comprising the system and which seek to advance the mutual concerns of those members through collective action. By formally-constituted it is meant that the mechanism possesses a coherent structure with an executive body elected or appointed by the participating units and vested with the authority to carry out specific functions on their behalf. Moreover, its operations must be conducted independently of other agencies and on a relatively continuous basis. At the intergovernmental level, these amalgamated linkages would include all formations established by inter-state agreement between national actors such as regional federations, functional intergovernmental organizations, and supranational agencies, while in the sphere of transgovernmental-subnational activity, only those formations embodying personal contacts and exchanges between sub-units of federal governments and/or officials of provincial, state, and municipal administrations would be considered relevant. To this latter category would be assigned the numerous functional organizations created by
provincial and state governments to deal with particular problem areas which fall within their jurisdictions such as law enforcement, public health and safety, social welfare, agriculture, labor, transportation, and the like. At the trans-societal level, the task of identifying eligible non-governmental organizations is much more complicated given the general lack of information on the aims, composition, and structure of such agencies. Nonetheless, in broad terms the definitional criteria indicate that a list of these formal linkages would include businessmen's associations, trade unions, certain religious organizations, professional societies, ethnic and fraternal organizations, and an array of "interest groups" concerned with various aspects of social welfare, education, and public affairs.

There are, however, a number of important classes of amalgamated linkages which are omitted from this inquiry although they do appear at least to have the potential to play key roles within a regional system. The grounds for their exclusion are perhaps not readily apparent, hence the need for further elaboration. In this regard, one should note that the definitional criteria do not extend to agencies which are internal, organic, or subsidiary units of larger organizations.\(^9\) While these formations may qualify in most respects as regional linkages, they are generally excluded, the only exceptions being made in those instances where it can be demonstrated that an agency does in fact
operate independently of the parent body. The criteria also preclude any closed and hierarchically-structured organization — such as a religious order — which restricts the degree and extent of participation by its members in the functioning of the organization. Associations which envelop such bodies, however, might be treated as relevant linkages as long as they meet the basic requirements outlined in the preceding discussion. National organizations are excluded, even though they may acquire members from other states within the system, essentially because their structure, goals, and scope of operations are not overtly regional in nature. Educational institutions — colleges, universities, schools — are a prime example in this respect. Nevertheless, regional associations involving these actors such as assemblies of university administrators would seem to represent wholly separate and distinct entities which must be included among the valid cases of regional linkage. Finally, it should be pointed out that amalgamated mechanisms which entail the joint participation of their members with some third party or parties outside the system are, by definition, ineligible for consideration. These multilateral linkages suggest a broader, more inclusive phenomenon which stretches beyond the confines of the region and which is thus divorced to some extent from the process of regional integration. International business enterprises, for example, are excluded on these grounds.
From a slightly different perspective, they might also be viewed as national organizations which accept members from other states in the system but lack a clear-cut regional orientation apart from their broader global concerns.

In this matter of multilateral linkages, there are still a few notable exceptions which must be recognized. Certain organizations which are active in an international context may be relevant to the study if it can be determined that, within these organizations, members from a particular regional system constitute a single unit or perform as a single unit in relation to other members. Within the Canadian-American system, for example, NATO would be classified as a multilateral linkage and thus dropped from the scope of inquiry while the NATO Regional Planning Group in which Canada and the United States have combined their efforts to pursue common goals and objectives in the area of military security would stand as an important regional linkage. Consequently, this kind of arrangement would have to be included in an examination of the infrastructure of the system.

While institutional capacity is perhaps most clearly discerned in the emergence of formal organizations, the search for collective capabilities by governmental and nongovernmental actors does not necessarily have to culminate in this type of linkage. Rather than combine their efforts through some formal structural arrangement, the resources
and energies of these groups may be diverted to expanding or strengthening existing channels of communication between themselves. The pluralistic linkages defined by such patterns of collective and corporate activity represent a second critical dimension of institutional capacity.

In view of the definitional criteria outlined above, the latter conception can be reformulated in more specific terms. Pluralistic mechanisms at the regional level comprise all those unstructured formal arrangements through which national groups engage in periodic discussion and consultation on matters of mutual concern. By unstructured it is simply meant that the collective activity involving these groups is conducted without the mediation of some concrete organizational mechanism such as a supranational agency. Nonetheless, the arrangements are still formal in nature to the extent that representatives of the participating units behave in accordance with officially-prescribed roles. By implication, acts of individual initiative are excluded from consideration as are irregular and sporadic contacts between groups.

The mechanisms which are subsumed under the rubric of pluralistic linkages generally fall into one of two broad classes. On the one hand, there is the complex network of interpersonal contacts and exchanges which facilitate communication between national groups within the system. Among these linkages are included patterns of diplomatic
interaction at the inter-state level and particularly those patterns which have become routinized and entrenched over time such as summit conferences between heads-of-state and the on-going contacts between diplomatic personnel. In this sphere of activity, one could also look at the established practices and procedures outside of normal diplomatic channels which animate the behavior of various administrative officials in their dealings with one another. Regular contacts and exchanges between representatives of governmental agencies and departments can reflect both a standard operating procedure and an important pluralistic linkage. These particular patterns of collective and corporate activity are duplicated to a large extent at the transgovernmental-subnational level. It must be stressed, however, that the primary actors are provincial, state, and municipal governments, and the contacts in question are manifested in the activities of their official representatives. With respect to trans-societal activity, interpersonal exchanges between non-governmental actors in various member states adopt a slightly different form. Periodic consultation and discussion on matters of mutual concern are largely pursued through such mechanisms as affiliation and coalition-building across state boundaries. Instances where national non-governmental organizations permit representatives of groups from other countries to participate as observers in their meetings and proceedings
would exemplify this latter type of interpersonal contact and exchange.

The second major category of pluralistic linkages can be described as contractual arrangements wherein participating units assume certain common obligations and responsibilities. Basically, these are only relevant within the inter-state and transgovernmental-subnational spheres of activity. Included among these linkages are the treaty relations in which national actors engage. **Treaties are considered here in the generic sense as encompassing “all agreements having binding international character, such as conventions, protocols, declarations, agreements, and arrangements by exchange of notes, commonly referred to as executive agreements.”** In addition, there is the web of agreements, understandings, and other arrangements entered into by provincial and state governments. Although these linkages at the transgovernmental-subnational level lack some of the authority and legal force of the treaty structure, they nonetheless represent crucial patterns of collective and corporate activity which contribute significantly to expanding channels of communication between national groups.

Taken collectively, these different classes of pluralistic and amalgamated mechanisms provide a means of evaluating and measuring the development of the institutional capacity of a regional integration system. They
suggest a number of specific indices which might be
generated to assess the growth or deterioration of the
regional infrastructure. In this respect, one might attempt
to measure variations in the total membership of regional
organizations over time or variations in the budget and
staff allocations of governmental and non-governmental
actors to regional affairs. Obviously, few of these indi-
cators can be fully or properly operationalized because of
the simple lack of particular kinds of data. Even where
such information does exist, it is often unavailable to the
general public.

Some of the major problems of data acquisition,
however, can be avoided by concentrating upon other indi-
cators such as the frequency with which amalgamated and
pluralistic linkages occur. That is to say, an estimate of
the growth or deterioration of collective and corporate
activity can be obtained for any given time period by simply
tallying up the actual number of linkages present as well as
the total number of linkages which are established or
dissolved by national groups. In this regard, Charles
Pentland has observed:

Assuming that the emergence of transnational
organizations in a multi-state system is a
response ... to needs which transcend national
boundaries, we might simply do an inventory of
such organizations according to a range of
categories. The total number of these organi-
izations — and the way in which they are
distributed among such categories as trans-
national corporations, trade unions, political
parties, and religious organizations, as well as intergovernmental organizations for general and specific purposes — can be expected to give us a good indication of the degree and, perhaps more important, the character of integrative linkages in the system.\textsuperscript{22}

These kinds of frequency measures are certainly the most basic and fundamental indices which can be developed, and they are employed by this study to operationalize the dependent variable. In Figure IV, a summary of these indices suggested by an inventory of amalgamated and pluralistic linkages in the Canadian-American system is presented.

As a final note, it must be pointed out that many of the mechanisms listed in the preceding pages and categorized according to type of linkage and sphere of activity cannot be viewed as institutions in themselves. The argument can certainly be made that amalgamated linkages such as professional societies are not of the same order as intergovernmental organizations insofar as the ties involved do not carry the same binding effect. Nor for that matter can interpersonal exchanges between non-governmental actors be equated with those between governmental officials at either the inter-state or subnational levels. Nevertheless, all the amalgamated and pluralistic linkages which have been described constitute \textit{vital elements} in the internal social processes of the system. The emphasis, therefore, is placed not upon the nature of any specific mechanism but rather
**FIGURE IV**

**BASIC INDICES OF INSTITUTIONAL CAPACITY**

<table>
<thead>
<tr>
<th>Locus of Activity</th>
<th>Type of Linkage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amalgamated</td>
</tr>
<tr>
<td><strong>INTERGOVERNMENTAL</strong></td>
<td>regional federal structures</td>
</tr>
<tr>
<td></td>
<td>supranational agencies</td>
</tr>
<tr>
<td></td>
<td>functional intergovernmental organizations</td>
</tr>
<tr>
<td></td>
<td>functional organizations created by state, provincial, and municipal governments</td>
</tr>
<tr>
<td><strong>TRANSGOVERNMENTAL/SUBNATIONAL</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>businessmen's associations</td>
</tr>
<tr>
<td></td>
<td>trade unions</td>
</tr>
<tr>
<td></td>
<td>professional societies</td>
</tr>
<tr>
<td></td>
<td>religious organizations</td>
</tr>
<tr>
<td></td>
<td>ethnic and fraternal organizations</td>
</tr>
<tr>
<td></td>
<td>regional &quot;interest&quot; groups</td>
</tr>
</tbody>
</table>
upon the pattern of which it forms a part. Where organizational linkages such as professional societies or businessmen's associations do not appear to be institutions in the proper sense of the term, participation in such bodies taken in its entirety may reflect an established practice or convention which is central to the system. In pluralistic, modernized societies, for example, the wealth of associational groups is a defining characteristic of the social structure. By adopting a similar perspective to examine regional integration systems such as that in North America, it is possible to shed some light on the dominant institutions and the structural complexities which prevail. Hence, the basic indices of institutional capacity outlined in the preceding pages should be interpreted in this broad manner. They do not represent institutions per se but merely the linkages which are the primary manifestations of accepted and well-entrenched modes of social interaction. Given this proviso, the task of operationalizing and measuring the concept of institutional capacity can proceed.

Sources of Data

Perhaps the most serious problem encountered in applying the definitional criteria to the Canadian-American system is the lack of certain kinds of data. Although several basic indices of institutional capacity have been
provided, the fact is that in many cases information is simply not available with which to operationalize them. The problem is most critical with regard to a few specific cases of pluralistic linkage such as interpersonal contacts between representatives of governmental agencies, coalitions between non-governmental organizations, and so on. While some data can be mustered, it is only partial and incomplete, and consequently, the task of operationalizing these particular indices is largely insurmountable. Moreover, if one is interested in conducting a longitudinal study covering a lengthy period of time, it is often difficult to determine the exact point at which such linkages first appear or when they finally cease. Given the obstacles raised by this lack of data, one can note the existence of these kinds of pluralistic linkage and present the little data that is available, but for the purposes of testing and quantitative analysis, the only viable option is to delete these particular indices from the study. Such a step may seem drastic, but it does not necessarily undermine the study as a whole. As T. R. Gurr argues:

Missing data are not an absolute evil. They can be tolerated just as error can be tolerated, and for much the same reason: their effects are comparable to those of error ... If missing data are randomly distributed through a data matrix, they will decrease the precision of results and conclusions but are not likely to seriously mislead the investigator. But if missing data are clustered on particular variables or among distinctive kinds of cases, results can be seriously distorted.

23
There is no reason to suspect that the pluralistic mechanisms embraced by the Canadian-American system are concentrated at any specific level or within any functional sector, and while certain classes of these linkages cannot be operationalized, it must be remembered that they do not represent the only indices of this particular dimension of institutional capacity.

Despite these problems which one must confront in examining pluralistic linkages, the body of data pertaining to amalgamated mechanisms is much more ample and complete. With respect to formally-constituted organizations and the process of amalgamation in the institutional development of the Canadian-American system, there is a wealth of information which can be subjected to measurement and quantification. Beyond the emergence and growth of intergovernmental agencies, a phenomenon which has received substantial attention over the years, valuable information on the evolution of formal organizational linkages at other levels can be derived from four general sources:

*Encyclopedia of Associations* (M. Fisk ed., Detroit, 1973). The volumes in this series provide a catalogue of various American organizations as well as furnishing summaries of their activities, composition, and membership, and the dates when they were established. Among these entries are included not only American organizations which have Canadian members but Canadian organizations which are also active in the United States.

*Directory of Associations in Canada* (B. Land ed., Toronto, 1975). This publication provides a list of organizations which are active in Canada, and
although it is not as comprehensive as the Encyclopaedia, it does indicate where these organizations are based and, in certain cases, the composition of such agencies.

**Canadian Almanac** (S. Walters ed., Toronto, 1976). A specific section in the Almanac is now devoted to cataloguing national organizations and associations. Many of these are actually regional or global actors, and some of the details provided by the Almanac about their structure and functional activities prove a valuable supplement to both the Encyclopaedia and the Directory.

**Yearbook of International Organizations** (Union of International Associations, Brussels, 1974). This compilation defines international organizations as any formally-constituted body whose aims are international in character and whose membership is drawn from at least three countries. On this basis, the Yearbook would obviously exclude the dyadic relationship with which this study is primarily concerned. Nonetheless, it still has utility as a device for checking out certain questionable cases where the researcher is not positive that an organizational linkage is truly bilateral or that multilateral linkage should be included in the scope of inquiry.

In addition to data generated by these sources, certain noticeable gaps in their treatment of formal organizations can be filled by referring to other works and publications which concentrate on special areas of concern:

**Canadian International Links in the Social Sciences and Humanities** (J. J. Loubsor ed.; Ottawa, 1976). This recent study published by the Social Science Research Council of Canada documents and summarizes linkages joining the Canadian academic community with scholars, organizations, and associations in over 80 countries.

**Labor Organizations in Canada** (Ottawa, Department of Labor/Manpower and Immigration, 1911 - 1975). Since 1911, the Canadian government has compiled statistics on the activities of labor organizations in Canada, and these have

With respect to pluralistic institutional linkages in North America, one can uncover substantial documentation but only for a few specific indicators:

Canadian Summit Diplomacy, 1923 - 1973 (R. Swanson, Toronto, 1976). The introduction to this study presents significant data on this particular mode of diplomatic interaction between Canada and the United States.

Canadian-American Treaty Relations (D. Deener ed., Durham, 1963). The treaty structure which binds the two countries together has also been given thorough treatment, directly and indirectly, in numerous monographs and official publications. The appendix to the text mentioned above lists treaties and agreements between Canada and the United States as well as those between the United States and Great Britain affecting Canada. This information can be updated and augmented by referring to such publications as the Annual Report of the Department of External Affairs (Ottawa, Department of External Affairs, 1948 - 1975), Treaties and Other International Agreements of the United States of America, 1776 - 1949 (C. I. Bevan, Washington, 1968), and United States Treaties and Other International Agreements (Washington, Department of State, 1950 - 1975).

State-Provincial Interactions (R. Swanson, Washington, 1974). In examining pluralistic linkages, it is also important to note that this process is not wholly limited to the governmental level and relations between national actors.
Within the North American context, trans-governmental interactions between state and provincial governments have also been extremely visible, generating a myriad of agreements, understandings, and arrangements. These are listed and summarized in this study by Roger Swanson.

The data culled from these sources can be collated and classified according to functional sectors, locus of activity, type of linkage, and time interval. The results of such an exercise are presented in Tables I to III. While some information is still absent, the problem is not as severe or as disconcerting as might have been suggested. Consequently, it is felt that the empirical data generated from these sources, although not as comprehensive as they might be, furnish a representative sample of the range of collective and corporate activity in North America.

Institutional Capacity in the Labor Sector

Patterns of collective and corporate activity directed to labor-related problems and issues remain a major subset of this complex network of linkages which comprise the infrastructure of the Canadian-American system. It is for this reason if for no other that the decision has been made to focus upon institutional capacity in the labor sector as a dependent variable for the purpose of empirical inquiry. In speaking of the labor sector, consideration is directed to all amalgamated and pluralistic institutional linkages at the regional level committed to dealing with common
### TABLE I

**TOTAL AMALGAMATED LINKAGES CREATED IN NORTH AMERICA**

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>FUNCTIONAL SECTOR</th>
<th>EX</th>
<th>P-C</th>
<th>S-C</th>
<th>EC</th>
<th>EX</th>
<th>P-C</th>
<th>S-C</th>
<th>EC</th>
<th>EX</th>
<th>P-C</th>
<th>S-C</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871/1880</td>
<td>Inter-Governmental*</td>
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<td>0</td>
<td>0</td>
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<td>1881/1890</td>
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<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>1891/1900</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>30</td>
<td>71</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
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<td>3</td>
<td>0</td>
<td>0</td>
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<td>5</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>59</td>
<td>139</td>
</tr>
<tr>
<td>1921/1930</td>
<td></td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>73</td>
<td>145</td>
</tr>
<tr>
<td>1931/1940</td>
<td></td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>12</td>
<td>14</td>
<td>3</td>
<td>6</td>
<td>92</td>
<td>177</td>
</tr>
<tr>
<td>1941/1950</td>
<td></td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>17</td>
<td>19</td>
<td>6</td>
<td>6</td>
<td>127</td>
<td>211</td>
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<td>1951/1960</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>20</td>
<td>23</td>
<td>6</td>
<td>8</td>
<td>160</td>
<td>235</td>
</tr>
<tr>
<td>1961/1970</td>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>0</td>
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<td>23</td>
<td>25</td>
<td>7</td>
<td>11</td>
<td>201</td>
<td>253</td>
</tr>
</tbody>
</table>

**EX** = External Relations Functions  
**P-C** = Political-Constitutional Functions  
**S-C** = Social-Cultural Functions  
**EC** = Economic Functions  

*The figures above are presented in the form of cumulative totals, being calculated by adding the number of regional linkages created in each period to the number of regional linkages created in all preceding periods.*


<table>
<thead>
<tr>
<th>FUNCTIONAL SECTOR</th>
<th>Treaties*</th>
<th>Summit Conferences*</th>
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</thead>
<tbody>
<tr>
<td>Time Interval</td>
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<td></td>
</tr>
<tr>
<td>1871/1880</td>
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<td>22</td>
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<tr>
<td>1881/1890</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>1891/1900</td>
<td>5</td>
<td>33</td>
</tr>
<tr>
<td>1901/1910</td>
<td>5</td>
<td>44</td>
</tr>
<tr>
<td>1911/1920</td>
<td>10</td>
<td>46</td>
</tr>
<tr>
<td>1921/1930</td>
<td>10</td>
<td>54</td>
</tr>
<tr>
<td>1931/1940</td>
<td>23</td>
<td>57</td>
</tr>
<tr>
<td>1941/1950</td>
<td>32</td>
<td>81</td>
</tr>
<tr>
<td>1951/1960</td>
<td>58</td>
<td>86</td>
</tr>
<tr>
<td>1961/1970</td>
<td>70</td>
<td>93</td>
</tr>
</tbody>
</table>

EX = External Relations Functions  
P-C = Political-Constitutional Functions  
S-C = Social-Cultural Functions  
EC = Economic Functions  

The figures above are presented in the form of cumulative totals, being calculated by adding the number of regional linkages created in each period to the number of regional linkages created in all preceding periods.


