

TAXONOMIC REPORT ON A  
CONCEPTUAL FRAMEWORK  
FOR INTERNATIONAL FORECASTING

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## INTRODUCTION

This paper attempts to construct a conceptual framework for the systematic analysis of international phenomena. This framework could become a standard form within which policy analysis, conditional forecasting, scenario building and tendential development could be carried out. The ultimate purpose of these activities being to systematize the foreign policy making process. This assumes that a more methodical consideration of all significant factors, trends, patterns and relationships in international events will improve one's capacity to forecast probable demands and plan policy responses.

The analysis of this paper complements the methodology proposed in another paper of this series. The forecasting-planning procedure outlined in that study, along with the conceptual framework presented here combine to form a comprehensive approach to policy-oriented research. At the same time it stresses a future-oriented and system-oriented attitude to world affairs. The emphasis on these three orientations should ensure a multi-faceted and exhaustive consideration of international issues in a broad, dynamic and anticipatory perspective.

To do so, the following study is divided into three chapters. The first deliniates three dimensions around which the analysis is to be made. These dimensions combined form the cartesian coordinates of an analytic field in which any particular subject could be treated. The second chapter explains the permutations of this three-dimentional construct into three matrices of cross-cutting categories. These, in effect, form the facets of our framework and relate it to the forecasting-planning methodology already mentioned. Finally, the third chapter tries to apply this structure and method to the administrative operations of DEA; concluding with the outlines of a possible case study example along these lines.

## I, DIMENSIONS (Analytic Coordinates)

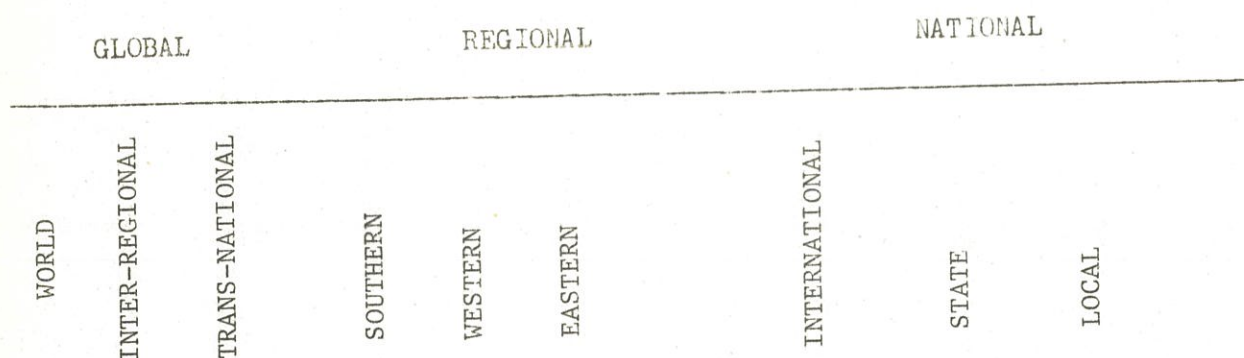
To begin with, a systematic study of any complex field requires a careful analysis of the subject matter into its component elements. In the case of international affairs, our analysis will utilize a three-dimensional framework, within which could be found all the required factors of the world system. The dimensions chosen here are: space; time; function; because they seem to cover the entire range of significant indices. The following sections will explain each of these dimensions in turn.

### 1. Spatial Dimension: (Geographic Levels)

International relations operates within the geographical space of the world in various senses. The most obvious is through the international boundaries that separate the political units which form its membership. In addition to this, however, there are other significant levels of world interaction: transnational; intercultural; intraregional; subnational; supranational; and other similar arenas of public activity.

Perhaps, the simplest way to categorize these levels would be into: national; regional; global. These three broad categories would divide all events of international importance according to their spatial extent: i.e., whether they focus primarily around a state, a group of states, or the world in general. Within each of these levels, one could define further arenas of concentrated activities. Thus, around the national focus, there may be subnational, national, or international events. The regional focus could be subdivided to reflect the actual tripartite separation of the world into East, West, and South; or First, Second and Third World. Finally, the global level could include broadly transnational activities, inter-regional relations, and world affairs in general.

Putting all these arenas in a continuum of relative broadness, one ends up with the following range:



Although there are a number of ways in which international affairs could be categorized, this particular breakdown combines theoretical criteria with practical issue-areas. Thus, it covers the principal arenas where the present crucial issues of the world are being fought.