United States, Department of State, United States Treaties and Other International Agreements, Washington 1950-1975.
<table>
<thead>
<tr>
<th>TYPE OF EXCHANGE</th>
<th>FUNCTIONAL SECTOR</th>
<th>TIME INTERVAL</th>
<th>NUMBER OF FORMAL EXCHANGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement</td>
<td>EX 4, P-C 0, S-C 1, EC 38, UN 1</td>
<td>1906/1910</td>
<td>1</td>
</tr>
<tr>
<td>Understanding</td>
<td>3, P-C 0, S-C 22, EC 153, UN 3</td>
<td>1911/1920</td>
<td>3</td>
</tr>
<tr>
<td>Arrangement</td>
<td>9, P-C 36, S-C 162, EC 312, UN 22</td>
<td>1921/1930</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>TOTAL 16, P-C 36, S-C 185, EC 503, UN 26</td>
<td>1931/1940</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1941/1950</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1951/1960</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1961/1970</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1971/1975</td>
<td>301a</td>
</tr>
</tbody>
</table>

EX = External Relations Functions
P-C = Political-Constitutional Functions
S-C = Social-Cultural Functions
EC = Economic Functions
UN = Unclassified

* The figures above are presented in the form of cumulative totals, being calculated by adding the number of regional linkages created in each period to the number of regional linkages created in all preceding periods.

a The total number of exchanges between state and provincial governments is 766. Because of a lack of data, however, it is impossible to determine the time period in which these exchanges occurred. The table above is based on the data that are available.

problems and issues faced by labor groups — i.e., collective bargaining, employment, job placement, work conditions, manpower development programs, workmen's compensation, industrial safety, certification and licensing of skilled and professional workers, and so on. Accordingly, by determining the frequency with which these linkages occur, one can derive basic indices of institutional development in this area. In this regard, the emergence of formal organizational linkages is undoubtedly the single most important indicator.

"International" trade unionism in particular has been a major institutional feature of the Canadian-American system since the 1870's. While national labor groups were active in both countries about fifty years prior to this date, by the turn of the century they had been eclipsed as the central actors within the labor movement in North America by regional organizations. Not surprisingly, the first "international" unions in North America were based in England. The Amalgamated Society of Engineers and the Amalgamated Society of Carpenters and Joiners began organizing workers in both Canada and the United States in the 1850's. Although they managed to survive until the 1920's, their position in the North American labor movement was severely reduced after 1870 with the massive influx of American-based labor organizations into Canada. Nonetheless, the role which American organizations have played in
uniting Canadian workers has not had an overwhelming impact:

Canadian labor has always been powerfully influenced by American labor organizations and policies, and always will be, as far ahead as anyone can see. It would have been powerfully influenced even if there had been no organic connection between Canadian and American movements. It would still be powerfully influenced even if that connection should come to an end, a development of which there seems not the slightest possibility. But American influence has never had things its own way. It has always had to contend against the British tradition, the French-Canadian tradition, and Canadian nationalism generally. 26

Although these separate traditions suggest some of the important differences in the perceptions and behavior of Canadian and American unionists, there is no question that "international" unionism is still the dominant force in the labor sector in North America. In 1972, 96 such organizations were active on the regional level with a total membership of 1.4 million workers in Canada and 16.5 million workers in the United States. 27

Further indication of this dominance is reflected in the proportion of the labor force and the proportion of union members which fall under the jurisdiction of the "internationals". Although this growth has not been steady or uniform, the statistics are revealing. For 1911, these organizations accounted for 90 per cent of union members and 4 per cent of the labor force in Canada and 94 per cent of union members and 6 per cent of the labor force in the
United States. After this point in time, the relative significance of the "international" unions in Canada witnessed a period of continuous decline reaching a low in the 1930's. For 1935, official publications disclose that about 50 per cent of Canadian unionists and 3 per cent of the Canadian labor force were members of "international" unions. By the late 1930's, "international" unionism had staged a recovery which continued until the 1950's when this growth levelled off. In 1965, the "internationals" encompassed approximately 70 per cent of union members and 16 per cent of the labor force— in both Canada and the United States.28

While the "international" unions are undoubtedly important, they are not the only formal organizational linkages within the labor sector. At the transgovernmental-subnational level, federal administrators and state-provincial agencies have established organizations and associations — such as the International Association of Government Labor Officials — to address mutual problems and concerns affecting labor. At present, there is a total of ten such formally-constituted agencies involving representatives of most state and provincial governments in North America as well as federal officials in some cases.

Perhaps even more important in terms of the overall pattern of labor interaction are the activities of certain trans-societal actors other than the "international" unions.
Where many of these groups place primary emphasis upon labor issues, there are some which are engaged in this sector peripherally in the sense that labor-related problems are not the central function with which the organization is concerned. For example, actors such as professional societies, while perhaps focusing the bulk of their attention upon certain activities like research, exchange of information, and standards of conduct, often provide a variety of services for their members such as assistance in job-placement, certification and licensing, and the like.

In the North American context, thirty regional organizations now operating at the trans-societal level perform functions of this kind for their members.

To further augment this description of institutional development in the labor sector, one can also evaluate the formal arrangements that are pluralistic rather than amalgamated in nature. The two national actors within the system have not been able to ignore or to avoid the regional nature of many labor-related problems and issues, and as a result, twenty-six agreements and conventions have been reached in order to facilitate the administration, regulation, and co-ordination of activities in the labor sector. Similarly, state and provincial governments (with and without the participation of federal authorities) have concluded a total of twenty-one agreements, understandings, and arrangements related to such matters as industrial
safety, the payment of compensation benefits, and the certification and licensing of skilled and professional workers.

As an aside, it might be noted that what scanty data there are on pluralistic linkages such as interpersonal contacts and exchanges suggest that these may not be particularly relevant within the labor sector. For 1968 and the first eight months of 1969, officials of the labor and immigration departments in Canada travelled to Washington for consultation and discussion 74 times while their American counterparts reciprocated with visits to Ottawa on only 23 occasions.29 Considering that there was a total of 14,764 contacts between the governments during this period it can be readily seen that these channels of communication were not being exploited to any great extent at least at this point in time.

The major labor federations in Canada and the United States — the Canadian Labor Congress, the American Federation of Labor/Congress of Industrial Organizations, and their predecessors — have also maintained more or less continuous ties since they first appeared upon the labor scene. These linkages have usually involved such practices as sending observers to major conventions. Undoubtedly other points of contact can be discerned, but there is simply not enough information available to determine whether these linkages are any more substantial than the practice of
sending observers. Despite these problems of data acquisition, however, a substantial amount of pertinent data has been derived by concentrating upon the labor sector and the linkages it subsumes, and this has been incorporated into Tables IV and V.

Procedures for Measuring the Dependent Variable

The general overview presented in the introduction to this chapter delineates a number of basic indices of institutional capacity, each of which tends to summarize or reflect a distinct class of regional linkage encompassed by the concept. Nonetheless, many of these are impracticable and unworkable within the context of this empirical study, given the obstacles in acquiring certain kinds of data and the limitations imposed by various technical considerations. These indices have to be set aside, and consequently, it must be restressed that the measures which are employed in the statistical analysis of the institutional capacity of the Canadian-American system are not exhaustive, although they are representative of both amalgamated and pluralistic types of linkage as well as all levels of activity.

In total, ten basic indices are utilized to compile raw data scores, the latter being obtained in all cases by determining the frequency with which particular linkages occur. The calculation of these frequencies, however, involves two separate and distinct measurement procedures.
<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>&quot;INTERNATIONAL&quot;</th>
<th>OTHER TSO'S*</th>
<th>TGO'S*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;INTERNATIONAL&quot;</td>
<td>TRADE UNIONS*</td>
<td></td>
</tr>
<tr>
<td>Prior to 1871</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1871/1880</td>
<td>16</td>
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<td>0</td>
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<td>1881/1890</td>
<td>39</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1891/1900</td>
<td>66</td>
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<td>0</td>
</tr>
<tr>
<td>1901/1910</td>
<td>85</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1911/1920</td>
<td>124</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>1921/1930</td>
<td>133</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>1931/1940</td>
<td>161</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>1941/1950</td>
<td>190</td>
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</tr>
<tr>
<td>1951/1960</td>
<td>204</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>1961/1970</td>
<td>213</td>
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</tr>
<tr>
<td>(1971/1975)</td>
<td>217</td>
<td>30</td>
<td>12</td>
</tr>
</tbody>
</table>

**TGO** = regional labor organizations at the transgovernmental-subsidiary level

**TSO** = regional labor organizations at the trans-societal level (excluding "international" trade unions)

* The figures above are presented in the form of cumulative totals, being calculated by adding the number of regional linkages created in each period to the number of regional linkages created in all preceding periods.

**Source:**
Canada, Department of Labor/Manpower and Immigration, Economics and Research Branch, Labor Organizations in Canada, Ottawa, 1911-1975.


<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>Treaties and Other Bilateral Agreements*</th>
<th>State-Provincial Agreements*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 1871</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1871/1880</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1881/1890</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1891/1900</td>
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<td>0</td>
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<tr>
<td>1901/1910</td>
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<tr>
<td>1911/1920</td>
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<tr>
<td>1921/1930</td>
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<td>1941/1950</td>
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</tr>
<tr>
<td>1951/1960</td>
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<td>2</td>
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<tr>
<td>1961/1970</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>(1971/1975)</td>
<td>26</td>
<td>8a</td>
</tr>
</tbody>
</table>

* The figures above are presented in the form of cumulative totals, being calculated by adding the number of regional linkages created in each period to the number of regional linkages created in all preceding periods.

a There are a total of 21 state/provincial exchanges in the labor sector. Because of a lack of data, however, it is impossible to determine the time period for all of these interactions.


United States, Department of State, United States Treaties and Other International Agreements, Washington, 1950-1975.
On the one hand, raw data scores are computed for the total volume or number of amalgamated and pluralistic linkages initiated or created between national groups in Canada and the United States. Nevertheless, for any given time interval, the deterioration or dissolution of previously existing linkages can offset the impact produced by a sudden surge in collective and corporate activity. For example, in the labor sector a total of 247 formally-constituted agencies at the trans-societal level have been created since 1867, but only 128 such regional organizations have survived to the present day. Consequently, it is necessary to provide a second set of raw data scores measuring the true or actual number of amalgamated and pluralistic linkages which are initiated or created in any given time interval. These measurement procedures are applied in turn to five classes of regional mechanisms. With respect to amalgamated linkages, values are calculated for the actual number of regional organizations in the system at the intergovernmental, transgovernmental-subnational, and trans-societal levels as well as for the total number created in these different spheres of activity. In assessing linkages of a pluralistic nature, similar measurements are taken for the frequency of summit conferences and the frequency of international agreements between the two governments. The net result of this exercise is a complex data matrix containing
two sets of indices for each of five different classes of regional linkage.

Inasmuch as this study relies upon several different indicators of institutional capacity, however, certain technical problems and issues are encountered. Although each of the ten basic indices could be analyzed separately, the benefits to be gained from doing so are not completely apparent. The argument can certainly be made that it may be more meaningful and productive to bring them together to construct composite or summary indicators of institutional capacity. In the most general and rudimentary terms, this procedure involves nothing more than summing the appropriate values across particular categories for each of the different sets of indices. In this manner, two composite indicators can be generated: (1) the total number of regional linkages created in the Canadian-American system (amalgamated and pluralistic linkages), and (2) the actual number of regional linkages created in the Canadian-American system (amalgamated and pluralistic linkages).

Nonetheless, the whole matter of index construction cannot be disposed of quite as easily as suggested above. It raises a number of crucial technical considerations, primarily those concerning the additivity of indicators, which must be satisfactorily resolved before any attempt at computing summary measures can proceed. In this regard, Caporaso and others have argued or implied that in most
cases the researcher can only assume that indicators are additive when three requirements have been fulfilled:

(1) The indicators must show some evidence of homogeneity or functional unity. This is usually measured by the correlation of several indicators with themselves. (2) The indicators must be standardized so as to remove differences due to reporting and unit biases in terms of which the variable is expressed. This is easily accomplished by transforming raw data into standard scores (Z-scores) before adding them. (3) It must be demonstrated, or at least plausible, that the indicators added together are part of a single component or dimension and not several components.30

Within this framework it is the first and third requirements which pose the most difficult problems for this study. On the one hand, there is some basis for doubting that correlation would be meaningful and relevant for determining whether the multiple indicators of regional linkage in the Canadian-American system are indeed homogeneous and unidirectional, that is, whether they measure the same attribute. Low correlations might result for certain indicators such as the total number of formal organizations at the intergovernmental level simply because the incidence or the frequency with which they occur is extremely small. From this vantage point, therefore, it would seem that correlation can provide no conclusive evidence of homogeneity or functional unity. Similarly, it is almost impossible to clearly demonstrate that such indicators, added together, are part of a single component or dimension. Where a statistical technique like factor analysis might
normally be employed to meet this requirement, in this case its utility is doubtful for essentially the same reasons as correlation.

Regardless of the limitations of the data and the obstacles which this presents to fulfilling the first and third requirements, it should also be pointed out that problems related to the additivity of indicators are not addressed in the same manner by all scholars concerned with quantitative techniques. A number of different criteria for establishing the additivity of indicators have been suggested, among which those prescribed by Caporaso are perhaps the most rigorous and demanding. Gurr, for example, contends that there are two general and broad approaches to the question, the inductive and the deductive, which embrace several distinct statistical procedures:

The "inductive" approach relies principally on the similarities observed among measures; empirically similar measures are combined; dissimilar ones are not. The "deductive" approach relies on prior theoretical assumptions about the relationships among measures; dissimilar measures may be combined on grounds that they tap different, uncorrelated aspects of the same underlying variable.

In this regard, correlation and factor analysis represent two procedures which are primarily associated with the inductive approach. As indicated above, however, data limitations make it virtually impossible to pursue this approach or to apply the criteria for additivity which it encompasses. Accordingly, to justify the construction of
composite indicators, this study has to fall back upon the
deductive approach outlined by Gurr. That is to say, the
multiple indicators of institutional capacity are viewed as
constituting a somewhat special case for which there is a
clearly-defined theoretical basis for summing across
categories. Although they may be uncorrelated and somewhat
dissimilar, it can be argued on purely conceptual grounds
that the indicators do represent different components or
elements of the same variable, and consequently, it is not
wholly unreasonable to proceed to add them together.

Such a step cannot be taken, however, without first
standardizing the raw data scores derived from the basic
indices. While there seem to be valid reasons why some of
the requirements for the additivity of indicators cannot be
fulfilled, the need for standardization cannot be disputed
or avoided. The failure to do so would subject the statis-
tical analysis to an unintentional form of bias or weighting
which would magnify the significance or impact of one or
more indicators in relation to the others. Hence, raw data
for each category of amalgamated and pluralistic linkage
are transformed into standard scores. These can
subsequently be incorporated into a second data matrix
similar in design to the one constructed for raw data.
For the purposes of this empirical study, both matrices will
be utilized at least indirectly to build more sophisticated
measures and indices of the dependent variable.
With respect to this latter point, the specific problem of operationalizing and measuring institutional capacity in the labor sector can be approached in a manner corresponding to that for the development of institutional capacity in the system as a whole. That is to say, two different sets of data are generated. The first contains raw data scores derived from the same basic indices and the same procedures of measurement that were employed in compiling the general empirical data described in the preceding pages. The pluralistic and amalgamated linkages which are deemed relevant for consideration, however, are confined to a particular functional sector, labor-related activities. The second set of data incorporates standard scores for each of the different classes of regional linkage in this sector. These are obtained in turn from the Z-scores previously calculated for frequency measures of pluralistic and amalgamated linkages in the Canadian-American system.

At this juncture, it should be noted that only a few of the indices encompassed by the two data sets will be left in this rudimentary form and directly tested by statistical techniques. For that matter, very little would be gained if they remained in their present state. These basic indicators provide the raw material upon which various data transformations can be performed to develop more complex and sophisticated indices for measuring and evaluating
institutional capacity in the labor sector. In general, the multiple indices which will be used in the statistical analysis of the dependent variable fall into one of four categories: raw data scores, composite indicators, proportion, and percentage transformations, and rate measures.

**Raw Data Scores.** Only two measures of institutional capacity in the labor sector are retained in the form of raw and unprocessed data scores: (1) the total number of "international" trade unions created in the Canadian-American system, and (2) the actual number of "international" trade unions created. The primary reason for selecting these particular indices is simply that for any given time interval, the organizational linkages embodied by the "internationals" constitute the single largest component of collective and corporate activity in the labor sector. In compiling the raw data scores for different classes of amalgamated and pluralistic linkage in this functional area, one discovers that for the entire period under consideration, 1867 to 1974, a total of 247 regional organizations were created at the trans-societal level, 217 of which were "international" trade unions. By way of contrast, there were only 12 formally-constituted agencies at the transgovernmental-subnational level and 26 international agreements concerned with labor-related problems. In terms of summit conferences and the emergence of intergovernmental organizations, no activity was observed
in this sector. Hence, for the purposes of checking the reasonableness and validity of more sophisticated indices, the two frequency measures of the number of "international" trade unions in North America appear to be the most practicable. To develop these other indices, however, raw data scores obtained for the different classes of amalgamated and pluralistic linkage in the Canadian-American system are subjected to various techniques of data transformation.

**Composite Indicators.** The task of constructing composite or summary indicators requires the addition of certain measures across categories. Insofar as these classes of regional linkage are analytically distinct, however, the raw data reflecting them are largely incomparable at least in their unprocessed and rudimentary form. Therefore, to resolve this problem and to eliminate any biases in the accounting procedures, it is necessary to standardize the various measures involved. Accordingly, standard scores have been computed for each of the basic indices of institutional capacity in the Canadian-American system by substituting the appropriate values into the equation, \( Z = (X - \bar{X})/SD \), where 'X' equals a particular raw data score for the indicator, \( \bar{X} \) equals the mean distribution of the raw data scores for the indicator, and 'SD' equals the standard deviation. Using the values generated by this procedure, absolute figures for the basic indices of
institutional capacity in the labor sector have also been converted into standard scores.

Through these calculations, comparable measures of the indicators are produced inasmuch as all values are now conferred with a mean distribution of zero and are indexed in terms of the number of standard deviations from the mean. Nonetheless, standardization does give rise to a peculiar problem to the extent that certain data are distorted by the transformation. For example, a raw score of zero indicating a case where no organizational linkages or contacts have occurred might be provided with a negative value, such as -1.650, when translated into a Z-score; similarly, a raw score of three, if it approaches the mean distribution of an indicator, may be translated into a Z-score of zero. Composite indicators, proportional transformations, and rate measures based on these standard scores may subsequently yield some rather bizarre results. The situation can be remedied, however, simply by adding a constant to all standardized measures. Consequently, for the data set containing indices of the total number of linkages created in North America a constant of 2.000 is added to all standard scores in order to remove negative

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* The formula for calculating standard deviation is

$$ SD = \sqrt{(X - \bar{X})^2} $$

where 'X' equals a particular raw data score for an indicator, 'X' equals the mean distribution of the raw data scores for that indicator, and 'N' equals the number of cases involved.
values, and for the data set containing indices of the actual number of linkages created, a constant of 0.500 is added.

Given this data transformation, a host of composite indicators derived from various combinations of the basic indices can be built simply by summing standard scores across categories. Of these numerous possibilities, however, only one indicator is utilized by this study to evaluate the dependent variable: that is, the total number of amalgamated and pluralistic linkages created in the labor sector. Summary indicators such as those measuring the total number of pluralistic linkages in the labor sector are omitted because the frequencies involved are too small to produce meaningful results while those concerned with the total number of amalgamated linkages are rejected because they largely duplicate the frequency measures already included for the number of "international" trade unions in North America.

Proportional and Percentage Transformations. In order to control for the gross size effects which might be introduced into the analysis of institutional development in the labor sector by fluctuations in the total volume of amalgamated and pluralistic linkages, proportional and percentage transformations can be performed on raw data scores and summary indicators. In this manner, two more measures of the dependent variable, reflecting the intensity
and degree of concentration of collective activity in the labor sector, can be developed. They are operationally defined as,

(1) the total number of "international" trade unions created in the Canadian-American system as a proportion of the total number of regional organizations created at the trans-societal level, and

(2) the total number of amalgamated and pluralistic linkages created in the labor sector as a proportion of the total number of amalgamated and pluralistic linkages created in North America.

Although different kinds of data are required to calculate these proportions, the actual procedure for measurement is exactly the same for both indices. With respect to the first set of proportional transformations, raw scores for the total number of "international" trade unions are divided by the raw scores for the total number of amalgamated linkages created at the trans-societal level. For the second set, the sum of the standard scores measuring total linkages in the labor sector is divided by the sum of the standard scores measuring total linkages in the system as a whole. To facilitate interpretation, all the values computed in this manner are then multiplied by a factor of 100 so that they are expressed in percentage terms.

Rate Measures. In addition to proportional transformations which provide some indication of relative intensity, a distinct set of measures is required to tap a second property of institutional capacity in the labor sector.
that is, rate-of-change over unit of time. Rate measures aid in clarifying the dominant trends and the prospects for growth (or deterioration) of the communal relationships under investigation. With respect to the dependent variable, two indices of rate-of-change are constructed:

1) percentage change in the actual number of "international" trade unions created in the regional system, and

2) percentage change in the actual number of amalgamated and pluralistic linkages created in the labor sector.

The basic formula employed for the measurement of each of these indices is \( GR = 100 \left( \frac{C_{t+1} - C_t}{C_t} \right) \) in which \( C_{t+1} \) equals the actual number or volume of linkages in any particular category (or combination of categories) in time period \( t+1 \) and \( C_t \) equals the actual number or volume of linkages in time period \( t \). Values for \( C_{t+1} \) and \( C_t \) are obtained, in turn, from the data sets which contain raw and standard scores measuring the actual number of amalgamated and pluralistic linkages created within the labor sector.

Summary. The methods and procedures for measurement adopted by this study to operationalize the dependent variable encompass a number of different indices which might lend important insights into the nature of collective and corporate activity in the labor sector. The specific measures generated by these indices involve both raw data scores and a variety of more complex and sophisticated data
transformations designed to tap different properties of the dependent variable — such as the relative intensity of labor-related activities, the extent to which collective action is concentrated in the labor sector, and the degree of continuity in the development of labor organizations and other linkages in this functional area. Nonetheless, for the purposes of empirical analysis, consideration is limited to just seven of the possible indices which might be developed. These include:

1. the total number of "international" trade unions created by labor groups,

2. the actual number of "international" trade unions created,

3. the total number of amalgamated and pluralistic linkages created in the labor sector,

4. the proportion of "international" trade unions created by labor groups,

5. the proportion of all amalgamated and pluralistic linkages created in the labor sector,

6. the rate-of-change in the actual number of "international" trade unions, and

7. the rate-of-change in the actual number of amalgamated and pluralistic linkages in the labor sector.

The values obtained for these measures are summarized in Appendix C.

Given these operational definitions, emphasis can now be shifted to the task of operationalizing and measuring the independent variable. Obviously, it is possible to discern
a range of factors which have contributed in one way or another to shaping and conditioning institutional development in the labor sector. In this regard, Deutsch observes that it might be especially fruitful and productive to examine the "broad societal shifts" which underly the process of integration. Within the North American context, one of the most critical and potent social forces appears to be the mobility of human resources. Indeed the continuous flow of people between Canada and the United States is a significant pattern of interaction which has helped to blur the boundary between the two countries and to heighten their mutual relevance. Nonetheless, its effects are perhaps felt most keenly in defining problems and issues in the labor sector, and in this sense, continental migration flows represent a major "determinant" in the development of organizational linkages and contacts between national groups in the two countries and especially between members of the labor force. The next chapter explores this relationship and describes several procedures for measuring and evaluating labor mobility.
Chapter VII
Labor Mobility in North America: Operationalization and Measurement of the Independent Variable

The introductory chapter to this section presents a conceptual framework designed to aid in the task of describing and explaining the phenomenon of integration. In the course of developing this model, a complex set of concepts and relationships is discussed, but for the purposes of summary and review, this can be reduced to a few basic assumptions:

1. Adaptive behavior is a common trait of all social formations or organizations.

2. Variations and changes in environmental patterns and processes represent a challenge to the growth and survival of social organizations. In short, environmental variations serve as a stimulus for these actors.

3. Social organizations initiate action in order to contain changes in the environment within certain limits, thus assuring their own existence.

4. Communications processes or, more specifically, transaction flows are an important component of environmental patterns, processes, and interdependencies.

5. Transaction flows establish the mutual relevance or salience of actors within the system.

From this perspective, the transaction flows involving labor mobility can be viewed as important environmental processes shaping the behavior of various social organizations within an integration system. That is to say, the reallocation of manpower establishes the mutual relevance of national groups.
and heightens the potential for collective and corporate activity particularly with respect to the development of organizational linkages and contacts. Stated as a simple hypothesis, one would expect that the greater the level of labor mobility, the greater the institutional capacity of the system. Conversely, as these transaction flows level off or decline, the patterns of collective and corporate activity which define the regional infrastructure should undergo some stagnation or deterioration. It is assumed, however, that while labor mobility contributes to the overall development of organizational linkages and contacts within a system, its impact is concentrated and amplified in the labor sector.

Both Canadians and Americans are aware of the effects which large scale population movements can have upon a society and a nation. Indeed such movements have been a central and extremely visible feature of the history and development of the North American continent. In the nineteenth and twentieth centuries, millions of Europeans uprooted by economic and political forces—found sanctuary in the new and developing nations of the Americas.

The great waves of immigration that were so vital in shaping the destiny of Canada and the United States are now, however, a thing of the past. Most countries, responding to nationalistic appeals and population pressures within their own territories, have gradually imposed more rigid and
narrow controls on the admission and selection of immigrants, thus severely curtailing the international flow of human resources. Nonetheless, for well over a century, labor mobility has been a constant and decisive environmental factor in the Canadian-American system. One author has observed:

It has always been and is still true that whenever the opportunity glows more brightly on one side of the boundary than on the other the movement expands in rapid response and citizens of one country move to the other with almost the same easy disregard of political boundaries that characterized their fathers before them.\(^1\)

One might even conclude that mobility has become an established and accepted way-of-life in North America, a fundamental social reality for many Canadians and Americans.\(^2\) Its impact can be seen most clearly among certain segments of the population — the young, the poorly educated and the highly qualified, the unskilled and the professional.\(^3\) Over the years, the susceptibility of these groups to the "push-and-pull" of economic forces and the propensity for movement displayed by them has strengthened the impression that there is a continental labor market in North America or at least the foundations of one.

It must be stressed, however, that despite vast improvements in transport and communications, migration flows between Canada and the United States in recent years have only been a fraction of those which the two countries experienced in the past. A number of factors have
contributed to this outcome, not least among which has been the role of institutional barriers in limiting or discouraging the mobility potential of certain social groups. This largely reflects the increasing sensitivity of the general public and governmental actors to the costs and benefits which have accrued from labor mobility.

In some respects, both Canada and the United States have profitted substantially from the movement of labor across the border. Speaking in abstract terms, it can be argued that for the recipient country, inflows of labor raise the aggregate demand for goods and services, improve terms-of-trade, and reduce inflationary pressures on wages and prices. Moreover, manpower gains from labor mobility constitute an investment in human capital which unlike pure capital investment is essentially a gift to the recipient country.

Similarly, certain benefits can accrue to the home country from the outflow of labor. During periods of severe unemployment, large-scale migration reduces labor surpluses and relieves the downward pressures on wage levels. Financial assistance and remittances supplied by these migrants to their dependents in the home country might also provide an additional source of real income for this segment of the population.

Of course these considerations of potential gain must be weighed against the enormous economic and human costs.
involved. Labor mobility might be particularly detrimental to the recipient country if it limits employment opportunities for the native labor force. Although economists tend to dismiss this argument because it rests on an assumption of static economic conditions and ignores the dynamic effects of continuous technological, organizational, and structural changes in the economy, the belief that employment opportunities are reduced by the inflow of migrant workers has often given way to fear and social tensions. Indeed, in both Canada and the United States, public concern in this area has provided the incentive for national actors to impose restrictions on immigration and labor mobility. While this concern has been largely directed to the inflow of migrant workers from outside the continent, Canadians and Americans have at times perceived the movement of labor across the boundary as posing a threat to their native labor forces.

For Canadians, however, the question of whether their country can tolerate and afford continuous outflows of labor to the United States has been a recurrent source of controversy. In recent years, for example, the migration of professional, technical, and highly skilled workers — the so-called "brain-drain" — has received much public attention. As noted previously, expenditures on education and manpower training programs to develop a stock of skills are a form of capital export. Many Canadian workers are
lost just when they are ready to enter into the work force and productive activity. Perhaps this investment in human resources might be considered a "fixed" cost which cannot be avoided by society, as many authors have suggested.\textsuperscript{10} Nonetheless, the crux of the matter is that the outflow of manpower constitutes a loss which has to be recovered at least in part from foreign labor markets. Although both Canada and the United States are faced with this problem, the burden has undoubtedly fallen most heavily upon the "smaller" nation. Moreover, it must be stressed that for Canada this particular cost of labor mobility has not been a recent development. While the nature of continental migration has changed in some respects over the years, the problems which it has raised in terms of draining the stock of skills within the labor force has been a fairly constant feature plaguing Canada throughout its history as an independent nation.

In sum, the ramifications of the relatively free flow of labor in North America have increasingly drawn the attention of policy-makers, various social organizations, and the general public. The crucial problem facing them in this area has been in determining the actual costs and benefits which have resulted. Any cost-benefit analysis, however, is complicated by numerous difficulties.\textsuperscript{11} The task of assigning costs has to take into consideration those related investments in human beings such as education and vocational
training which generally heighten the individual's mobility potential. Moreover, there is a certain degree of incongruency between benefits and costs. While the gains derived from mobility are nearly always defined in economic terms, the costs tend to be weighted towards social and cultural matters.

It is in this context that one can grasp how labor mobility has established and amplified the mutual relevance of the two nation-states which comprise the Canadian-American system. On the one hand, various governmental and non-governmental actors in both countries have had to address a host of problems and issues generated by the two-way flow across the border. On the other hand, Canadian and American workers have accepted migration as a realistic alternative when their expectations and demands for career advancement, economic security, and employment opportunities have not been fulfilled at home. Indeed mobility has been elevated to a social norm in North America, an established mode of conduct, and to this extent it has become one of the primary environmental realities of the Canadian-American system.

In turn, this reality has spurred governmental and non-governmental actors in Canada and the United States to undertake collective action on a regional basis. The channels of communication opened up by migration flows have undoubtedly helped different groups in each society to
discover common goals and objectives, and these contacts have often yielded to formal organizational linkages. Furthermore, the problems and issues stemming from the reallocation of manpower have accentuated and reinforced the need for greater co-ordination and collaboration at the intergovernmental and transgovernmental-subnational levels.

From this general perspective, therefore, labor mobility would seem to have a distinct impact upon the emergence of regional linkages in the labor sector. Nevertheless, before it is possible to assess the nature of this contribution and to test the strength of the relationship involved, the same principles which were employed for operationalizing and measuring the concept of institutional capacity must be applied to the independent variable. That is to say, certain critical decisions have to be made with respect to the choice of appropriate indicators of labor mobility, the acquisition of data, and the development of procedures for measurement.

**Immigration as a Basic Indicator of Labor Mobility**

In essence, transaction flows are nothing more than interpersonal contacts and exchanges between members of different national societies. Nonetheless, they involve a variety of diverse patterns of mutual interaction ranging across the full spectrum of political, economic, social, and cultural affairs. The movement of persons across state
boundaries simply constitutes one of three broad categories of transaction flow,12 and it in turn can be broken down into a number of distinct elements. With respect to the Canadian-American system, these sub-classes include:

(1) immigrants from Canada admitted into the United States,

(2) Canadian citizens entering the United States to assume residence on a temporary basis,

(3) Canadian residents travelling to the United States for business or leisure purposes,

(4) American citizens repatriated to the United States after emigrating to Canada,

(5) immigrants from the United States admitted into Canada,

(6) American citizens entering Canada to assume residence on a temporary basis,

(7) American residents travelling to Canada for business or leisure purposes, and

(8) Canadian citizens repatriated to Canada after emigrating to the United States.

In this context, labor mobility represents a very specific and narrow subset of the movement of persons across the Canada-United States border, encompassing only those interpersonal contacts and exchanges between national groups which result from the geographic reallocation of manpower.

Perhaps the most basic measure or indicator of mobility is provided by immigration statistics, and these figures form the "cornerstone" for all data transformations which will be attempted in the following pages. A primary reason for selecting them is simply that, for the purposes of
quantification and measurement, they furnish a relatively complete set of data in contrast to some other basic indicators which might be employed. Nevertheless, it must be pointed out that by relying solely on these figures, a degree of error is introduced into the statistical analysis, and the reliability of the empirical generalizations and insights is impugned.

Immigration statistics contribute to a somewhat distorted view of the true extent of labor mobility between Canada and the United States in at least two respects. First, these figures include not only immigrants destined for the labor force but also their dependents, and consequently, they furnish an inflated estimate of the labor force component which is actually present. Secondly, immigration statistics do not reveal the full range of migration flows which involve Canadian and American manpower inasmuch as they tend to reflect permanent resettlement and to exclude other kinds of movement across the border. Therefore, in order to obtain a perfectly accurate evaluation of the extent of labor mobility on the continent, it would be necessary to determine the actual labor force component of the different migration flows between Canada and the United States such as immigration, temporary relocation, repatriation of former citizens, and the like. The only problem in this regard is that there is simply not
enough data available to make any sort of realistic or meaningful appraisal.

Despite these perplexities, there is still reason to believe that the degree of error incurred by utilizing immigration statistics may not be serious enough to radically distort the results of the study. On the surface at least, the exclusion of data on certain migration flows would seem to grossly undervalue the full extent of labor mobility in North America. If the figures of the U.S. Bureau of the Census on "non-immigrant arrivals in the United States" can be used as a guideline, however, a somewhat different picture emerges. The vast majority of "non-immigrants" admitted to the United States from Canada and elsewhere are spouses and dependents of American citizens, resident and transient aliens, representatives of foreign governments and international organizations, and businessmen engaged in commercial and financial activity. Temporary workers (professional, skilled, and unskilled) comprise only a small fraction of the total. Thus, where data on "non-immigrants" may be essential in determining the absolute level of migration flows between Canada and the United States, they may not be wholly adequate as estimates of temporary relocation of members of the labor force, and the extent to which labor mobility is undervalued by excluding them may not be as severe as it might initially appear. Furthermore, it must also be remembered that
immigration statistics taken by themselves tend to exaggerate or overvalue the magnitude of labor mobility. As is the case with "non-immigrants", a significant proportion of those who enter Canada and the United States as immigrants are not immediately destined for the labor force. In short, while the exclusion of certain data suggests that the volume of labor mobility on the continent might be undervalued, the degree of error is modified to some extent by the fact that absolute figures for immigration furnish a compensatory bias. From this standpoint, the use of immigration statistics as an indicator of the independent variable would seem to be partially vindicated.

Data Acquisition

As a general rule, economic and demographic variables — such as migration flows, trade, and the like — have received substantial attention from social scientists, government agencies, and international organizations. Moreover, when dealing with more developed countries, official records tend to be more complete and extensive at least in terms of the historical perspective they afford and the statistical material available to the researcher. Thus, in examining a phenomenon such as labor mobility especially within the North American context, one is extremely fortunate, insofar as data are relatively
plentiful. Even when attempting a longitudinal study which covers a considerable span of time as is the case in this thesis, data demands with respect to this particular variable are not overly excessive.

There are eight basic sources of official data which offer a wealth of raw and unprocessed statistical material pertaining to the temporary and permanent movement of persons between Canada and the United States:

**Canada Year Book** (Dominion Bureau of Statistics/Statistics Canada, Ottawa, 1925 - 1975).


**Immigration Statistics** (Department of Manpower and Immigration, Ottawa, 1946 - 1975).

**Immigration and Population Statistics** (Department of Manpower and Immigration, Canadian Immigration and Population Study, Ottawa, 1974).

**Annual Report** (Commissioner-General of Immigration, Washington, 1908 - 1934).


The data which are available in these publications can be readily supplemented and expanded by drawing upon a variety of articles and monographs dealing with historical developments in migration patterns and special issue areas:


Immigration and Emigration of Professional and Skilled Manpower During The Post-War Period (Louis Parel, Ottawa, 1966).


"Immigration in Canada, 1851 - 1920" (Duncan M. McDougall, 1961).

It is the material derived from these sources which provides the basis for the observations presented in the following sections of this chapter and which is employed to develop measures of labor mobility and mutual relevance in North America.

Despite the significant amount of data to which the researcher has access, however, there are still a number of problems encountered in the process of data acquisition of which the reader should be aware. Essentially, these problems fall into one of two categories: interpretation of official statistics and missing data. In the former case, one must recognize that governmental agencies have not been wholly consistent over the years in the procedures which they have adopted to record and collate the number of
migrants entering the two countries. Before the turn of the century, both the governments of Canada and the United States tended to utilize the records kept by border officials and port authorities to determine levels of immigration for any given time period. These figures are greatly inflated, including not only true immigrants seeking to permanently resettle in one of the two countries but many "non-immigrants" as well who merely intended to take up residence on a temporary basis. Thus, while such data may be poor indicators of permanent migration flows within the continent, they are probably more accurate in reflecting the full extent of population movements and the geographic reallocation of manpower.

After 1908, however, American authorities took the first steps to establish a system of quotas for immigration, a system which has been carried down to the present day although subjected to frequent modification. In conjunction with this development came more extensive and well-defined procedures for enumerating and classifying migration flows. In Canada, rigorous techniques for monitoring immigrant arrivals were more gradual in their implementation, and it was not until the 1930's that the basis of the current system — immigration cards, visas, and so on — was finally consolidated.

Given these changes in accounting procedures, it must be stressed that official statistics after 1900 dealing with
immigration into Canada and the United States tend to more closely approximate permanent population shifts and to cut out temporary migration flows. Accordingly, to appraise the true magnitude of labor mobility between the two societies, the researcher or analyst should furnish some form of additional data or some estimate indicating temporary movements of the labor force. While such a task is probably feasible, it is extremely difficult in the light of certain data limitations.

Another problem related to this whole question of the interpretation of official statistics stems from the different time periods which governmental agencies on both sides of the border have employed in collecting and processing data on migration flows. Although immigration authorities in Canada and the United States provide annual figures on population movements, the cut-off points which are used to define twelve-month intervals do not always coincide. At various times, both governments have resorted to calendar years (January to January) or fiscal years (March to March, June to June) as a format for computing immigration statistics. Consequently, in comparing annual immigration figures from one country to the other or even from one historical period to another for the same country, one finds that the intervals of time in question are roughly similar but not completely identical.
This problem can be circumvented in a number of ways. On the one hand, the researcher might attempt to readjust the figures so that they correspond to the same time periods. Such an exercise, however, is extremely time-consuming. On the other hand, a simpler but less laudible procedure would be to aggregate the data into broader time intervals and thus reduce the discrepancies involved. In short, the greater the time interval employed, the greater the degree of correspondence between the data. Needless to say, this study has opted for the latter technique.

Regardless of the problems associated with the interpretation of official statistics, these are largely overshadowed by the whole issue of missing data. While annual figures for total immigration into Canada and total immigration into the United States are available for the entire period under consideration (1867 to 1974), there are some significant gaps in the data related to American immigrant arrivals in Canada and Canadian immigrant arrivals in the United States. On surveying official records of the Canadian government, one finds two periods where no figures or only partial ones are furnished on immigration flows from the United States, 1867 to 1880 and 1892 to 1896. Similarly, American statistics on Canadian immigration for the years between 1885 and 1906 are not available or are incomplete.
Two solutions to this problem of missing data can be suggested. As mentioned in the previous chapter, one alternative might be to exclude this particular variable from the scope of inquiry. Such a step, however, is out of the question in this case insofar as immigration statistics provide the researcher with the most basic and fundamental indicator of labor mobility. Hence, the only real alternative is to calculate estimates of migration flows for those years where data are missing. While this might be achieved by inserting some value representing the mean tendency of previous and/or succeeding years, the method chosen by this study has been to estimate yearly migration flows between the two countries by interpolating from existing data on total annual immigration. In general, there appears to be a distinct inverse relationship between total immigration into each country and the proportion of Canadian and American immigrant arrivals involved: that is, the greater the magnitude of migration flows into Canada, the smaller the component constituted by American immigrant arrivals; and similarly, the greater the magnitude of migration flows into the United States, the smaller the component constituted by Canadian immigrant arrivals. Working on the basis of this observation or assumption, ratios or proportions can be determined for different ranges of total immigration, and in turn, these can be applied to
existing data to secure estimates of migration flows within the North American continent.

By way of conclusion, it might simply be asserted that although missing data and the interpretation of official statistics present major problems in studying and measuring the degree of labor mobility in North America, these obstacles are not insurmountable. Various techniques and methods can be developed to circumvent the problem areas in question. Nonetheless, the reader must be made aware of the problems and the procedures designed to deal with them before any meaningful discussion of labor mobility and patterns of migration in North America can be undertaken.