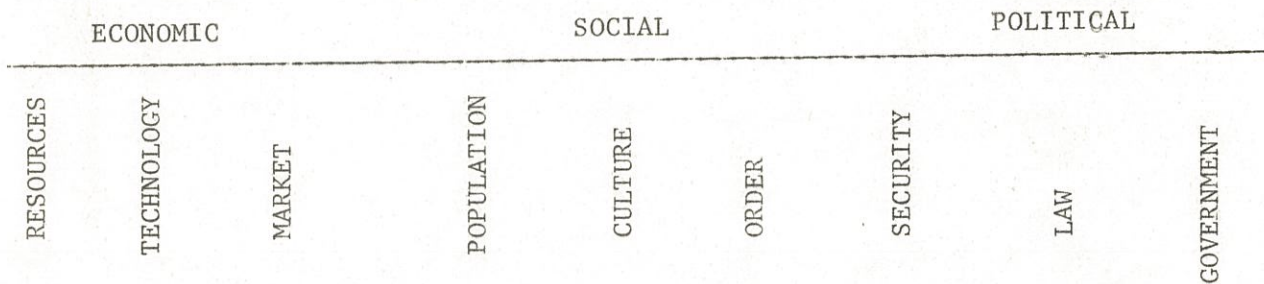
2. Functional Dimension: (Thematic Categories)

The second dimension of our schema deals with the functional aspects of international relations. This dimension covers the thematic content of world affairs, and so distinguishes public issues on the basis of their subject-matter. Thus, the simplest classification in this dimension could be the classical trichotomy of economic, social, and political activities. These three areas can be defined to cover the whole range of human interactions, so that any event falls within one or the other areas.

The three functional areas are so broad that they should be subdivided into more operational sectors in the same way as the three spatial levels. Thus the economic field could cover subjects relating to environment or resources; technology or industry; and the market or trade. The social field would then cover the demographic, cultural, and structural aspects of

international affairs. These would include population, labour, health, education, social stability and change. Finally, the political field should deal with matters of security or defense, law or regulations, and authority or government. In this way, world issues will be divided according to whether they involve mainly the production and distribution of wealth (goods and services); the structures and processes of human groups (social welfare and justice); or the institutions and dynamics of public policy-making (Power and participation).

These classifications could be arranged along a continuum of relative dependence. This range would correspond to the familiar concepts of infrastructure; structure; and super-structure of social systems. The following line illustrates one possible consecutive arrangement.



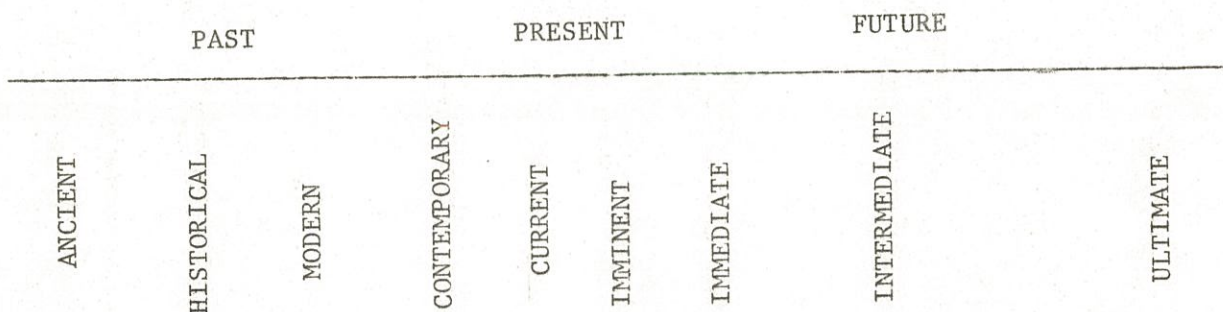
For purposes of this model, the relationships indicated above are only approximate. What is more important is their correspondence to actual areas of foreign policy concern. In this sense, together with the regional divisions, these functions cover all eventualities.

### 3. Chronological Dimension: (Time Periods)

The third dimension of this model introduces the time element into the analysis of world affairs. Events happen at different points in time, so they are related to each other not only in space and function, but in their chronological sequence. In terms of this study, the chronology of

international events is best divided into past, present and future. These three time periods separate contemporary affairs from those that preceded and those that will follow them. The present can, therefore, be indefinitely extended both backwards and forwards in time.