Population Movements in North America Prior to 1945

Population growth is a function of two major elements: the natural increase of the indigenous population (the excess of births over deaths) and the net migration of persons (the excess of immigrants over emigrants).\textsuperscript{14} In general, it has been natural increase, which has made the more substantial contribution to the expansion of the Canadian and American populations.\textsuperscript{15} This is not meant to imply that migration has been an unimportant component in this growth. For example, in the eighty-odd years between 1867 and 1945, over 6 million immigrants entered Canada and 33 million entered the United States. Most of these people arrived during the great cycles of immigration to North
America in the late nineteenth and early twentieth centuries. Nearly 3 million migrants were admitted to Canada in the short span of time between 1903 and 1914, most coming in response to the intense campaign launched by the Laurier administration to populate the Canadian North West. (See Tables VI and VII).

No doubt these immigrants were spurred on by a variety of motivations. Some did not intend taking up permanent residence in Canada, but rather they used this country to gain entrance to the United States. Canadian citizens were no less impervious to the lure of economic opportunity to the south. Thus, in these years of rapid growth in the Canadian population, emigration from this country was calculated at times to have reached levels as high as eighty per cent of total immigration to Canada. At the turn of the century, the Canadian-born residing in the United States numbered about one-fifth of the Canadian population at that time (although the Canadian-born constituted less than two per cent of the American population). Given the magnitude of these flows, Canada has generally been considered unique among modern nations.

These statistics also tend to confirm the finding that the Canadian population has in the past been characterised by somewhat erratic rates of growth and a high degree of geographic mobility. In this vein, John Porter observes that "rather short periods of high immigration have been
<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>Total Immigrant Arrivals in Canada (000's)</th>
<th>Immigrant Arrivals in Canada from the U.S. (000's)</th>
<th>Percent American Immigrants (%)</th>
<th>Total Emigration from Canada (000's)</th>
<th>Percent Canadian Emigrants to the U.S. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871/1880</td>
<td>343</td>
<td>(151)e</td>
<td>44.0</td>
<td>429</td>
<td>89.5</td>
</tr>
<tr>
<td>1881/1890</td>
<td>886</td>
<td>527</td>
<td>59.5</td>
<td>1091</td>
<td>60.8</td>
</tr>
<tr>
<td>1891/1900</td>
<td>339</td>
<td>(136)e</td>
<td>40.1</td>
<td>525</td>
<td>96.8</td>
</tr>
<tr>
<td>1901/1910</td>
<td>1644</td>
<td>525</td>
<td>31.9</td>
<td>1060</td>
<td>51.0</td>
</tr>
<tr>
<td>1911/1920</td>
<td>1712</td>
<td>626</td>
<td>36.6</td>
<td>1411</td>
<td>52.6</td>
</tr>
<tr>
<td>1921/1930</td>
<td>1230</td>
<td>224</td>
<td>18.2</td>
<td>980</td>
<td>94.3</td>
</tr>
<tr>
<td>1931/1940</td>
<td>159</td>
<td>78</td>
<td>49.1</td>
<td>242</td>
<td>45.0</td>
</tr>
<tr>
<td>1941/1950</td>
<td>491</td>
<td>71</td>
<td>14.5</td>
<td>324</td>
<td>53.1</td>
</tr>
<tr>
<td>1951/1960</td>
<td>1574</td>
<td>101</td>
<td>6.4</td>
<td>407</td>
<td>92.9</td>
</tr>
<tr>
<td>1961/1970</td>
<td>1410</td>
<td>167</td>
<td>11.8</td>
<td>633</td>
<td>65.2</td>
</tr>
</tbody>
</table>

e Estimates based on partial data


### TABLE VII

**IMMIGRATION AND EMI GRATION:**
**UNITED STATES, 1871 - 1970**

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>Total Immigrant Arrivals in the U.S. (000's)</th>
<th>Immigrant Arrivals in the U.S. from Canada (000's)</th>
<th>Percent Canadian Immigrants (%)</th>
<th>Total Emigration from the U.S. (000's)</th>
<th>Percent American Emigrants to Canada (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871/1880</td>
<td>2818</td>
<td>384</td>
<td>13.6</td>
<td>513</td>
<td>29.4</td>
</tr>
<tr>
<td>1881/1890</td>
<td>5247</td>
<td>(663)(^e)</td>
<td>12.6</td>
<td>1108</td>
<td>47.6</td>
</tr>
<tr>
<td>1891/1900</td>
<td>3688</td>
<td>(508)(^e)</td>
<td>13.8</td>
<td>983</td>
<td>13.8</td>
</tr>
<tr>
<td>1901/1910</td>
<td>8795</td>
<td>(541)(^e)</td>
<td>6.2</td>
<td>2372</td>
<td>22.1</td>
</tr>
<tr>
<td>1911/1920</td>
<td>5736</td>
<td>742</td>
<td>12.9</td>
<td>2295</td>
<td>27.3</td>
</tr>
<tr>
<td>1921/1930</td>
<td>4107</td>
<td>924</td>
<td>22.5</td>
<td>(1045)(^e)</td>
<td>21.4</td>
</tr>
<tr>
<td>1931/1940</td>
<td>529</td>
<td>109</td>
<td>20.6</td>
<td>(460)(^e)</td>
<td>17.0</td>
</tr>
<tr>
<td>1941/1950</td>
<td>1035</td>
<td>172</td>
<td>16.6</td>
<td>(176)(^e)</td>
<td>40.3</td>
</tr>
<tr>
<td>1951/1960</td>
<td>2516</td>
<td>378</td>
<td>15.0</td>
<td>(259)(^e)</td>
<td>39.0</td>
</tr>
<tr>
<td>1961/1970</td>
<td>3422</td>
<td>414</td>
<td>12.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^e\) Estimates based on partial data

**Source:**
followed by longer periods of gradual dissipation of
gains". And traditionally the United States has absorbed
the largest segment of this population movement out of
Canada.

This attraction which the Republic held for Canadians
and the foreign-born who settled in Canada can be attributed
to a number of factors: (1) the absence of strict controls
on movement between the two countries until the 1930's,
(2) more favorable regulations in the United States
governing land tenure and the purchase of land throughout
most of this period, and (3) higher wages, a broader range
of employment opportunities, and a greater potential for
advancement because of the higher level of economic develop-
ment in the United States. Moreover, there is some
question whether the prospective immigrant really
distinguished between the concept of "Canada" and the
concept of "America". Thus, Porter remarks that in this
respect "it is impossible to separate the pull of Canada
from the pull of North America as a whole". These
immigrants had no specific commitment or allegiance to
Canada, and they were quite willing to relocate wherever the
opportunities were most promising. Considering the relative
freedom of movement across the international boundary, they
were almost inevitably drawn to the south.

Immigration into Canada from the United States has
seldom attained the same proportions as the flow of
Canadians across the frontier. Only in that brief period from 1903 to 1914 was net migration between the two countries substantially in Canada's favor. The primary reason underlying this movement was undoubtedly the availability of land in the Canadian North West. As the population in this region increased and good land became relatively scarce, the number of Americans emigrating to Canada dropped significantly, and Canada once again experienced a deficit in net migration.

Labor Mobility in North America, 1946 - 1975

Since the end of the Second World War, there has been a noticeable change in one aspect of population movements. Migration is no longer directed to the less populated areas where land might be easily purchased. In general, the immigrant is now increasingly attracted to regions of high population density where job opportunities are rapidly expanding in the industrial sector of the economy.

International migration has changed its character since the early fifties from the movement of population to one principally of the labor force. Economic forces have become more predominant. The "push" of unemployment and underemployment in the sending countries and the "pull" of economic opportunity in the receiving countries have become the real major determinants of the volume and direction of international populus movements.22

Within the Canadian-American system, changes in the dominant patterns of economic activity have also contributed to this development.
While Canada remains small in relation to the United States, it has become large enough for a secondary manufacturing sector to emerge and for the distributive and service sectors to expand. Before this development, Canada imported a relatively large amount of its knowledge, skill and technology in the form of commodities and services. While commodity trade between the two countries continues to increase and promote specialized production on either side of the border, Canada has developed an increasing need for knowledge, skill and technology embodied in people rather than products.  

Needless to say, the United States has experienced similar demands for highly qualified manpower but over a much longer period of time, and it has satisfied this at least partially by tapping the supply available in Canada.

Nonetheless, in the broader context of the interaction between the United States and Canada, population movements have not radically departed from the well-established patterns of the past. Both countries have been able to attract migrants from foreign labor markets with no real difficulty, and indeed the problem as policy-makers seem to have perceived it is one of regulating the flows in accordance with national economic and social objectives. Total immigrant arrivals in Canada during the period under consideration have averaged about 142,000 per year while for the United States the average rate approaches 288,000 migrants per year. From 1948 to 1960, nearly 2 million immigrants were admitted to Canada, almost equalling the wave of migration prior to the outbreak of the First World War. Without this influx it would have been impossible to
Sustain the high levels of economic growth and the prosperity which Canadians have enjoyed throughout the post-war era. Immigration not only helped to meet the immediate demand for labor; it also allowed the country to rebuild the stock of skills which had been exhausted by the Depression and the Second World War, thus preventing critical labor shortages from occurring at some time in the future.

This contribution has been all the more significant considering the United States has continued to "siphon off" a sizeable proportion of these manpower gains. The promise of higher wages, broader employment opportunities, and greater potential for advancement has lured both the Canadian-born and the foreign-born across the frontier at an average rate of approximately 34,000 per year since 1946. In return, an average of about 14,000 migrants per year have entered Canada from the United States. This migration flow from the south, however, has displayed a steady, almost constant growth since the end of the Second World War, ranging from a low of 7,400 migrants to Canada in 1948 to a high of 26,500 in 1974. Overall, during the post-war era, continental migration has accounted for roughly 11 per cent of the total migration to the two countries. This figure may seem small, but when one considers that both Canada and the United States draw immigrants from all over the world, it is not surprising to discover that in terms of the
composition of migration flows and the origin characteristics of migrants, former Canadian and American residents have tended to constitute one of the more dominant groups.

Immigrant arrivals, however, only form a small portion of the total migration between Canada and the United States. In this respect, the U.S. Bureau of the Census has kept records since 1908 on other kinds of flows into the United States, but the definitions and system of classification employed have tended to be extremely broad, including a range of behaviors that often do not seem to be wholly comparable. To break these aggregate flows down into their component elements and to reaggregate them in accordance with the categories listed in the introduction to this chapter would also be a rather difficult undertaking given the lack of consistency in accounting procedures over the years and the general inaccessibility of such data to the public. Keeping this in mind, however, it is still interesting to note the extent of these migration flows. For example, between 1961 and 1970, the total flow from Canada to the United States approached some 1,625,000 persons, among which were 413,000 immigrants, 1,052,000 "non-immigrants", and 160,000 Canadian workers (forest and agricultural labor only). (See Tables VIII and IX).

There are really no comparable Canadian figures for the same period. Indeed until recently the flow of temporary workers into Canada from the United States was
### TABLE VIII
LABOR FORCE COMPONENT OF MIGRATION FLOWS, 1951 - 1975

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>American Immigrants in Canada</th>
<th>Canadian Immigrants in the U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total American Immigrants 000's %</td>
<td>Destined for the Labor Market 000's %</td>
</tr>
<tr>
<td>1951/1955</td>
<td>47 100</td>
<td>19 41</td>
</tr>
<tr>
<td>1956/1960</td>
<td>54 100</td>
<td>21 39</td>
</tr>
<tr>
<td>1961/1965</td>
<td>63 100</td>
<td>24 38</td>
</tr>
<tr>
<td>1966/1970</td>
<td>104 100</td>
<td>47 45</td>
</tr>
<tr>
<td>1971/1975</td>
<td>120 100</td>
<td>52 43</td>
</tr>
<tr>
<td>1951/1975</td>
<td>388 100</td>
<td>163 42</td>
</tr>
</tbody>
</table>

* Estimate — Data for 1975 are not available. The figures indicated were calculated by determining the mean for the previous four years and substituting this value for the missing data.

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>Non-Immigrants Admitted to U.S. (Total) 000's</th>
<th>Canadian-Born Non-Immigrants Admitted to U.S. 000's</th>
<th>Canadian Laborers Admitted or Paroled 000's</th>
</tr>
</thead>
<tbody>
<tr>
<td>1908/1910</td>
<td>490.7</td>
<td>37.1</td>
<td></td>
</tr>
<tr>
<td>1911/1915</td>
<td>852.1</td>
<td>63.2</td>
<td></td>
</tr>
<tr>
<td>1916/1920</td>
<td>524.1</td>
<td>44.5</td>
<td></td>
</tr>
<tr>
<td>1921/1925</td>
<td>782.8</td>
<td>51.7</td>
<td></td>
</tr>
<tr>
<td>1926/1930</td>
<td>991.9</td>
<td>80.3</td>
<td></td>
</tr>
<tr>
<td>1931/1935</td>
<td>729.6</td>
<td>(101.0) e</td>
<td></td>
</tr>
<tr>
<td>1936/1940</td>
<td>844.3</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>1941/1945</td>
<td>541.4</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>1946/1950</td>
<td>1919.9</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>1951/1955</td>
<td>2654.4</td>
<td>249.9</td>
<td>17.3 a</td>
</tr>
<tr>
<td>1956/1960</td>
<td>4458.6</td>
<td>205.3</td>
<td>36.3 a</td>
</tr>
<tr>
<td>1961/1965</td>
<td>7879.6</td>
<td>384.5</td>
<td>117.2</td>
</tr>
<tr>
<td>1966/1970</td>
<td>16227.6</td>
<td>667.2</td>
<td>91.5</td>
</tr>
<tr>
<td>1971/1975</td>
<td>(28076.6) e</td>
<td>(927.8) e</td>
<td>(62.8) e</td>
</tr>
</tbody>
</table>

n/a Data not available

e Estimate based on partial data (mean value substituted for missing figures)

a Agricultural laborers only (forest workers were not included under this category until 1955)


not given any special attention by governmental agencies. These movements were only counted among border crossings and placed in the category of business trips. Since 1973, however, a system of employment visas has been instituted, and between 1973 and 1975, the Canadian government has issued about 114,000 such permits to American residents.

More important, perhaps, in assessing migration flows into Canada from the United States are statistics on emigration published by the U.S. Bureau of the Census. This American agency has also monitored the movement of emigrant and "non-emigrant" aliens leaving the United States for permanent or temporary residence in Canada and abroad. The utility of these statistics is, nonetheless, rather limited insofar as they are open to a variety of interpretations. Because the origins of these aliens are not recorded, one does not know whether they are Canadian citizens returning to Canada after a period of temporary residence in the United States, repatriated Canadians, foreign-born residents of the United States moving to Canada on a temporary basis, or foreign-born residents of the United States seeking to permanently resettle in Canada as immigrants. In short, the figures might be revealing but not very helpful. (See Table X).

On the whole question of repatriation, there is again no concrete data on which to make accurate judgements. Calculations might be made on the basis of changes in the
TABLE X
EMIGRANTS AND NON-EMIGRANTS DEPARTING FROM THE
UNITED STATES, 1908 - 1955

<table>
<thead>
<tr>
<th>TIME INTERVAL</th>
<th>Total Non-Emigrants* Departing from U.S. 000's</th>
<th>Total Non-Emigrants Departing for Canada 000's</th>
<th>Total Emigrants* Departing from U.S. 000's</th>
<th>Emigrants Departing for Canada 000's</th>
</tr>
</thead>
<tbody>
<tr>
<td>1908/1910</td>
<td>672.4</td>
<td>46.7</td>
<td>830.5</td>
<td>n/a</td>
</tr>
<tr>
<td>1911/1915</td>
<td>1318.8</td>
<td>293.8</td>
<td>1444.6</td>
<td>n/a</td>
</tr>
<tr>
<td>1916/1920</td>
<td>522.2</td>
<td>83.4</td>
<td>702.5</td>
<td>n/a</td>
</tr>
<tr>
<td>1921/1925</td>
<td>716.9</td>
<td>98.6</td>
<td>697.4</td>
<td>n/a</td>
</tr>
<tr>
<td>1926/1930</td>
<td>762.9</td>
<td>134.3</td>
<td>347.8</td>
<td>(19.4)e</td>
</tr>
<tr>
<td>1931/1935</td>
<td>864.7</td>
<td>(123.5)e</td>
<td>323.9</td>
<td>(7.0)e</td>
</tr>
<tr>
<td>1936/1940</td>
<td>872.2</td>
<td>n/a</td>
<td>135.9</td>
<td>(5.5)e</td>
</tr>
<tr>
<td>1941/1945</td>
<td>356.8</td>
<td>n/a</td>
<td>42.7</td>
<td>2.9</td>
</tr>
<tr>
<td>1946/1950</td>
<td>1749.0</td>
<td>n/a</td>
<td>113.7</td>
<td>6.2</td>
</tr>
<tr>
<td>1951/1955</td>
<td>2657.6</td>
<td>n/a</td>
<td>134.3</td>
<td>13.3</td>
</tr>
</tbody>
</table>

- series discontinued after 1955 -

n/a Data not available

e Estimate based on partial data (mean value substituted for missing figures)

* Non-emigrants are defined as "resident aliens of the United States who leave the United States for temporary residence abroad, or non-resident aliens of the United States who are in the United States less than one year who are returning to a permanent residence abroad".

Emigrants are defined as "aliens residing in the United States for 1 or more years and who leave for permanent residence abroad".


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number of Canadian-born in the United States and the number of American-born in Canada by intercensal period, but these would provide only partial estimates inasmuch as they would tell us nothing about the repatriation of foreign-born Canadian citizens or the repatriation of foreign-born American citizens. What must be stressed, however, is that emigration from one country to the other does not necessarily imply a permanent redistribution of population. One author estimates that, if current trends prevail, as many as seven out of every eight Canadian emigrants now in the United States will return to Canada at some time in the future, and the proportion would seem to be only slightly less for American emigrants now residing in Canada. 28

Thus, from a Canadian standpoint, two distinct views of continental migration flows emerge. 29 In terms of emigration, Canada has witnessed a constant drain of skills and talent to the United States. But looking at total population flows, it is apparent that many Canadians residing in the United States make the decision at some point in time to come back home. In this context, one would have to agree with K. V. Pankhurst when he concludes:

... the naive view of a substantial loss of population to the United States requires modification. What may be more important, however, is that there appears to have been substantially more movement between the two countries than has been thought. 30
Transformation of Raw Data Scores

Although the Canadian-American system suggests another important regional context in which integrative behavior can be examined, the fact is that the relationships in question are limited to a particular nation-pair or dyad as opposed to a collectivity embracing several member states. As a result, dyadic analysis is not just one among a variety of options which the researcher can choose to adopt or disregard according to the nature of the inquiry and the specific problem under consideration. Rather it is a mandatory requirement which must be accepted.

Given this restriction, two approaches to measuring migration flows in North America are proposed. On the one hand, these transactions between the two countries can be viewed from the perspective of a "directional dyad". That is to say, attention can be focussed upon the two-way flow of human resources between the home and recipient countries. Although both societies are bound tightly together in a regional system, it is important to note that there are crucial disparities and discrepancies in the magnitude and impact of migration flows. Accordingly, two different sets of observations must be made: the first pertaining to transactions originating in Canada and terminating in the United States; and the second to transactions in the opposite direction, originating in the United States and terminating in Canada.
In addition to the two-way flow of human resources, the Canadian-American system can also be examined as a "summed dyad".\textsuperscript{32} This approach to measurement yields a third set of observations which stress the total magnitude of continental migration flows and their significance in the regional context. Such a perspective provides the opportunity to observe and analyze the functioning and responsiveness of the system as a whole.

Within this framework, the raw and unprocessed data presented in the preceding pages only afford a somewhat simple and primitive measure of the level of migration flows in North America and their impact upon the system. The relative intensity and continuity of these transactions constitute equally significant environmental processes, having a critical bearing upon regional integration. In this regard, communications and transactional theorists suggest a number of different properties or attributes of patterns of mutual interaction which also have to be taken into consideration: the concentration or relative density of transactions between members of the system, the level of dependence or interdependence involved, the degree to which these interactions penetrate member societies, and the dominant trends towards growth, stagnation, or deterioration in transactional patterns.\textsuperscript{33}

It is in this context that absolute figures pertaining to the volume of transaction flows appear to be clearly
insufficient or inadequate. In order to gauge and evaluate the full extent and impact of the complex environmental processes shaping regional integration in North America, the data compiled for both the "directional" and "summed" dyad must be transformed into more sophisticated indices. Nonetheless, raw scores remain an indispensable tool for statistical analysis especially when taken in conjunction with other measurement procedures and employed as a means of checking their accuracy. Below, four specific procedures for measuring migration flows, corresponding to distinct properties or attributes of transactional patterns, are presented and discussed.

**Absolute Transaction Volumes.** As mentioned above, absolute figures are essential if for no other reason than that they offer the most basic indicator of the extent of interpersonal contacts between members of a community. Moreover, they are the raw material for more elaborate data transformations and, hence, the source from which all other measures for evaluating the relative intensity and continuity of transaction relationships are derived. Within the framework of this study, estimates of the absolute volume of labor mobility are calculated by summing annual statistics on immigrant arrivals entering Canada and the United States for specific time intervals. In accordance with our intention to examine the Canadian-American system as both a "directional" and "summed" dyad, however, three
separate sets of raw data scores are required: (1) Canadian immigrant arrivals entering the United States, (2) American immigrant arrivals entering Canada, and (3) total continental migration (i.e., the sum of Canadian and American immigrant arrivals).

**Concentration of Migration Flows.** The primary shortcoming or disutility of absolute volumes as a measure of the impact of transaction flows is that they do not reveal the effects of the "size" of the participating units or the extent to which these actors are involved regionally or internationally. Nor do the data lend themselves to easy interpretation of the dominant trends and patterns in the mutual interaction of national societies. As a result, methods for converting or transforming raw scores into more adequate indices of transaction relationships must be developed. In this regard, patterns of labor mobility between Canada and the United States might be analyzed by constructing an index of concentration to reflect the degree to which migration flows are limited to the two members of the system. Such a measure would provide a means to standardize for the "size" or total volume of migration flows into Canada and the United States from all parts of the world.

In the simplest terms, concentration merely expresses the proportion of total immigrant arrivals entering Canada and the United States which are Canadian or American in
origin (by country of last permanent residence). It is calculated and indexed according to the formula,

$$CON = 100\left(\frac{I_{xy}}{I_{xz}}\right),$$

in which 'I_{xy}' is total immigrant arrivals entering country 'x' from country 'y' and 'I_{xz}' is total immigrant arrivals entering country 'x' from the rest of the world ('z'). Theoretically, the concentration index for country 'x' could range from zero to infinity, where zero would indicate that no migration at all was experienced between 'x' and 'y', and a value of one-hundred would indicate that migration flows between 'x' and 'y' equal those between 'x' and the rest of the world ('z'). Applying this formula to the Canadian-American system produces two different sets of measures corresponding to what has been designated as the "directional" dyad. In order to obtain an index of concentration for the "summed" dyad, the equation has only to be slightly altered so that 'I_{xy}' would represent total continental migration and 'I_{xz}' would represent total immigrant arrivals entering Canada and the United States from other parts of the world.

**Degree of Penetration.** A third method of evaluating the relative intensity and continuity of labor mobility within North America is to determine the extent to which mutual interactions are diffused and distributed throughout the two societies. In other words, it would be desirable to have some measure of the degree of penetration which Canada and the United States have experienced as a result
of the continuous ebb and flow of migrants across the international boundary and the subsequent intermingling of the Canadian and American peoples. Adopting the simplest and most practical approach to measurement, the degree of penetration can be stated as the number of immigrant arrivals for every hundred-thousand inhabitants of the recipient country. In addition to providing valuable indices of the impact of labor mobility, this method of data transformation is particularly relevant inasmuch as it aids in controlling for the gross effects which stem from the differential in the size of the Canadian and American populations. To calculate ratios for the "directional" dyad, the basic formula is \( \text{PEN} = \frac{I_{xy}}{P_x} \), where \( I_{xy} \) equals total immigrant arrivals entering country 'x' from country 'y' and \( P_x \) equals the population of country 'x' in hundreds-of-thousands. With respect to the "summed" dyad, penetration is measured by dividing the raw data score for continental migration by the combined population total for Canada and the United States expressed in hundreds-of-thousands.

**Rate-of-Change.** In order to accurately assess critical environmental trends, it is essential to have some indicator of the rate-of-change in transaction volumes. Rate measures are employed to index growth, stagnation, and deterioration in transaction relationships, and in general, it is assumed that the greater the rate of acceleration and growth in the
volume of transaction flows, the greater the progress towards integration. Although this assumptive hypothesis cannot be accepted a priori (as has been the case with communication theory in the past), it does underscore the need for developing measures which summarize or reveal rates-of-change.

Rate measures are computed in terms of the percentage increase or decrease in transaction flows between two time periods. For the purpose of evaluating patterns of labor mobility, the general formula is \( \text{ROC} = 100 \frac{(I_{t+1} - I_t)}{I_t} \), where \( I_t \) represents immigrant arrivals for time interval \( t \) and \( I_{t+1} \) represents immigrant arrivals for the following time interval. To examine rates-of-change in migration flows from the United States to Canada, the value of \( I \) would equal the absolute volume of American immigrant arrivals entering Canada, and for the reverse flow, the value of \( I \) would equal the absolute volume of Canadian immigrant arrivals admitted to the United States. In the case of the "summed" dyad, the raw scores for total continental migration would be substituted for \( I \) to calculate measures of percentage change over time.

Summary. A total of twelve indices for evaluating the magnitude, relative intensity, and continuity of patterns of labor mobility in North America are encompassed by the procedures for measurement described in the preceding pages. These include:
(1) the absolute volume of immigrant arrivals entering Canada from the United States,

(2) the concentration of American immigrants among all immigrant arrivals entering Canada,

(3) the degree to which American immigrants have penetrated Canadian society,

(4) the rate-of-change in the volume of immigrant arrivals entering Canada from the United States,

(5) the absolute volume of immigrant arrivals entering the United States from Canada,

(6) the concentration of Canadian immigrants among all immigrant arrivals entering the United States,

(7) the degree to which Canadian immigrants have penetrated American society,

(8) the rate-of-change in the volume of immigrant arrivals entering the United States from Canada,

(9) the absolute volume of continental migration flows,

(10) the concentration of continental migrants among all immigrant arrivals entering Canada and the United States,

(11) the degree to which continental migrants have penetrated both national societies, and

(12) the rate-of-change in the volume of continental migration flows.

For any given time interval, numerical values can be obtained for each of these indices by employing the appropriate formula or measurement procedure. The results of such an exercise are contained in Appendix D, and these measures taken in conjunction with those provided for the
dependent variable make it possible to test the hypothesized relationship concerning labor mobility and the development of regional linkages in the labor sector.
CHAPTER VIII

MULTIVARIATE ANALYSIS OF
LABOR MOBILITY AND INSTITUTIONAL CAPACITY
IN NORTH AMERICA

At the centre of the conceptual framework of this study is the argument or assumptive hypothesis that the mutual relevance of the actors in a regional system as defined by particular environmental processes and patterns has a significant effect upon the potential for integration. In order to determine whether this argument has some merit, an empirical inquiry has been suggested which is limited to a specific nation-pair (the Canadian-American dyad), to a specific type of transaction flow (labor mobility), and to a specific case of sectoral integration (the development of organizational linkages and contacts concerned with labor-related problems and issues). The central argument of the study is thus rendered in a more concrete proposition: the greater the mobility of labor between Canada and the United States, the greater the institutional capacity in the labor sector.

To begin the multivariate analysis of this hypothesized relationship, however, a few preliminary requirements of a technical nature must be addressed. First, it is necessary to describe how the test will be structured or, more specifically, what time intervals will be used and what time comparisons will be made. Secondly, the different statistical techniques which will be employed for data analysis
have to be examined and their utility evaluated. Thirdly, the validity of the multiple indices of labor mobility and institutional capacity must be established. And finally, the possible effects of problems such as multicollinearity and autocorrelation in distorting the results of this empirical inquiry have to be assessed.

Time Intervals and Comparisons

While theoretical considerations, data limitations, and a host of technical problems largely determine the structure of this empirical inquiry, the researcher does possess a great deal of freedom in defining the time scale which will be utilized. For the purposes of this study, the analysis of the Canadian-American system will be broken down into 54 time periods, representing two-year intervals running in succession from 1867 through to 1974. For example, 1867 to 1868 constitutes the first interval, 1869 to 1870 the second, 1871 to 1872 the third, and so on. Similarly, for each interval, 19 sets of observations are included corresponding to the number of indices which have been developed for the dependent and independent variables.

A variety of reasons spurred this decision to employ two-year intervals as a basic format. First, the fact that continuous data on migration flows and regional linkages were available for the entire period under consideration — with the exception of a few gaps — strengthened the
argument for conducting a longitudinal study in which relatively short time intervals could be used to analyze the basic hypothesis. Indeed these shorter intervals seem to heighten the possibility of obtaining greater precision in examining the dynamics of the process of change in the communal relationships between Canada and the United States.

A second argument for adopting this particular format rests on purely technical considerations: that is, the need for a wide range of cases in order to make reliable statistical generalizations. As a general rule, a minimum of 10 to 20 cases is required to determine whether a relationship between two variables does exist, and the greater the number of cases under investigation, the greater the accuracy with which the researcher can assess the strength and probability of that relationship. And finally, underlying the decision to employ two-year intervals is a concern for the comparability and reliability of data particularly with respect to migration flows. Obviously, ten-year or five-year intervals would be more appropriate for reducing the discrepancies found in official government records of population movements. Nonetheless, these broader intervals would also hamper statistical analysis by severely limiting the range of cases. As a compromise, therefore, two-year intervals have been selected to balance the requirements of comparability of data and reliable statistical generalization, and it is on this basis that the study has proceeded.
By structuring the inquiry in this manner, however, a new dimension is added to the analysis of labor mobility and institutional capacity. While the link between the independent and dependent variables can be viewed in broad conceptual terms as being conditional rather than causal in nature, there is ample reason to believe that even in this regard the relationship involved is extremely complex. The possibility certainly exists that the effects of an increase or decrease in the magnitude of labor mobility may not be immediate or direct but delayed in the sense that they are felt more strongly in subsequent time intervals. Similarly, it is not inconceivable that something of a "feedback" effect may be present in the relationship; that is to say, institutional development may enhance the mobility of the labor force insofar as membership in a regional labor organization may provide prospective immigrants not only with information on employment and job opportunities in other countries but also some guarantee of employment once they arrive. Consequently, one may discover that labor mobility is correlated with institutional capacity in preceding rather than subsequent time intervals.

Therefore, in order to determine what the correlates of institutional development in the labor sector are and what is the precise nature of the relationship under examination, it is necessary to perform time-lag and time-leading comparisons. This entails a procedure in which
measures of the dependent and independent variables are tested and the results compared using various time differentials as the basis of observation. For the purposes of this study, the impact of labor mobility upon institutional capacity and the possible "feedback" effects are evaluated for five separate time configurations ("t-4", "t-2", "t", "t+2", and "t+4") where the basic temporal unit is the two-year interval.

The decision to confine the comparisons to only two succeeding and two preceding time intervals is somewhat arbitrary but nonetheless justifiable. To extend the inquiry to include "t-6" or "t+6", for example, would not produce any significant results inasmuch as the time differential between events, between the presumed "cause" and "effect", is so vast (12 years in this example) that any correlation which might be observed would be difficult to interpret. Accordingly, "t-4" and "t+4", each reflecting a time lapse of eight years in relation to the base period "t", have been established as the cut-off points.

Techniques for Statistical Analysis

To actually test the strength of the relationship between the multiple indices of the independent and dependent variables for these different time configurations, two techniques for statistical analysis are employed: Pearson correlation and multiple regression.
Pearson Product-Moment Correlation. For a variety of reasons, the Pearson product-moment correlation \( r \) has become one of the most widely-accepted modes of statistical analysis in the social sciences.\(^4\) Undoubtedly, one of the prominent reasons underlying its acceptability is that it offers a test of association and significance particularly adapted to bivariate analysis of interval data. Moreover, the technique especially suits the type of hypothesis which most frequently occurs in empirical studies of social phenomena: that is, it rests upon the assumption that relationships between variables are linear in nature. And finally, the correlation co-efficients generated by it are relatively easy to interpret. Because the co-efficients range from \(-1\) to \(0\) for negative relationships and from \(0\) to \(+1\) for positive relationships, their meaning can be grasped without much difficulty. From a more technical viewpoint, values of \( r \) also provide a crucial estimate of the "explained" variance between two variables. In statistical terms, the Pearson \( r \) is viewed as the "square root of the amount of variation in \( Y \) that is 'explained' by or attributable to variation in \( X \)," and accordingly, the proportion of "explained" variance is equivalent to \( r^2 \) (the co-efficient of determination).\(^5\) If a correlation of \( .316 \) is obtained, for example, then the proportion of variable \( Y \) "explained" by variable \( X \) would be \(.10 \) or 10 per cent.\(^6\)
Given the peculiar nature of this empirical study, however, the utility of the Pearson product-moment correlation is restricted to some extent. Considering the relatively large number of indices which have been posited, it would seem that some technique of multivariate analysis would be more appropriate. Hence, the Pearsonian 'r' will not be applied to directly test the relationship between the independent and dependent variables or to gather empirical findings and conclusions. Rather, it is employed to locate the key indices of labor mobility and institutional growth, to assess their validity, and to furnish a preliminary indication of the strength of the various relationships.

**Multiple Correlation and Regression.** Techniques for data analysis such as those furnished by multiple correlation and regression are more complex than Pearson product-moment correlation not only in terms of the computations which they require but also in terms of the statistical precepts upon which they are based. Although no technical explanation will be attempted here because of the complexities involved, it is possible to outline and summarize some of the features or attributes of these techniques. Basically, multiple correlation and regression provide a means of "explaining" variance and of "predicting" the dependent variable when two or more independent variables are identified as significant determinants or "causal" factors in the relationship. In more specific
terms, the multiple regression model assumes the form of an equation which "specifies what proportion of each independent measure is needed to obtain the best estimate of the dependent variable".

As suggested above, the procedures used to calculate this equation are formidable to say the least. For example, taking a simple multivariate relationship in which 'X' and 'Z' are the independent variables and 'Y' is the dependent variable to be explained,

... what is done in multiple correlation, in effect, is first to correlate X with Y; next to determine the residuals of Y regressed on X; and then to correlate Z with these residuals. This process can be repeated for as many independent variables as we want to add; the residuals are determined after each step and correlated with the next measure.

The summary statistic which is derived from these procedures is the multiple correlation co-efficient 'R'. For practical purposes, it can be defined as "the square root of the proportion of variance in the dependent variable 'explained' by the independent variables", and in this regard, the actual proportion of explained variance would equal 'R^2' (the co-efficient of multiple determination). Once these values are determined, they can be incorporated into a multiple regression equation.

Obviously, the multiple correlation co-efficient and the co-efficient of multiple determination are comparable to the Pearson 'r' in several respects. Not only is their
interpretation similar, but the assumptions upon which they rest are largely identical. In both cases, it is presumed that the relationships being examined are linear and that a normal distribution of cases is present.

Nonetheless, there are also profound divergencies between the two methods of statistical analysis which define their utility for empirical inquiry. On the one hand, a correlation technique such as the Pearson product-moment does not necessarily demonstrate causation between the independent and dependent variables. It only reveals that the two measures are related in some manner, and this co-variance can be attributed to a number of different factors besides causality: the effect of a third variable, for example, or mutual causation. In order to make more solid causal inferences, techniques such as multiple correlation and regression should be employed.

Another fundamental divergence between the two methods stems from the fact that they are designed to deal with different types of hypotheses and relationships. Although bivariate analysis can be used in situations where a relatively large number of variables or indices are to be examined, to some extent it tends to obscure the actual nature of the relationship because it does not control for the variation which is generated by independent variables other than the specific one being tested. Consequently, the correlation statistics derived from techniques of
multivariate analysis do not automatically correspond to Pearson correlation co-efficients for the same relationship.

On the basis of these differences, therefore, it has been decided to use multiple correlation and regression for the actual statistical analysis and empirical test of the relationship between labor mobility and institutional capacity in the labor sector. A discussion of the empirical findings is contained in the concluding section of this chapter. At this juncture, however, the most immediate concern is to establish the validity of the multiple indices which have been developed for the two variables.

Validity of the Indicators

Validity is a conceptual consideration which is largely inseparable from basic principles of operationalization and measurement in quantitative research.\(^{11}\) It demands that the indices being tested or subjected to analysis accurately measure the variables they are purported to represent.\(^{12}\) Where this cannot be demonstrated, then the indicators cannot be seen as valid for conceptual purposes, and the study must be modified either by redefining the key variables so that they accommodate these indices or by some other means. There are, however, no absolute criteria which can be applied and followed in order to meet this requirement, and thus, as Gurr argues, the researcher must take recourse to certain relative standards of validity:
One is a theoretically and substantively plausible argument that spells out how and why an indicator represents a significant aspect of a conceptual variable. The other is an accumulation of empirical evidence that an indicator is related to a variety of other measures or indicators in consistent, predicted ways.\textsuperscript{13}

These standards, in turn, give rise to a number of specific tests, two of which are presented here as means of assessing the validity of the multiple indices of labor mobility and institutional capacity.\textsuperscript{14}

**Face Validity.** Indicators are essentially indirect and incomplete measures, and consequently, one cannot realistically expect that they will correspond in an exact manner with the variables they are designed to represent or even that they will provide precise measures of every key feature or dimension.\textsuperscript{15} Nonetheless, the researcher must be able to demonstrate that these indicators are at least reasonable in the sense that they follow logically from the theoretical arguments and conceptual definitions which are at the centre of the study.\textsuperscript{16} Although this approach is largely intuitive, it constitutes the first and perhaps the most basic test which must be performed to establish the validity of an indicator or a set of indicators. If these criteria can be satisfied and the correspondence between indicator and variable clearly delineated, then the indicator can be said to possess face validity.

In relation to this empirical study, the face validity of the various indices proposed for measuring labor mobility
and institutional capacity ultimately rests upon the logical consistency and coherence of the theoretical and conceptual framework. While at this point in the proceedings it would probably serve no good purpose to reintroduce those theoretical arguments, a couple of points can be made that have a particular bearing on the question of face validity. First, the set of indicators designed to tap the different analytical properties and attributes of labor mobility are derived from conceptual definitions and techniques of measurement which are well-established in the field of transaction analysis, and accordingly, one can approach them with some degree of confidence. Second, if there is a problem of face validity, it arises with respect to the dependent variable. Because of the approach which has been taken towards integration and, more specifically, institutional capacity, there are undoubtedly serious questions about whether the measures which have been developed are, in fact, accurate representations. Beyond the theoretical arguments presented in the introductory chapters of this section, perhaps the best means of alleviating some of these questions is through empirical tests of validity, and this is attempted in the following discussion of convergent validation.

Convergence Validity. One expects both intuitively and logically that indicators of the same variable will be strongly correlated, and this assumption gives rise to a
specific test of validity which theorists engaged in quantitative analysis describe as convergent validation. In general terms, the requirements of convergence validity are considered to be satisfied if independent measures or indicators of a variable produce similar results when compared with one another by statistical techniques. As Caporaso suggests, however, in the situation where several different procedures for measurement are employed to develop these independent measures, one must also have confidence that the procedures themselves are valid and reasonable.

The point is well-taken especially in the context of this study. In the preceding pages, it has been argued that the measurement procedures from which the various indices are drawn touch upon specific attributes or dimensions of the independent and dependent variables. Consequently, a prime concern of this study is to determine whether these techniques accurately represent the two variables. That is to say, to fully establish the convergence validity of the multiple indices which have been constructed, it is also necessary to demonstrate that similar results will be produced by statistical comparison of the different procedures. The implications of this "test of convergence" are clear:

To the extent that a particular method produces results which are artifactual these results will tend not to agree with those derived from highly different measurement techniques. Thus, given a set of scoring techniques, we will place more
confidence in those which show highest agreement with all others, ceteris paribus. To the extent that none of the various scoring procedures displays significant (in the nonstatistical sense) overlap, we must conclude either that each technique taps a different construct, that the construct is not unidimensional, or that a substantial portion of the variance results from variance in the methods and not from variance in the substantive variables that we are attempting to measure. 21

To assess these implications and to examine the degree of convergence, simple correlation co-efficients (Pearson 'r') are computed for each of the indices of labor mobility and institutional capacity. The results for the independent and dependent variables are presented in matrix form in Tables XI and XII respectively. In addition, to facilitate interpretation the correlation co-efficients have been summed for each indicator and the average intercorrelation co-efficient (X̄) determined.