According to this scheme, one can study international relations historically, then analyze current events empirically, and finally try to forecast future possibilities speculatively. The time range for any of these activities may vary according to its proximity to the present, all the way from the distant past to the far-away future. This time continuum is shown in the usual manner as follows:



The chronological divisions, of course, may be as broad-gauge or finely-focused as desirable. Historical studies may be very particular in space, time and function; or perform broad sweeps of universal historical eras.

Similarly, the daily operations of governments have to consider world events of different subjects and regions. For purposes of forecasting and planning, the time range is progressively extended from a few months to many years and even decades. In this specific case, forecasting world events will be limited between five and ten years, in order to keep within the bounds of feasible policy-planning.

The basis of forecasting is trying to establish chronological patterns. If a sequence of events can be discerned, then it might be projected from the past into the future. The difficulty here, of course, is to

decide whether the pattern is linear, cyclic, variable, or exponential. In any case forecasting methodology is a complex subject which has been covered extensively in the previous report. What remains to be done here is to fit this method in the present framework.

#### 4. Operational Method: (Procedural Steps)

Without going into details, the forecasting method in question comprises a three-step process. The first step focuses on the determination of past trends which have brought events to their present position. This step requires some knowledge of history, the possession of quantifiable data over a period of time, and some tentative hypothesis by which to interpret the facts. On the basis of these givens, one can attempt a historical analysis, both quantitatively and qualitatively, which should result in the development of some trends.

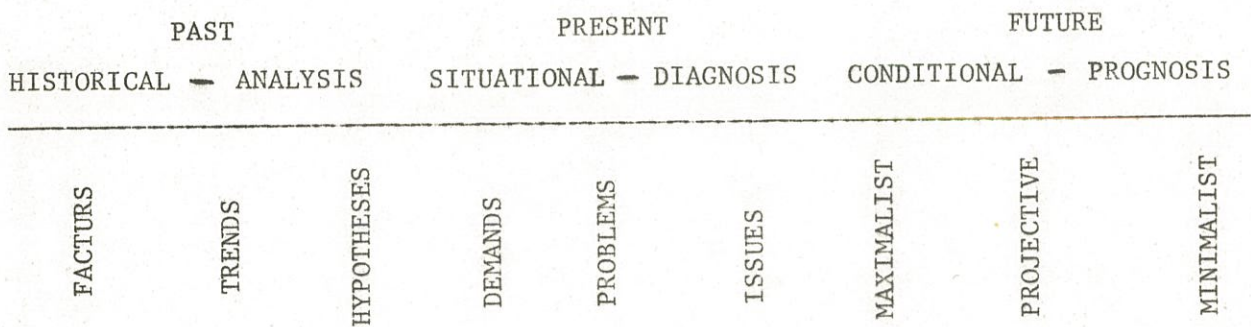
The second step consists of a situational diagnosis of the present conditions. This means that the analyst must try to find the critical problems of the world which could be turning points of history. To do this, one has to calculate the demands and pressures for change against the resistance and obstacles of the status quo. These contradictions and discrepancies among the various opposing forces in the world shape the ongoing issues whose resolution will determine the direction of the future.

Finally, the third step involves the speculation upon the alternative outcomes of present issues. Methodical forecasting must take into consideration the results of both historical analysis and situational diagnosis, correlate different trends and their impact upon each other, and then build scenarios of their possible evolution. The various methods existing for this type of activity present a wide choice depending on the givens of the particular case. In general, however, the main alternative



outcomes can be grouped within three types of scenarios: upper-limit of possibility (maximal developments); probable projection (surprise-free evolution); and lower-limit of possibility (minimal or inverse change). These three alternatives assume either that trends will accelerate and strengthen; decrease and perhaps reverse; or they will continue as before. Subjectively speaking, these three possibilities may be labeled as optimistic, pessimistic, and realistic scenarios, depending on what one considers better, worse or indifferent outcomes.

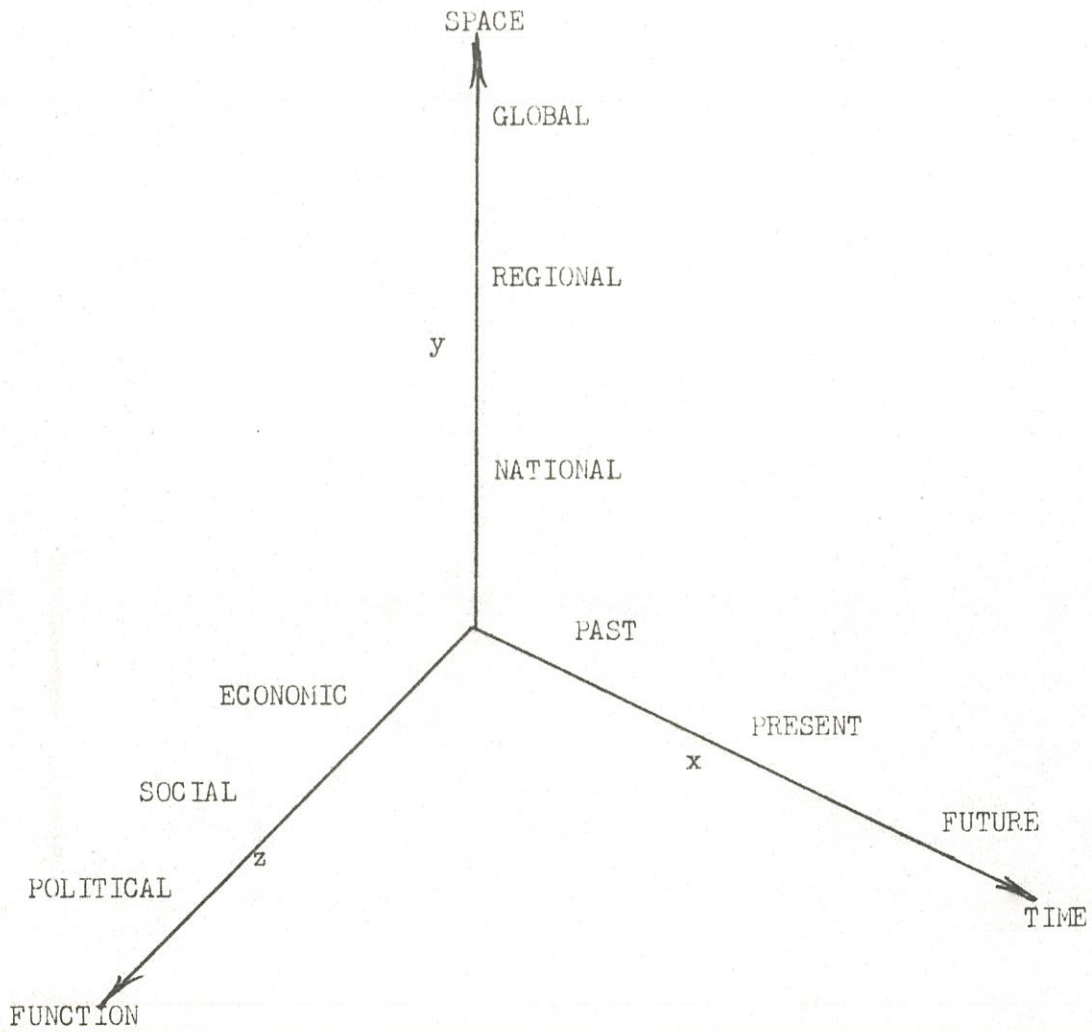
Using the spectrum diagram again for the sake of consistency, the operational method will be superimposed on the time continuum thusly:



This one-dimensional rendition of the two-dimensional diagram which appeared in the previous report, is obviously a simplification of the forecasting process. Whether the simple or the complex method should be used will depend upon the availability of time and effort. For this exposition however, the above simplification is both sufficient and usefull because it is interchangeable with the chronological dimension.

As we will see later on, it is advantageous to coincide the chronological and the methodological dimensions in order to keep within a more manageable three-dimensional rather than a four-dimensional operation. When this is done, we can construct the diagram shown on the following page. In it, space, function and time-operation become the three field coordinates

THREE-DIMENSIONAL  
FIELD DIAGRAM



Space-Time-Function Coordinates

of a cartesian space. Within this space, one can locate any subject, anywhere at any time, and thus analyze its position from various aspects. We shall therefore adopt this three-dimensional framework for our present study.

## II. CORRELATIONS (Two-dimensional fields)

Having established the preceding three-dimensional framework, we can now proceed to analyse its implications. This will be done by correlating the three possible dual combinations of these dimensions: i.e., space-time; space-function; function-time. Each of these three dyads gives us a two-dimensional field within which one may correlate the various factors of each dimension. In the following sections, we shall take each of these fields in turn and indicate the use of which it can be put.