A number of critical implications are raised in the examination of the correlation matrices. In the case of both the dependent and independent variables, the average intercorrelation co-efficients (X̄) cover a wide range, but none of the scores is extremely high. With respect to institutional capacity, all seven indices possess some degree of convergence, and all are significant at the .05 level. For labor mobility, on the other hand, the only significant intercorrelation co-efficients are observed for those indices measuring absolute transaction volumes and the degree of penetration.
FIGURE V
INDICATORS AND MEASUREMENT PROCEDURES FOR THE INDEPENDENT AND DEPENDENT VARIABLES

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLE</th>
<th>DEPENDENT VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method 1 (Absolute Transaction Volume)</td>
<td>Method 1 (Raw Data Scores)</td>
</tr>
<tr>
<td>ATV₁ Absolute volume of Canadian migration to the U.S.</td>
<td>TOT₁ Total number of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>ATV₂ Absolute volume of American migration to Canada</td>
<td>ACT₁ Actual number of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>ATV₃ Absolute volume of total continental migration flows</td>
<td></td>
</tr>
<tr>
<td>Method 2 (Concentration)</td>
<td>Method 2 (Composite Indices)</td>
</tr>
<tr>
<td>CON₁ Concentration of Canadian immigrant arrivals</td>
<td>TOT₂ Total number of amalgamated and pluralistic linkages created in the labor sector</td>
</tr>
<tr>
<td>CON₂ Concentration of American immigrant arrivals</td>
<td></td>
</tr>
<tr>
<td>CON₃ Concentration of total continental migrants</td>
<td></td>
</tr>
<tr>
<td>Method 3 (Penetration)</td>
<td>Method 3 (Proportional Transformations)</td>
</tr>
<tr>
<td>PEN₁ Penetration of Canadian immigrant arrivals</td>
<td>PRO₁ Proportion of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>PEN₂ Penetration of American immigrant arrivals</td>
<td>PRO₂ Proportion of amalgamated and pluralistic linkages created in the labor sector</td>
</tr>
<tr>
<td>PEN₃ Penetration of total continental migrants</td>
<td></td>
</tr>
<tr>
<td>Method 4 (Rate-of-Change)</td>
<td>Method 4 (Rate-of-Change)</td>
</tr>
<tr>
<td>ROC₁ Percentage change in the volume of Canadian migration</td>
<td>GR₁ Rate-of-change in the actual number of &quot;international&quot; trade unions</td>
</tr>
<tr>
<td>ROC₂ Percentage change in the volume of American migration</td>
<td>GR₂ Rate-of-change in the actual number of amalgamated and pluralistic linkages in the labor sector</td>
</tr>
<tr>
<td>ROC₃ Percentage change in the volume of continental migration flows</td>
<td></td>
</tr>
</tbody>
</table>
### Table XI

**Correlation Matrix:**

<table>
<thead>
<tr>
<th></th>
<th>ATV1</th>
<th>ATV2</th>
<th>ATV3</th>
<th>CON1</th>
<th>CON2</th>
<th>CON3</th>
<th>FEN1</th>
<th>FEN2</th>
<th>FEN3</th>
<th>ROC1</th>
<th>ROC2</th>
<th>ROC3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATV1</td>
<td>1.000</td>
<td>-0.375</td>
<td>0.864</td>
<td>0.161</td>
<td>0.079</td>
<td>0.064</td>
<td>0.788</td>
<td>0.343</td>
<td>0.686</td>
<td>0.366</td>
<td>0.160</td>
<td>0.324</td>
</tr>
<tr>
<td>ATV2</td>
<td>0.375</td>
<td>1.000</td>
<td>0.790</td>
<td>-0.285</td>
<td>0.242</td>
<td>-0.073</td>
<td>0.378</td>
<td>0.719</td>
<td>0.689</td>
<td>0.001</td>
<td>0.228</td>
<td>0.047</td>
</tr>
<tr>
<td>ATV3</td>
<td>0.864</td>
<td>0.790</td>
<td>1.000</td>
<td>-0.047</td>
<td>0.184</td>
<td>0.004</td>
<td>0.726</td>
<td>0.617</td>
<td>0.827</td>
<td>0.242</td>
<td>0.230</td>
<td>0.239</td>
</tr>
<tr>
<td>CON1</td>
<td>0.161</td>
<td>-0.285</td>
<td>-0.047</td>
<td>1.000</td>
<td>0.369</td>
<td>0.891</td>
<td>-0.025</td>
<td>-0.311</td>
<td>-0.167</td>
<td>-0.021</td>
<td>-0.191</td>
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</tr>
<tr>
<td>CON2</td>
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<td>-0.242</td>
<td>0.184</td>
<td>0.369</td>
<td>1.000</td>
<td>0.684</td>
<td>0.226</td>
<td>0.322</td>
<td>0.299</td>
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<td>-0.143</td>
</tr>
<tr>
<td>CON3</td>
<td>0.064</td>
<td>-0.073</td>
<td>-0.004</td>
<td>0.891</td>
<td>0.684</td>
<td>1.000</td>
<td>0.013</td>
<td>0.090</td>
<td>0.028</td>
<td>-0.135</td>
<td>-0.196</td>
<td>-0.178</td>
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<tr>
<td>PEN1</td>
<td>0.788</td>
<td>-0.378</td>
<td>0.726</td>
<td>-0.025</td>
<td>0.226</td>
<td>0.013</td>
<td>1.000</td>
<td>0.685</td>
<td>0.916</td>
<td>0.423</td>
<td>0.323</td>
<td>0.420</td>
</tr>
<tr>
<td>PEN2</td>
<td>0.343</td>
<td>-0.719</td>
<td>0.617</td>
<td>-0.311</td>
<td>0.322</td>
<td>-0.090</td>
<td>0.685</td>
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<td>0.887</td>
<td>0.084</td>
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<td>0.138</td>
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<td>0.317</td>
<td>0.931</td>
<td>0.608</td>
<td>1.000</td>
</tr>
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</table>

$X = \text{average intercorrelation co-efficient}$

$X_{pr} = \text{average purified correlation}$

$n/a = \text{not applicable}$

$r_{critical} = .227 \text{ (significant at the .05 level)}$

$N = 54$
### TABLE XII

**CORRELATION MATRIX:**
**INDICES OF THE DEPENDENT VARIABLE**

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<thead>
<tr>
<th></th>
<th>ACT₁</th>
<th>TOT₁</th>
<th>TOT₂</th>
<th>PRO₁</th>
<th>PRO₂</th>
<th>GR₁</th>
<th>GR₂</th>
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<td>.284</td>
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<td>.579</td>
<td>.078</td>
<td>.404</td>
<td>.003</td>
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<td>1.000</td>
<td>.410</td>
<td>-.043</td>
<td>.269</td>
<td>.057</td>
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<td>.661</td>
<td>.512</td>
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<td>.437</td>
<td>.514</td>
<td>1.000</td>
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</table>

$\bar{r} = \text{average intercorrelation co-efficient}$

$r_{\text{critical}} = .227$ (significant at the .05-level)

*number of cases = 54*
Some of the rather low correlations which are obtained, however, can be attributed to the effects of certain indicators and measurement techniques. Two indicators of the dependent variable — the total number of amalgamated and pluralistic linkages created in the labor sector (TOT2) and the proportion of amalgamated and pluralistic linkages in the labor sector (PRO2) — are negatively correlated, and consequently, their average intercorrelation co-efficients (\( \bar{X} \)) are weakened to some extent. Nonetheless, it must be pointed out that neither indicator results in consistently low correlations when compared with other indices of the dependent variable. By way of contrast, the average intercorrelation co-efficients (\( \bar{X} \)) for most indicators of the independent variable are substantially reduced by the lack of convergence displayed by indices of concentration (\( CON_1, CON_2, CON_3 \)). The detrimental effects of these "bad" indicators of the independent variable can be demonstrated by excluding them from the calculation of the average intercorrelation co-efficients. The result is an "average purified correlation" (\( \bar{X}_{pr} \)) for each of the indicators of the independent variable. These correlations are not only much higher, but to some extent, they also alter the ranking of the various indices. By eliminating the effects of the indices of concentration, the scores for three procedures of measurement — absolute transaction volumes, penetration, and rate-of-change — as well as the intercorrelation
co-efficients for the nine indices which these procedures encompass attain significance at the .05 level.

In view of the lack of convergence possessed by these particular indicators of labor mobility, serious consideration must be given to three possibilities: (1) the independent variable is not unidimensional, (2) the indicators involved tap completely different constructs, and (3) the low correlations produced by this measurement technique are artifactual.\textsuperscript{22} The first possibility cannot be dismissed, and in fact, it can be argued on the basis of the pattern of results that the independent variable is multidimensional. The significant intercorrelation between most of the indices and most of the procedures for measurement seems to imply that they tap a single dominant dimension or several closely-related dimensions of the independent variable. Given this perspective, it might also be suggested that the indices of concentration ($\text{CON}_1$, $\text{CON}_2$, $\text{CON}_3$) do not converge with the other indices because they tap a wholly different dimension. Nonetheless, this may be the weakest interpretation of the observed pattern of results insofar as the low intercorrelations for the suspect indices are somewhat expected. An inspection of the measures computed for the degree of concentration reveals that they tend to vary inversely with the absolute volume of migration flows, and hence, high intercorrelation co-efficients are not anticipated.
Thus, it is necessary to look at the other two possibilities in order to best explain the pattern of results. One interpretation is that the low correlations obtained for the indices of concentration are simply artifactual, and consequently, they can be dismissed as invalid. Nevertheless, the relationship which has been observed among the indicators of the independent variable lends credence to a second interpretation: it would appear that measures of concentration tap a completely different and undefined construct which is outside the scope of inquiry of this study. From this standpoint, there would seem to be no other alternative than to exclude the various indices of the degree of concentration from the empirical analysis of the relationship between labor mobility and institutional capacity in the labor sector. Conversely, the remaining measures — nine indices of the independent variable and seven indices of the dependent variable — tend to satisfy most of the requirements of convergent validation. A final decision with respect to the indicators that will be employed to test the basic hypothesis cannot be taken, however, until an effort has been made to assess the possible effects of the problems of multicollinearity and autocorrelation upon this inquiry.

Multicollinearity

Of the various independent measures and indicators which are considered to be valid, technical and practical
considerations dictate that only a handful of these can be subjected to empirical analysis. As a general rule, no more than four or five indicators of the independent variable(s) should be used with techniques of multivariate analysis such as multiple correlation and regression, otherwise the researcher runs the risk of compounding sample biases or encountering problems of multicollinearity. The latter situation arises when there is a fixed linear relationship between one or more independent variables in a multiple regression equation. In the presence of such relationships, the partial regression coefficients generated by techniques of multiple correlation may not be uniquely determined, and consequently, they cannot be regarded as reliable estimates of the proportion of each different indicator which is needed to best explain variance in the dependent variable. To put the problem in more brutal terms, it can be said that multicollinearity undermines the utility of multiple regression and, to all intents and purposes, renders the results of this technique largely meaningless.

Nonetheless, three solutions might be put forward as means of remedying this problem. First, where a strong linear relationship between two or more indicators exists, the researcher can develop a composite scale incorporating the indicators in question and substitute this new variable into the regression equation. Second, one indicator among
those which are closely related might be pulled out and used to represent the whole set.\textsuperscript{26} And finally, more and better data can be generated, and entirely new indicators can be constructed to replace those which are at the source of the problem.\textsuperscript{27}

While anyone of these procedures are a viable solution to the distortions produced by multicollinearity, the task of identifying or detecting this situation is often difficult.\textsuperscript{28} In this respect, certain guidelines for determining whether a problem exists can be suggested although none is wholly infallible. As a general rule, if simple correlations between indicators are extremely high (a Pearson 'r' in the range of 0.8 to 1.0, for example), then the presence of multicollinearity must seriously be considered.\textsuperscript{29} Furthermore, this problem would seem to be encountered if one or more independent variables can be dropped from a regression equation without affecting the explained variance in the dependent variable.\textsuperscript{30}

Within the context of this study, an inspection of the Pearson product-moment correlations calculated for the test of convergent validity reveals that six of the inter-indicator correlation coefficients for the independent variable fall within the 0.8 to 1.0 range (ATV\textsubscript{1} and ATV\textsubscript{3}, ATV\textsubscript{3} and PEN\textsubscript{3}, PEN\textsubscript{1} and PEN\textsubscript{3}, PEN\textsubscript{2} and PEN\textsubscript{3}, ROC\textsubscript{1} and ROC\textsubscript{3}, CON\textsubscript{1} and CON\textsubscript{3}). On the surface, therefore, it seems that multicollinearity may be a factor in testing the
hypothesized relationship between labor mobility and institutional capacity. Furthermore, even when measures of concentration are omitted, the number of indices remaining is still excessive, and the likelihood of a problem of multicollinearity being present must also be considered from this standpoint. To rectify the situation, some of the indicators of the independent variable must be deleted from the inquiry. Accordingly, the decision has been made to exclude those measures developed for the "summed" dyad in addition to those pertaining to the degree of concentration.

Three reasons can be cited for taking this course of action. First, analysis of the disparities in the magnitude and direction of migration flows seems to address some of the more critical questions about the functioning of the Canadian-American system rather than analysis of total migration flows. Second, initial impressions suggest that measures of the "summed" dyad do not possess any predictive or explanatory capacity beyond that which they derive from the appropriate indices of the "directional" dyad. And third, an examination of simple correlations for indices of the independent variable reveals that measures of the "summed" dyad are the most highly correlated for each method of measurement employed by this study and, hence, the most likely to constitute a source of multicollinearity.

With respect to the dependent variable, multicollinearity is simply not a problem except in terms of making
time-lag comparisons. In this instance, the hypothesized relationship is essentially reversed with institutional capacity in the labor sector becoming an independent variable vis-a-vis labor mobility. Once again, therefore, it is necessary to exclude certain indices from the analysis in order to reduce the possibility of multicollinearity being present. For the purpose of time-lag comparisons, only three indices of institutional capacity in the labor sector are included in the regression equation to explain variations in patterns of labor mobility. These are: (1) the total number of amalgamated and pluralistic linkages created in the labor sector (TOT2), (2) the proportion of amalgamated and pluralistic linkages in the labor sector (PRO2), and (3) the rate-of-change in the actual number of amalgamated and pluralistic linkages in the labor sector (GR2). Indices pertaining to the rate-of-change, proportion, and volume of "international" trade unions in the Canadian-American system are omitted from the analysis of the "feedback" effect essentially because they are already incorporated into the measures listed above. The inclusion of these particular indices would only result in a significant degree of duplication and thus threaten to confound the results obtained through multiple regression and correlation.
Autocorrelation

Another factor which hampers the interpretation of empirical findings and generalizations is autocorrelation. This problem is inherent to most quantitative research in the social sciences and especially that research which utilizes time series data in the investigation of social relationships. In technical terms, autocorrelation refers to a situation where the residuals observed for a regression equation are highly correlated from one time interval to the next; that is to say, "positive residuals tend to follow positive residuals, and negative residuals tend to follow negative residuals." Where this sort of problem is detected, the researcher must draw one of three conclusions: (1) the relationship under examination is time dependent, that is, a function of the passage of time; (2) an important variable is missing from the analysis, and consequently, the regression equation must be reformulated; and (3) the relationship between the independent and dependent variables is not linear in form, and new specifications have to be introduced. Although these conclusions suggest that steps can be taken to remedy the problem of autocorrelation, there are really no easy solutions. Nevertheless, the problem must at least be recognized in

A residual is the difference between the actual value of a dependent variable for any specific time interval and the value predicted or explained by the independent variables.
order to aid in the interpretation of the findings obtained through multivariate analysis. Accordingly, to determine whether autocorrelation is present, the Durbin-Watson test of residual differences is applied to the multiple correlations contained in this study, and in those instances where a problem is discovered, it is duly noted along with the appropriate empirical results.33

Empirical Findings and Generalizations

In light of the various technical requirements outlined in the preceding pages, several indices which have been constructed to measure the independent and dependent variables are excluded from consideration. With respect to the indices which remain, it must be stressed that each is essentially a variable in itself, and consequently, the basic hypothesis at the heart of this study has to be disaggregated and restated in terms which specify the actual relationships to be tested. In total, seven distinct propositions concerning the impact of labor mobility upon institutional capacity in the labor sector can be formulated:

Proposition 1. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the total number of "international" trade unions created in the labor sector.

Proposition 2. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the actual number of "international" trade unions.
Proposition 3. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the proportion of "international" trade unions in relation to the total number of regional organizations treated at the trans-societal level.

Proposition 4. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the rate-of-change in the actual number of "international" trade unions created within the system.

Proposition 5. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the total number of amalgamated and pluralistic linkages created in the labor sector.

Proposition 6. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the proportion of amalgamated and pluralistic linkages in the labor sector in relation to the total number of regional linkages created within the system.

Proposition 7. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the rate-of-change in the actual number of amalgamated and pluralistic linkages in the labor sector.

However, for the purpose of time-lag comparisons and testing the reverse impact of institutional capacity upon labor mobility, three additional propositions must be developed:

Proposition 8. The greater the total number, proportion, and rate-of-change of pluralistic-and amalgamated linkages in the labor sector, the greater the absolute volume of migration flows between Canada and the United States.

Proposition 9. The greater the total number, proportion, and rate-of-change of pluralistic and amalgamated linkages in the labor sector, the greater the degree of penetration experienced by the two national societies in the system.
Proposition 10. The greater the total number, proportion, and rate-of-change of pluralistic and amalgamated linkages in the labor sector, the greater the rate-of-change in the volume of migration flows between Canada and the United States.

All ten of these propositions suggested by the different indices of the independent and dependent variables are subjected to multivariate analysis, and the strength of each relationship is evaluated by applying the techniques of multiple correlation and regression. Overall, this analysis is undertaken in two stages: in the first stage, the impact of labor mobility upon institutional capacity in the labor sector is tested for time configurations 't', 't+2', and 't+4'; in the second stage, the "feedback" effect is assessed for time configurations 't-4', 't-2', and 't'. The empirical findings and results are summarized in Tables XIII and XIV.

The Impact of Labor Mobility Upon Institutional Capacity. The empirical findings for the first stage of our analysis present both an interesting and complex picture of the connection between labor mobility and patterns of collective and corporate activity in the labor sector. The first and perhaps most obvious conclusion to be drawn from a cursory examination of these findings is that the impact of continental migration flows is somewhat discriminatory inasmuch as it is felt most acutely in terms of the rate-of-change, proportion, and actual number of "international" trade unions within the system (GR₁, PRO₁, and ACT₁). In
FIGURE VI
KEY TO SYMBOLS

INDEPENDENT VARIABLE

\( \text{ATV}_1 \) = absolute volume of Canadian migration to the U.S
\( \text{ATV}_2 \) = absolute volume of American migration to Canada
\( \text{PEN}_1 \) = penetration of Canadian immigrant arrivals
\( \text{PEN}_2 \) = penetration of American immigrant arrivals
\( \text{ROC}_1 \) = percentage change in the volume of Canadian migration
\( \text{ROC}_2 \) = percentage change in the volume of American migration

MULTIPLE CORRELATION AND REGRESSION

\( R \) = multiple correlation
\( R^2 \) = coefficient of multiple determination
\( (R^2) \) = critical value of \( R^2 \)
\( \text{significant at the} \ .05 \text{ level} \)
\( \ast R \) = change in \( R \) attributable to independent variable
\( \ast R^2 \) = change in \( R^2 \) attributable to independent variable
\( B \) = standardized regression co-efficient
\( N \) = number of cases

DEPENDENT VARIABLE

\( \text{TOT}_1 \) = total number of "international" trade unions created
\( \text{ACT}_1 \) = actual number of "international" trade unions created
\( \text{PRO}_1 \) = proportion of "international" trade unions created
\( \text{GR}_1 \) = rate-of-change in the actual number of "international" trade unions
\( \text{TOT}_2 \) = total number of amalgamated and pluralistic linkages created in the labor sector
\( \text{PRO}_2 \) = proportion of amalgamated and pluralistic linkages created in the labor sector
\( \text{GR}_2 \) = rate-of-change in the actual number of amalgamated and pluralistic linkages created in the labor sector

DURBIN-WATSON TEST

\( D \) = Durbin-Watson statistic
\( D_1 \) = critical value of \( D \)
\( (\text{lower limit}) \)
\( D_u \) = critical value of \( D \)
\( (\text{upper limit}) \)
\( a \) = Durbin-Watson test (autocorrelation)
\( i \) = Durbin-Watson test (inconclusive)
## TABLE XIII
MULTIVARIATE ANALYSIS: THE IMPACT OF LABOR MOBILITY UPON INSTITUTIONAL CAPACITY

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLE</th>
<th>ATV1</th>
<th>ATV2</th>
<th>PEN1</th>
<th>PEN2</th>
<th>ROC1</th>
<th>ROC2</th>
<th>R</th>
<th>R² (R²)</th>
<th>D</th>
<th>D₁</th>
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TABLE XIII
MULTIVARIATE ANALYSIS:
THE IMPACT OF LABOR MOBILITY UPON INSTITUTIONAL CAPACITY (continued)

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<th>DEPENDENT VARIABLE</th>
<th>INDEPENDENT VARIABLES (TIME CONFIGURATION &quot;T+2&quot;)</th>
<th>MULTIPLE CORRELATION</th>
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TABLE XIII
MULTIVARIATE ANALYSIS:
THE IMPACT OF LABOR MOBILITY UPON INSTITUTIONAL CAPACITY (continued)
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### TABLE XIV
MULTIVARIATE ANALYSIS:
THE "FEEDBACK" EFFECT (continued)

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this regard, the Durbin-Watson test of residual differences suggests that a significant degree of autocorrelation is found in other relationships, such as that involving the total number of amalgamated and pluralistic linkages created in the labor sector (TOT2), while the presence of such a problem must be entertained in interpreting the findings for the remaining three relationships (TOT1, PRO2, and GR2). Insofar as there is evidence of autocorrelation, it would appear that these relationships are a function of time. That is to say, increments in the magnitude of the dependent variable are correlated from one time interval to the next, and consequently, the co-efficient of multiple determination (R²) obtained for each relationship is somewhat inflated. In other words, the relationships in question are considerably weaker than the co-efficients of multiple determination suggest, and this finding lends support to the assertion that the movement of labor across the border is most effective in determining the growth of "international" trade unions. Aside from this observation, however, the presence of autocorrelation renders it impossible to gain additional insights from these particular relationships, and thus, further examination of them is excluded.