### 1. Space-Function Field:

The first dyad to be considered correlates the spatial with the functional continuum. By placing these two dimensions at right angles to each other, we have the matrix which appears below. The three spatial levels and the three functional categories of each dimension result in a 3x3 matrix of nine issue areas (i.e., Global economic; regional social; national political, etc). Since each of these levels or categories is further subdivided into three types, the total combinations add up to 81, or a 9x9 matrix. Each of the above areas is thus divided into nine boxes containing particular issues. Within the regional economic area, for instance, one can find energy problems of the western countries (a-vi); technological problems of socialist countries (b-v); or trade problems of the third world (c-iv).

FUNCTIONAL x SPATIAL MATRIX \*

| S      | F               | ECONOMIC (WEALTH) |               |              | SOCIAL (WELFARE)  |          |                 | POLITICAL (POWER) |            |            |      |
|--------|-----------------|-------------------|---------------|--------------|-------------------|----------|-----------------|-------------------|------------|------------|------|
|        |                 | RESOURCES         | TECHNOLOGY    | MARKET       | POPULATION        | CULTURE  | ORDER           | SECURITY          | LAW        | GOVERNMENT |      |
| GLOBAL | WORLD           | UNEP<br>IAEA      | UNCTAD<br>ITU | WHO<br>UNFPA | UNESCO            | INTERPOL | SALT<br>CCD     | ICJ<br>UNCLOS     | UNGA       |            | ix   |
|        | INTER<br>BLOC   | MEC               | COLONEC       | CIEC         | COMMON-<br>WEALTH | ICRC     | MEFR            | CSCE              | IPU        |            | viii |
|        | TRANS<br>NATION | EXXON             | INGO's        | TNE's        | ISSA              | PIO      | IPRA            | ILA               | UMFA       |            | vii  |
|        | WEST            | IEA               | OECD          | GATT         | ICFTU             | ICDO     | NATO            | IFEL              | HANSARD    |            | vi   |
|        | EAST            |                   | COFECON       | CMEA         | COMINTERN         |          | WPC             |                   | DANUBE     |            | v    |
|        | SOUTH           | OPEC              | AFCAC         | CSTDC        | ALO               | UNEP     |                 | AALCC             | "77"       |            | iv   |
|        | INTER<br>NATION | EURATOM           | ECLA          | EEC          | ICEM              | C of E   | OAS             | NORAD             | ECHR       | UNTEA      | iii  |
|        | STATE           | DEMER             | CIDA          | IT&C         | MANDI             | CUSSO    | RCMP<br>UNFICYP | DND               | PARLIAMENT | BNAA       | ii   |
|        | LOCAL           | HYDRO             | ICILD         |              | ICSW              | IFSNIC   | IRA             | CIVIL<br>DEFENCE  | ASSEMBLY   | P.Q.       | i    |

\* TIME is kept constant at the PRESENT. Examples illustrate Conflict Arenas.

a b c d e f g h i j

It is, of course, possible to sub-divide each of these categories further and thus multiply the number of boxes in the matrix. The state level, for instance, could be divided into 150 units, one for each of the states of the world. Similarly, the population category could be divided into demographic parameters, so that one could look into the immigration problems of Canada or the labour problems of the Common Market. In this case, we have not gone so far because the matrix would have become unmanageable. It appears that the 9x9 matrix fits best our purposes of medium-gauge analysis and avoids both the indiscriminate platitudes of the broad-gauge (3x3) matrix and the innumerable details of further subdivisions.

In order to illustrate the contents of the Matrix, we have in this case chosen examples from some arenas in which the various world problems are being considered. Thus, it is easy to see that the European Conference on Mutual & Balanced Forces Reduction is an inter-regional negotiation to resolve security problems between NATO and the Warsaw Pact (g-viii).

In reality, of course, it is difficult to find a one-to-one correspondence between analytic categories and actual institutions. Certain issue areas may not have a permanent arena which is specifically designed to handle them. Strictly speaking, then, some boxes may be empty, because the issues in these areas are handled by ad hoc contracts or fall within the jurisdiction of related multi-functional organizations. Thus the Conference on International Economic Cooperation deals with trade as well as resources. On the other hand, certain issue areas are covered by many institutions; as in the case of population (d-xi) where there is an overlapping involvement of WHO, ILO, and other Specialized Agencies. In general, the more activity there is in a particular area, the more important the issues of that area appear to the international community.