A second general conclusion which emerges from the empirical findings of this study is that a definite time-lag exists, before the full impact of migration flows is experienced. If the analysis of the actual number of
"international" trade unions created within the Canadian-American system (ACT₁) is taken as a guideline, one observes that the co-efficient of multiple determination (R²) for this relationship is significant at the .05 level for time configuration 't+2' but noticeably weaker for configurations 't' and 't+4'. The existence of this pattern is also reflected to some extent in the results obtained from the analysis of the proportion of "international" trade unions in the system (PRO₁) and the rate-of-change in the actual number of "international" trade unions (GR₁). Although the possibility of autocorrelation in time configuration 't' hampers any inferences based on these two relationships, it should be noted that both are significant at the .05 level for time configurations 't+2' and 't+4' with the higher multiple correlations being found in configuration 't+2'.

Furthermore, an examination of these three relationships (GR₁, PRO₁, and ACT₁) and three time configurations reveals a number of factors which are extremely potent in shaping the development of organizational linkages in the labor sector and especially the development of "international" trade unions. For time configurations 't', 't+2', and 't+4', the degree to which Canadian migrants penetrate American society (PEN₁) and the degree to which American migrants penetrate Canadian society (PEN₂) appear to be particularly critical. These two indices of the independent variable account for much of the explained
variance which is observed for the rate-of-change, proportion, and actual number of "international" trade unions within the Canadian-American system (GR₁, PRO₁, and ACT₁).

Their impact in these areas, although hardly uniform, does fall into a rather vague and ill-defined pattern. The degree of penetration of Canadian immigrant arrivals entering the United States (PEₓ₁) is felt almost immediately with respect to the rate-of-change and proportion of "international" trade unions (GR₁ and PRO₁). Its significance tends to increase marginally in time configuration 't+2' but then taper off in configuration 't+4'. In terms of the actual number of these regional organizations operating in the system (ACT₁), the degree of penetration of Canadian immigrants seems to possess far greater significance over time, accounting for relatively little of the explained variance in time configuration 't' and then acquiring a prominent share in subsequent time configurations. In addition, the effects of this particular factor are complemented and reinforced by the degree of penetration attending migration flows from the United States to Canada (PEN₂). The pattern of results for time configuration 't+2' clearly demonstrates the delayed impact which the penetration of Canadian society by American immigrants has had upon institutional capacity in the labor sector. In this regard, it must also be pointed out that the latter variable, like the degree of penetration of Canadian
immigrants entering the United States, is most potent in explaining the rate-of-change and proportion of "international" trade unions (GR₁ and PR₁).

Nonetheless, there is one specific area in which indices of penetration do not appear to play a dominant role. For time configuration 't', three additional factors must be considered as major determinants of the actual number of "international" trade unions which are operating in North America (ACT₁). These include: (1) the absolute volume of immigrant arrivals entering Canada from the United States (AV₂), (2) the rate-of-change in this volume (RC₂), and (3) the rate-of-change in the volume of immigrant arrivals entering the United States from Canada (RC₁).

The predictive and explanatory capacity of two of these indices — the absolute volume of American immigrants entering Canada (AV₂) and the rate-of-change in the volume of Canadian immigrants admitted to the United States (RC₁) — tends to be restricted to this particular relationship. By way of contrast, the impact of the rate-of-change in the volume of American immigrants to Canada (RC₂) appears to be crucial for all three relationships (ACT₁, PR₁, and GR₁) in time configuration 't' as well as for two relationships (ACT₁ and GR₁) in time configuration 't+4'. Accordingly, this indicator along with those for the degree of penetration might be seen as the three most significant factors
affecting the level of institutional capacity in the Canadian-American system.

In this task of evaluating the relative potency of the different indices of the independent variable, however, an inspection of partial regression co-efficients (B) exposes a somewhat surprising finding. Several measures of labor mobility possess negative co-efficients for the key relationships under consideration. This is most noticeable in the case of the absolute volume of immigrant arrivals entering the United States from Canada (ATV₁) which is negatively correlated for all three relationships (ACT₁, PRO₁, and GR₁) and for all three time configurations. A similar pattern can be observed for the absolute volume of American immigrant arrivals admitted into Canada (ATV₂) which is consistently negative in its impact except for the one relationship in time configuration 't' — the actual number of "international" trade unions operating in the system (ACT₁) — and one other relationship in time configuration 't+4' — the proportion of "international" trade unions (PRO₁).

Two interpretations of this empirical finding seem to be possible: on the one hand, the variance in the dependent variable explained by the two indices is so small that negative regression co-efficients are produced; or, on the other hand, the two indices are inversely related to patterns of collective and corporate activity in the labor
sector. In this regard, the second interpretation appears to be the weakest. It contradicts not only the other findings of this study with respect to the impact of labor mobility upon institutional capacity but also much of the "theory" and research on regional integration and communication processes. Moreover, a close inspection of the statistical results presented in the preceding pages reveals that the contribution of these measures of transaction volume in explaining variance in the dependent variable and in producing change in the co-efficient of multiple determination ($R^2$) is minimal. Similarly, with respect to the occurrence of negative regression co-efficients for certain other indices of labor mobility, the most appropriate interpretation undoubtedly lies in the small amount of variance which they explain.

On the basis of the pattern of results discussed above, it is possible to make a few final conclusions about the functioning of the Canadian-American system. First, labor mobility in North America does indeed seem to constitute a critical environmental process which has had important repercussions on the development of "international" trade unions. Nonetheless, its impact has been more conditional than causal. The various indices of labor mobility are relatively weaker in predicting and explaining the actual number of "international" unions while somewhat stronger in predicting the proportion and rate-of-change. This suggests
that labor mobility, although an important "determinant" of the actual number of these regional linkages, may possess greater significance in terms of establishing favorable or unfavorable conditions of growth. Second, indices of the independent variable tend to have a differential impact upon institutional capacity in the labor sector. Factors such as the rate-of-change in the volume of American migration to Canada (ROC₂), the penetration of American society by Canadian immigrants (PEN₁), the absolute volume of American immigrant arrivals entering Canada (ATV₂), and the rate-of-change in the volume of Canadian migration to the United States (ROC₁) have an immediate and profound effect upon the development of "international" trade unions. With the passage of time, however, indices of the degree of penetration (PEN₁ and PEN₂) become increasingly dominant factors in predicting and explaining variance in the dependent variable. In this context, therefore, it might also be argued that labor mobility has both short-term and long-term effects upon the development of organizational linkages in the labor sector with its most dramatic impact being delayed until the migrant worker has adjusted to the society of the recipient country and has begun to participate in it more fully. Finally, the empirical findings seem to indicate, in accordance with our expectations, that the Canadian-American system must be viewed as a whole. Although two of the most potent factors affecting
institutional capacity pertain to American migration to Canada (PHEL2 and ROC2), the impact of labor mobility cannot be adequately gauged by focussing solely upon the flow from the United States to Canada or, for that matter, by focussing solely upon the flow from Canada to the United States. Rather, a combination of factors have contributed to the development of institutional mechanisms and integration in this sector.

The "feedback" effect. The second stage of this inquiry draws attention to the possible "feedback" effects of institutional capacity upon patterns of labor mobility. In general terms, it is hypothesized that the greater the organizational linkages and contacts in the labor sector, the greater the propensity for movement between Canada and the United States. The empirical findings contained in Table XIV reveal, however, that five of the six relationships tested (ATV1, ATV2, PEH1, PEH2, and ROC2) are largely autocorrelated. In several respects, this pattern of results is not totally surprising given the problem which was encountered in the first stage of analysis with relationships involving the rate-of-change, proportion, and total number of amalgamated and pluralistic linkages in the labor sector (GR2, PRO2, and TOT2). Moreover, it can be argued that many of the dependent variables employed in this evaluation of the "feedback" effect are an additional source of autocorrelation.
The two indices of penetration ($P_{t1}$ and $P_{t2}$), for example, are inversely related to population size. That is to say, the greater the population of Canada or the United States, the less the degree of penetration resulting from continental migration flows. Inasmuch as the population of the two countries has continuously increased over time, it is expected that the degree of penetration experienced by them has declined accordingly. Although this relationship is not invariably true and fluctuations in degrees of penetration do occur in contrast to the expected pattern, the fact is that a certain amount of time dependence is already built into these indices. Therefore, the presence of some autocorrelation is not unanticipated.

In terms of the two relationships dealing with the absolute volume of migration flows between Canada and the United States ($ATV_1$ and $ATV_2$), autocorrelation can also be attributed to time dependence. Nonetheless, these particular cases point out a second underlying cause of the problem which is deserving of some consideration. To adequately explain levels of labor mobility, a host of economic and social factors have to be included in the analysis, factors such as employment opportunities, wage differentials, distance, education, age, and so on. In sum, a number of important variables have been left out of the regression equation, and this may have possibly contributed to the degree of autocorrelation present.
In addition, the absence of these variables might account for the weak multiple correlation obtained for the one relationship which is not clearly autocorrelated — the rate-of-change in the volume of Canadian immigrant arrivals entering the United States (ROC). While this relationship is not significant at the .05 level, it does give rise to some interesting speculation. First, one might interpret the overall pattern of results as indicating that organizational linkages and contacts in the labor sector are a more important factor in heightening the propensity for movement among Canadians than Americans. This coincides with the observations made by a number of authors that participation in regional labor organizations such as the "international" unions has been perceived by many Canadians as a means of broadening their employment opportunities and of ensuring employment when and if they move to the United States. Similarly, it might be suggested that pluralistic linkages such as treaties and other agreements are far more crucial to Canadians in gaining access to the American labor market than for Americans seeking to enter the Canadian market. Second, the development of these linkages in the labor sector seems to have a short-term and long-term effect upon labor mobility, but in contrast to the pattern observed in the first stage of this analysis, the effects are strongest and most pronounced in the short-term. Third, the pattern of results implies that the impact of regional
linkages is somewhat conditional insofar as it does not appear to be directly related to variations in the volume of migration flows between the two countries but rather to variations in the rate at which those flows change over time. Finally, it seems that the "feedback" effect in general is considerably weaker than the impact of labor mobility upon patterns of collective and corporate activity in the labor sector. Few of the multiple correlations (\(R\)) obtained for the "feedback" effect exceed those obtained for the key relationships examined in the first stage of this empirical inquiry (\(ACT_1\), \(PRO_1\), and \(CR_1\)). Furthermore, most of these correlation-co-efficients are inflated by the presence of a certain degree of autocorrelation.

**Summary.** In retrospect, it can be stated that the hypothesized relationship between labor mobility and institutional capacity is given at least modest support by the findings of this study. More specifically, three of the propositions listed in the introduction to this section seem to be partially verified:

**Proposition 2.** The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the actual number of "international" trade unions created.

**Proposition 3.** The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the proportion of "international" trade unions in relation to the total number of regional organizations created at the trans-societal level.
Proposition 4. The greater the absolute volume, penetration, and rate-of-change of migration flows between Canada and the United States, the greater the rate-of-change in the actual number of "international" trade unions created in the system.

Moreover, the empirical findings lead to some speculation with respect to one proposition concerning the "feedback" effect:

Proposition 10. The greater the total number, proportion, and rate-of-change of pluralistic and amalgamated linkages in the labor sector, the greater the rate-of-change in the volume of migration flows between Canada and the United States.

In the context of this latter proposition, however, it must be stressed that the relationship involved is extremely weak and confined to the rate-of-change in the volume of Canadian immigrants entering the United States.

Given these generalizations, a few words in the way of qualification must be added. The empirical findings of this inquiry cannot be considered as final or decisive. Rather, they are tentative in nature, pending confirmation from further research into the development of organizational linkages and contacts within regional integration systems. Nonetheless, the findings do lend support to the argument that integrative relationships are extremely complex, defying any easy or simplistic explanation based upon a single variable. In this respect, labor mobility must be seen as only one among several different environmental processes shaping patterns of collective and corporate
activity in the labor sector. Hence, if there is one solid conclusion stemming from this empirical inquiry, it is simply that a range of factors must be brought into consideration in order to understand the development of institutional mechanisms in this specific functional area or the process and condition of regional integration taken in its entirety.
CHAPTER IX

INTEGRATION IN NORTH AMERICA:
CONCLUSION

A large amount of data has been presented in the preceding pages for the purpose of descriptive and empirical analysis of the Canadian-American system. Nonetheless, one wonders whether any significant insights have been gained as a result or whether these have been lost in the endless discussion of theoretical approaches, abstract concepts, techniques of quantitative research, and so on. Therefore, at this juncture, perhaps a final attempt should be made to bring a degree of order and coherence to the study by linking together a few of the more important findings and by interpreting them in a broader framework. In short, it might be helpful to focus more sharply upon the process and condition of integration and what our findings and conclusions imply in that respect.

From a general viewpoint, the development of institutional mechanisms between nation-states is one of the central themes explored by integration theory, and this thesis is equally concerned with the phenomenon. This emphasis should not be surprising given that such mechanisms are undoubtedly the most visible and prominent manifestations of the fusion of national actors and societies. In this regard, the communal relationships which have emerged in North America are no exception to the rule. Canada and the United States, like other regional integration systems,
are merged through a vast, complex, and intricate network of formal arrangements between governmental and non-governmental actors.

Among these arrangements, there is no question that formally-constituted regional organizations or amalgamated linkages occupy a dominant position. The development of these particular linkages, however, has followed two separate paths: on the one hand has been the process of "institutionalization" in the public sector, and on the other hand has been the process of "regional group formation" confined to largely economic and social interactions in the private sector. In the former case, the data presented in this study reveal that the structure of the Canadian-American system encompasses a variety of regional organizations at the intergovernmental and transgovernmental-subnational levels through which federal, state, provincial, and municipal officials communicate and pursue certain matters of mutual concern. Nonetheless, these linkages are overshadowed, at least in terms of sheer volume, by the plethora of regional groups and associations at the trans-societal level. Indeed the bulk of corporate and collective activity in the system seems to revolve around these entities.

In this light, the wealth of pluralistic linkages between governmental and non-governmental actors in Canada and the United States might be perceived as being of
secondary importance in the make-up of the regional infrastructure, and yet such a conclusion would probably be difficult to support. The development of these linkages represents a wholly distinct process from that of amalgamation. It involves the expansion of communication facilities between participating units in the system by such means as periodic consultation and discussion. In this respect, if various forms of diplomatic activity and interpersonal exchanges are appropriate indicators of this process, then the data which is available would strongly suggest that pluralistic linkages must be given due consideration. They are significant elements in the Canadian-American system, and perhaps are made more significant by the fact that they appear to be the primary type of linkage through which governmental actors in North America seek to resolve common problems and co-ordinate their activities. In short, at the intergovernmental and transgovernmental-subnational levels, it would seem that the search for collective capabilities has been conducted largely through pluralistic as opposed to amalgamated linkages.

Integration in the labor sector reflects in microcosm the process and condition of integration in the system as a whole. The same patterns of institutional development which characterize the total structural configuration are duplicated in this specific functional context. The vast
majority of amalgamated linkages are not found at the intergovernmental or transgovernmental-subnational levels but rather are concentrated at the trans-societal level where "regional group formation" and the emergence of the "international" trade unions in particular have been the dominant trends. On the average, these regional organizations established by Canadian and American workers have accounted for 45 per cent of all amalgamated linkages created at the trans-societal level, and they have managed to grow in number at a mean annual rate of roughly 2.5 per cent. (See Appendix C). Nonetheless, it must be pointed out that this growth has not been uniform or continuous. The most intense and concentrated period of development was experienced in the thirty years between 1881 and 1911. Since that time, however, the number of labor organizations in North America has fluctuated somewhat erratically with the only period of sustained growth occurring between 1935 and 1950. Moreover, the proportion of amalgamated linkages at the trans-societal level constituted by the "international" trade unions has undergone a rather steady decline in this century as other regional organizations have assumed greater prominence in the structural composition of the Canadian-American system.

Although these figures underscore the observation that "institutionalization" in the political sphere does not represent a primary vehicle for dealing with labor-related
problems and issues, there seems to be a marked proclivity among governmental actors to pursue mutual concerns in the labor sector through the development of pluralistic linkages. Since the 1940's, government labor officials in both Canada and the United States have been increasingly active in terms of joint consultation and discussion on labor-related issues, and out of this collective action has emerged a number of formal treaties, agreements, understandings, and other executive arrangements to co-ordinate manpower programs and to resolve major disputes. Thus, in the post-war era, one finds that the growth rate and proportion of the total number of amalgamated and pluralistic linkages in the labor sector is far more steady and continuous than that recorded for "international" trade unions alone. (See Appendix C). This pattern of results clearly suggests that the increased activity of governmental actors in the labor sector and their reliance upon pluralistic linkages as a means of co-ordinating national policies and interests have substantially offset the erratic growth in the number of "international" trade unions.

Given this general description of the communal relationships binding Canada and the United States together, one is almost inevitably drawn to the conclusion that the regional integration system in North America contrasts sharply with the established notions of traditional integration "theory" and its view of community formation in regions
such as Western Europe. Although it can be pointed out that both the Western European and North American systems represent instances where fusion between nation-states has occurred and where power has been redistributed to some extent from the national to the regional level, they do seem to constitute two clearly separate models of regional integration. In this regard, there are several dimensions along which they might be differentiated.

First and foremost perhaps is the fact that the Canadian-American system has experienced no significant development towards central decision-making institutions. While the regional intergovernmental organizations which do exist in North America are designed to handle a number of tasks, the decisions made by these institutions have no binding effect to the extent that they are conditional upon the continuing support and consent of the participating units. Indeed the implementation of these decisions is completely dependent upon the administrative machinery of each state. Overall, therefore, the centralization of power in the political sphere is not extensive.

Nonetheless, even in the absence of a clearly-defined central authority, the two national societies in North America have been able to achieve a remarkable degree of co-ordination in the pursuit of common goals and objectives. In the public sector, governmental actors have taken recourse to a variety of institutional mechanisms other than
formal organizational ties, and these have facilitated a continuous process of consultation, bargaining, and negotiation in defining problem areas, formulating policy alternatives, and resolving disputes. This degree of co-ordination, however, is largely surpassed by that which has been attained in the private sector where the extensive development of regional groups has lent a certain measure of continuity and coherence to patterns of interaction between the two societies. From this perspective, the Canadian-American system might be likened to a "market mechanism"; that is to say, the network of linkages between Canada and the United States is so vast and intense that the co-ordination of common activities and the allocation of resources is somewhat automatic, resting heavily upon individual decisions made by private groups and organizations in a regional framework. Thus, integration in North America seems to have progressed from the "bottom up", being most prominent within the economic, social, and cultural spheres rather than the political and being characterized by a considerable diffusion of power throughout the system. On the other hand, integration in Western Europe appears on the surface to have followed the opposite path. It has been effected from the "top down" with the most significant developments occurring in the public sector and the relative concentration of power in formally-constituted supranational agencies.
In this context, it should be noted that most "theories" and models of regional integration posit a definite sequence of events in which the creation of intergovernmental organizations at the regional level is perceived as a precondition for "regional group formation". Nye, for example, argues that "once a regional integration scheme is established, it may serve as the stimulus for private groups to create various types of formal and informal regional organizations to reflect and protect their common interests at the regional level". Similar views are echoed by Haas in some of his earlier works. In short, "regional group formation" is considered a response to the development of intergovernmental organizations. At later stages or cycles of the integration process, however, the transnational organizations encompassing these private groups may act as important mechanisms in shaping the strategies, objectives, and decision-making styles of regional institutions and national actors.

This observation is largely based upon the experience of the EEC, and as such, it cannot be automatically presumed that the same relationship holds in all cases. In addition, some theorists do not appear to be wholly consistent in explaining and analyzing this sequence of events. A core assumption upon which most of these models rest is that economic and social integration precedes development in the political sphere. Some theorists even contend that the
mutual interactions shaping the processes of social and economic integration are "conducted through a vast network of interpersonal communications and intergroup exchanges". In this light, the assertion that "regional group formation" follows the creation of intergovernmental linkages appears to be rather tenuous. It seems far more likely that some sort of regional "pluralism" — that is, "the linking of national interest groups and elites in transnational structures, usually involving transnational organizations for purposes of co-ordination" — will emerge prior to any concerted attempt at political integration. The crux of the matter is simply that both the approach taken by traditional integration theorists and the viewpoint presented by this study may be quite accurate interpretations of institutional development in integration systems. Hypothetically, it does seem possible that, in different regional configurations, the sequence of events may be altered or reversed in accordance with the impact of unique factors or variables.

Finally, the regional systems in North America and Western Europe might be differentiated in terms of the range of functional tasks which are performed by regionally-involved actors. In both communities, joint activities tend to be concentrated in the economic sphere. Nevertheless, if initial impressions can be trusted, it might be argued that the search for collective capabilities
in the Canadian-American system is not primarily confined to this specific sector (as is the case in Western Europe) but spread over a slightly broader spectrum of functional classes.  

In view of these differences, there is an obvious need for further re-evaluation and modification of traditional approaches to the study of regional integration. More specifically, greater consideration must be given to the possibility that several outcomes or end-states may exist for the process and condition of integration. This viewpoint if it is accepted also gives rise to a number of interesting theoretical questions. To the extent that regional groupings such as North America and Western Europe constitute different models of integration, one can speculate that the mix of variables shaping communal relationships in each system may not be the same. Where labor mobility, for example, appears to have a significant impact upon certain patterns of collective and corporate activity in the Canadian-American system, it may not necessarily be an equally potent factor in the Western European context. Indeed the structural dissimilarities between the two systems intuitively suggest that environmental processes such as transaction flows may be far more crucial in determining integrative potential in North America than in the EEC.
This speculation, however, merely points out that a great deal more research is essential in this field of study before any broad understanding of the phenomenon of integration can be realized. In this respect, there are a number of directions which future research can take. Certainly, more extensive and thorough analysis of specific regional integration systems such as that in North America can provide important insights and invaluable data on the emergence and development of communal relationships. Moreover, a pressing demand exists for more comparative analysis of regional systems; only in this manner is it possible to arrive at truly incisive empirical generalizations and to build a comprehensive body of theory which can explain the process and condition of integration.

From this general perspective, therefore, the study undertaken in the preceding pages has not made any profound contribution to the subject of regional integration. It has merely attempted to introduce the subject matter and to establish the relevance of integration theory in analyzing the relationship between Canada and the United States. If in the course of examining this regional grouping it has stimulated some interest or shed some light on the phenomenon of integration, then the underlying goals and objectives of the study have been fulfilled.
SUGGESTIONS
FOR FURTHER RESEARCH

With respect to North America, a great deal of research is still required in a number of areas in order to fully understand the functioning of the system:

(1) More accurate data on the network of organizational linkages in North America can be compiled, and with greater precision in the description of this regional infrastructure, more incisive empirical generalizations can be developed.

(2) While more and more analysis is being devoted to Canadian and American public opinion on relations between the two countries, relatively little has been done on the attitudes and opinions of elite groups, especially those in the United States.

(3) The impact of various environmental processes such as transaction flows upon other dimensions of the process and condition of integration needs to be investigated. For example, can shifts in public opinion or variations in levels of collective decision-making be related to changes in environmental patterns and interdependencies?

(4) Although patterns of collective decision-making between national actors in Canada and the United States have been examined by several authors, there are no comparable studies of these patterns at the trans-societal and transgovernmental-subnational levels. The nature and extent of collective decision-making within the private sector has simply not been subjected to systematic analysis.

(5) Few if any attempts have been made to compare or contrast the dominant patterns of integration in different functional areas. More specifically, we do not know whether these patterns vary between the economic, socio-cultural, political-constitutional, and external sectors.
(6) In addition to the examination of specific sectors, a comprehensive multivariate analysis of the impact of environmental processes and inter-dependencies upon integration in North America would be invaluable in assessing the relative potency of different factors within this regional system.

Perhaps the most fruitful area for further research lies in the comparative analysis of regional integration systems. In this regard, the study undertaken in the preceding pages suggests several possible directions which descriptive and empirical inquiry might take:

(1) The growth of regional linkages in North America can be compared to that in other regional systems such as Western Europe. It would be particularly valuable to know the precise differences or similarities in structural composition in addition to the differences and similarities in the sequence of events which have characterized the evolution of these linkages.

(2) Extending upon this sort of analysis, one might also try to determine whether the relative potencies of factors such as transaction flows vary in shaping these different outcomes of the process of integration.

(3) Very little research has been done to evaluate the impact which variables such as socio-cultural similarity and status discrepancy have upon the development of integrative relationships. This study has intimated that similarities in social and cultural patterns as well as disparities in size and power hamper the process of "institutionalization" in regional integration systems. Nonetheless, these assumptive hypotheses must be confined to the realm of speculation until more substantive analysis is conducted.
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1. This distinction has been made by a number of writers. See, for example, Karl Deutsch, Nationalism and Social Communication, Cambridge, Mass.: MIT Press, 1966, especially pp. 1-14, 187-193; also Karl Deutsch, Nationalism and Its Alternatives, New York: Knopf, 1969, pp. 187-190.


6. Ibid.


8. Hoffmann, loc. cit.


10. Ibid.

11. Ibid., p. 49.


CHAPTER II CANADIAN-AMERICAN RELATIONS IN HISTORICAL PERSPECTIVE

1. Axline, Hyndman, Lyon, and Molot eds., op. cit.


3. Ibid., p. 10.

4. This point has been made frequently by a number of authors. See, for example, James Bayne, "Sharing A Continent: The Hard Issues", The United States and Canada, ed. John S. Dickey, The American Assembly, Columbia University, Englewood Cliffs, New Jersey: Prentice-Hall, 1964, pp. 72-73.


14. Ibid.


17. Canada's role as a "mediator" or "linchpin" within the North Atlantic area has been analyzed and critically appraised by a number of authors. See, for example,


21. Canadian-American Committee, op. cit., p. 3.


25. Ibid., pp. 17-23.


27. Ibid., pp. 7-11.

28. Ibid., pp. 3-6.

30. For a thorough treatment of the Reciprocity Agreement, see Donald C. Masters, The Reciprocity Treaty of 1854, Toronto: McClelland and Stewart, 1963; and Donald C. Masters, Reciprocity 1846-1911, Ottawa: Canadian Historical Association, 1961.


33. Ibid., p. 12.

34. Ibid., p. 13; also see Wade, op. cit., pp. 42-48.


47. Ibid., p. 53. Between 1940 and 1945, it has been estimated that the value of American assets in Canada jumped by 25 per cent.

48. Ibid., p. 52; also see Stacey, "Twenty-One Years of Canadian-American Military Co-operation", *op. cit.*, p. 104.


52. Ibid.


56. Ibid., pp. 5-6.

57. Ibid., pp. 6-22.

58. Ibid., pp. 22-38; also see Canada, Department of External Affairs, *Foreign Policy For Canadians*, Ottawa, 1970.

CHAPTER III THE CONCEPT OF INTEGRATION AND ITS RELEVANCE TO THE CANADIAN-AMERICAN SYSTEM


3. Ibid., p. 376.

4. Two important contributions to this alternate interpretation of the Canadian-American experience are Levitt, op. cit.; and Stephen Clarkson ed., An Independent Foreign Policy for Canada?, Toronto: McClelland and Stewart, 1966.

5. See Kenneth McNaught, "From Colony to Satellite?", Canadian Foreign Policy Since 1945: Middle Power or Satellite, ed. J. L. Granatstein, Toronto: Copp Clark, 1970, pp. 30-34.


7. Ibid., p. 11.


12. The concept of "symbiosis" is used to describe relationships of interdependence by Johann Galtung, op. cit., p. 376.


15. Ibid., pp. 386-387.


17. Ibid., p. 5.


19. Ibid.


22. Hughes, op. cit., p. 29.

23. Some recent publications provide notable exceptions to this general trend in studies of Canadian-American relations. See Axline, Hyndman, Lyon, and Molot eds., op. cit., and Fox and Herro eds., op. cit.

24. Ibid.


28. Ibid., p. 6.

29. Ibid., pp. 28-29.

30. One of the major criticisms of the communications or transactionalist approach is that it has assumed but never demonstrated the connection between institutional development and the rate of transaction flows. See William E. Fisher, "An Analysis of the Deutsch Socio-Causal Paradigm of Political Integration", International Organization, Vol. 23, No. 2, Spring 1969, pp. 254-290.


35. See, for example, Pentland, op. cit., p. 53; Haas, "The Study of Regional Integration: Reflections on the Joy and Anguish of Pretheorizing", op. cit., p. 22; and
Fisher, op. cit., p. 258.


40. This seems to be clearly implied by Deutsch in his earlier works. See, for example, Deutsch, "Communication Theory and Political Integration", op. cit., pp. 65-70.


43. This point is made by Cobb and Elder, op. cit., p. 20.


45. Ibid., p. 10.


52. Ibid.; p. 56.

53. Nye, Peace in Parts, op. cit., p. 44.


56. A summary of the federalist and neo-functionalist approaches and their view of institutional capacity in regional systems can be found in Haas, "The Study of Regional Integration: Reflections on the Joy and Anguish of Pretheorizing", op. cit., pp. 20-24; also see Pentland, op. cit., pp. 46-50.

57. Ibid.

58. The concept of collective decision-making will be discussed in greater length in the following section of this chapter. See pp. 83-88.


60. Ibid.


CHAPTER IV PATTERNS OF INTEGRATION IN NORTH AMERICA

1. This is a recurrent theme throughout the literature on Canadian-American relations as well as public statements of American and Canadian politicians on the subject. See, for example, Stacey, The Undefended Border, op. cit., p. 3. Public opinion surveys also lend some support to the contention that violent confrontation in North America is unthinkable to most Canadians and Americans. See Sigler and Goresky, op. cit., pp. 44-45.


4. Ibid., pp. 1-2.

5. Ibid.

6. This view has been forwarded by several authors in recent years. See, for instance, Wade, op. cit., pp. 53-54.


10. Ibid., pp. 44-45.

11. Ibid., pp. 73-75.


15. Lawrence J. Burpee, "Insurance for Peace", IJC Papers, Ottawa, 1929, p. 64.


18. Ibid., p. 286.


21. Chapter VI of this study presents an inventory of these regional organizations at the trans-societal level. In particular, see Table 1, p. 181.


23. Ibid., pp. 295-304.


26. Ibid., p. 301.


28. The most comprehensive work to date on this aspect of Canadian-American relations has been written by Roger Swanson, Canadian-American Summit Diplomacy, 1923-1973, Toronto: McClelland and Stewart, 1975.

29. Ibid., p. 15.


33. Ibid.

34. Ibid., pp. 389-394.


37. This discussion of "ranges of variation" is taken from the conceptual framework elaborated by Lindberg, "Political Integration as a Multidimensional Phenomenon Requiring Multivariate Analysis", op. cit., p. 53.

39. For a more comprehensive description of the various stages of collective decision-making, see Lindberg, "Political Integration as a Multidimensional Phenomenon Requiring Multivariate Analysis", op. cit., pp. 53-67.

40. Ibid.


CHAPTER V SPECIFICATION AND ELABORATION OF KEY CONCEPTS: INSTITUTIONAL CAPACITY AND TRANSACTION FLOWS


5. See, for example, Nye, Peace in Parts, op. cit., pp. 24-27; and Haas, "The Study of Regional Integration: Reflections on the Joy and Anguish of Pretheorizing", loc. cit.

6. Ibid., p. 28.

7. This observation is made by Haas. Ibid., pp. 27-28.

8. Most notable in this regard is the work of Cobb and Elder, op. cit., and Nye, Peace in Parts, op. cit.
9. See, for example, Lindberg, "Political Integration as a Multidimensional Phenomenon Requiring Multivariate Analysis", op. cit., pp. 45-51.


12. Ibid., p. 4.


14. These key assumptions are discussed in further depth by Cobb and Elder, op. cit., pp. 7-9.


20. Ibid., pp. 176, 196.


CHAPTER VI  REGIONAL INSTITUTIONAL LINKAGES IN THE LABOR SECTOR: OPERATIONALIZATION AND MEASUREMENT OF THE DEPENDENT VARIABLE


5. This threefold distinction is made by Haas, The Uniting of Europe, op. cit., pp. 33-37.


7. Ibid., pp. xii-xiii.

8. Ibid., pp. xiii-xiv.


10. See Lindberg, "Political Integration as a Multidimensional Phenomenon Requiring Multivariate Analysis", op. cit., p. 60; and Nye, Peace in Parts, op. cit., p. 42.

11. A few specific guidelines for constructing a list of issue areas and functional sectors can be found in Lindberg, "Political Integration as a Multidimensional Phenomenon Requiring Multivariate Analysis", op. cit., pp. 59-60.

12. Ibid., p. 61.

13. Ibid.

14. Ibid.


16. This definition parallels that provided by Jan J. Loubser, Canadian International Links in the Social
17. This conception of what linkages represent formally-constituted agencies is adapted from the criteria presented by the Union of International Associations, *Yearbook of International Organizations*, 15th ed., Brussels, 1974, pp. 15-16.

18. Ibid.

19. Ibid.

20. Ibid.


29. Source: Canada, House of Commons, Standing Committee on External Affairs and National Defence, *op. cit.*, pp. 64-67. The figure for total contacts excludes visits by defence personnel. Members of the military
establishment were involved in 14,070 exchanges for the period under consideration. Thus, the actual total for contacts is 28,834.


32. Ibid., pp. 116-118; and Caporaso, op. cit., p. 128.

33. Deutsch, Political Community in the North Atlantic Area, op. cit.

CHAPTER VII LABOR MOBILITY IN NORTH AMERICA:
OPERATIONALIZATION AND MEASUREMENT OF THE INDEPENDENT VARIABLE


2. Public acceptance of mobility as a way-of-life can be traced back to the late nineteenth century. See Canada, Royal Commission on Relations of Capital and Labour in Canada, op. cit.


8. See, for example, Peitchinis, *loc. cit.*


20. Peitchinis, op. cit., p. 54.
22. Barkin, "The Economic Costs and Benefits and Human Gains and Disadvantages of International Migration", op. cit., p. 496.
26. This statement is based upon information gathered from officials of the Department of Manpower and Immigration, Economics and Research Branch.
27. Information provided by the Department of Manpower and Immigration, Economics and Research Branch; also see Canada, Department of Manpower and Immigration, Economics and Research Branch, Immigration Statistics, Ottawa, 1975.
29. Ibid., pp. 56-57.
30. Ibid., p. 57.
31. This approach to dyadic analysis is more fully described by Cobb and Elder, op. cit., pp. 61-63.
32. Ibid., p. 63.
33. These analytical and operational attributes of transaction flows are treated in depth by Puchala, "International Transactions and Regional Integration", op. cit., pp. 129-136.
34. Ibid., p. 131.
37. Ibid., pp. 137-139.

CHAPTER VIII MULTIVARIATE ANALYSIS OF LABOR MOBILITY AND INSTITUTIONAL CAPACITY IN NORTH AMERICA

2. With respect to the potential effects of integration upon labor mobility, see Reid and Hunter, op. cit., pp. 195-196.
3. Guidelines for using time-lag and time-leading comparisons can be found in Gurr, op. cit., pp. 161-165.
4. The nature and the utility of the Pearson product-moment correlation is discussed in some depth by Gurr. Ibid., pp. 135-137.
5. Ibid., p. 135.
6. Ibid.
7. Ibid., p. 150.
8. Ibid., p. 151.
10. Ibid., pp. 190-191.
11. Gurr, op. cit., p. 43.
12. Ibid., pp. 43-44.
13. Ibid., p. 44.
14. There are several tests of validity which the researcher can employ to satisfy this requirement of quantitative analysis. These are given a concise and thorough treatment by Gurr, op. cit., pp. 43-48, and Garson, op. cit., pp. 165-169.
15. This point is made by Gurr, *op. cit.*, p. 45.

16. Ibid., p. 44.


21. Ibid.

22. Ibid.


25. Ibid., p. 341.

26. Ibid.


28. Several methods for detecting the presence of multicollinearity are examined by Rao and Miller, *op. cit.*, pp. 46-47.


31. This observation is made by Beal, *op. cit.*, p. 345.

32. Ibid.


34. An excellent empirical study of the effects of these different factors upon labor mobility has been produced by Vedder and Gallaway, *op. cit.*

35. See, for example, Crispo, *op. cit.*, pp. 4-5.

CHAPTER IX INTEGRATION IN NORTH AMERICA: CONCLUSION


2. With respect to processes of consultation, bargaining, and negotiation between governmental actors in Canada and the United States, see Holsti, "Canada and the United States", *op. cit.*, pp. 375-396.


5. See, for example, Haas, *The Uniting of Europe, op. cit.*, pp. 9-10.


10. A comprehensive analysis of the functional scope of collective and corporate activity in the EEC has been provided by Lindberg and Scheingold, Europe's Would-Be Polity, op. cit., pp. 64-82.

11. This argument has been forcefully presented by Haas, "The Study of Regional Integration: Reflections on the Joy and Anguish of Pretheorizing", op. cit., pp. 26-32.

12. The question of the mix of variables which shapes the process of regional integration has also been raised by Haas. Ibid., p. 28.
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Methods of Quantitative Analysis


**Government Publications and Sources of Data**


### APPENDIX A

#### KEY TO SYMBOLS:

**INDICES OF THE INDEPENDENT AND DEPENDENT VARIABLES**

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLE</th>
<th>DEPENDENT VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Transaction Volume</td>
<td>Raw Data Scores</td>
</tr>
<tr>
<td>$ATV_1$ Absolute volume of Canadian migration to the U.S.</td>
<td>$TOT_1$ Total number of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>$ATV_2$ Absolute volume of American migration to Canada</td>
<td>$ACT_1$ Actual number of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>$ATV_3$ Absolute volume of total continental migration flows</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Composite Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>$CON_1$ Concentration of Canadian immigrant arrivals</td>
<td>$TOT_2$ Total number of amalgamated and pluralistic linkages created in the labor sector</td>
</tr>
<tr>
<td>$CON_2$ Concentration of American immigrant arrivals</td>
<td></td>
</tr>
<tr>
<td>$CON_3$ Concentration of total continental migrants</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Penetration</th>
<th>Proportional Transformations</th>
</tr>
</thead>
<tbody>
<tr>
<td>$PEN_1$ Penetration of Canadian immigrant arrivals</td>
<td>$PRO_1$ Proportion of &quot;international&quot; trade unions created</td>
</tr>
<tr>
<td>$PEN_2$ Penetration of American immigrant arrivals</td>
<td>$PRO_2$ Proportion of amalgamated and pluralistic linkages created in the labor sector</td>
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<tr>
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<td>$GR_1$ Rate-of-change in the actual number of &quot;international&quot; trade unions</td>
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<td>$ROC_2$ Percentage change in the volume of American migration</td>
<td>$UR_2$ Rate-of-change in the actual number of amalgamated and pluralistic linkages in the labor sector</td>
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<td>$ROC_3$ Percentage change in the volume of total continental migration flows</td>
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### APPENDIX B

**TIME SERIES DATA**

**TOTAL REGIONAL LINKAGES CREATED IN THE CANADIAN-AMERICAN SYSTEM**

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* Estimate based on partial data
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