By choosing any two of the three dimensions, one implicitly decides to hold the third one constant. Thus, in this case of space-function analysis, we have assumed the time to be the present. This need not have been so. One could have used this same matrix to illustrate the issues of a different historical era. Thus, if we had chosen the interwar period (1920-40), the example for (a-ix) would have been the Permanent Court of International Justice rather than the present International Court of Justice. Looking ahead rather than back, one could forecast a matrix for the future in which the proposed International Regime for the Seas would occupy the central place in (a-ix). In the same manner, the matrix could be used to analyse any of the nine items of the chronological dimension, or any subject for that matter. As we shall see in the next section, a similar operation can be performed with the other dimensions.

## 2. Space-Time Field:

For our second dyad we have chosen space-time. To arrive at this correlation, one may take the previous space-function matrix and replace the functional with the chronological dimension. By doing so, time becomes a variable, while function now is kept constant. The new matrix thus correlates the nine levels of the spatial dimension with the nine operational steps through time. It will be recalled that the time dimension was juxtaposed with the methodological in order to keep the analysis three-dimensional. For that reason, the nine operations are superimposed on the three chronological eras: past, present and future.

Looking at the time-space matrix below, one can locate any international subject according to its space-time coordinates. Thus recent trends in the third world will be found in 2-iv; while the future of the of the East-West conflict can be projected in three alternative scenarios:

T I M E x S P A C E M A T R I X \*

| S               | T               | PAST (HISTORICAL) |               |                | PRESENT (SITUATIONAL) |                 |                    | FUTURE (CONDITIONAL) |                |                |              |           |     |
|-----------------|-----------------|-------------------|---------------|----------------|-----------------------|-----------------|--------------------|----------------------|----------------|----------------|--------------|-----------|-----|
|                 |                 | FACTORS           | TRENDS        | ASSUMPTION     | DEMANDS               | PROBLEMS        | ISSUES             | POSITIVE             | NEUTRAL        | NEGATIVE       |              |           |     |
| G L O B A L     | WORLD           | U.N.              | Radical       | Reflective     | Redistribution        | Inequality      | Justice            | Consensus            | Status Quo     | Conflict       | ix           |           |     |
|                 |                 | East-west         | Detente       | Convergence    | Deterrence            | Arms Race       | Parity             | Entente              | Balance        | Cold War       | viii         |           |     |
|                 |                 | INTER BLOC        |               |                |                       |                 |                    |                      |                |                |              |           |     |
|                 | TRANS NATION    | INGO's            | Proliferation | Function-alism | Regulation            | Overlap         | Public-Private     | Cosmopolitanism      | Penetration    | Irrelevance    | vii          |           |     |
|                 |                 | WEST              | ECC           | Supra-national | Integration           | Account-ability | Power Distribute   | Juris-diction        | Federation     | Con-federation | Nationalism  | vi        |     |
|                 |                 | EAST              | Sino-Soviet   | Deterioration  | Rivalry               | Accommodation   | National Interests | Ideology             | Rapprochement  | Cold war       | Border Clash | v         |     |
|                 | R E G I O N A L | SOUTH             | Africa        | Decolonization | Nationalism           | Independence    | South African      | Majority Rule        | Black Rule     | Bantustans     | Apartheid    | iv        |     |
|                 |                 |                   | INTER NATION  | Arab-Israel    | Protraction           | Power Balance   | Armistice          | Palestine            | Boundaries     | Peace          | Deadlock     | War       | iii |
|                 |                 |                   | STATE         | Sovereignty    | Autonomy              | Socialization   | Decision-Making    | Govern-ability       | Participa-tion | Coopera-tives  | Activism     | Isolation | ii  |
| N A T I O N A L | LOCAL           | Ireland           | Extremism     | Polarization   | Settle-ment           | Minority        | Self-determination | Republic             | Protraction    | Annexation     | i            |           |     |

1                      2                      3                      4                      5                      6                      7                      8                      9

\* FUNCTION is kept constant in POLITICAL arena.

optimistic (7-viii); surprise-free (8-viii); and pessimistic (9-viii). In this way, one may perform a longitudinal analysis of a given topic at any geographical region. By introducing the time element, the new matrix can now apply to the forecasting process; whereas the space-function matrix could only provide a snap-shot picture of world events at some particular time.

In order to illustrate the space-time matrix, we have selected some salient issues which have dominated the world in recent years (column 1). These topics, and all other items presented in the matrix, are for illustrative purposes only, and should not be judged as to their substantive validity. Many other topics could have been chosen instead, and different factors could be taken to follow their analysis across the matrix. For lack of space, the particular examples are shown by key words rather than a longer explanation. Thus, the example in row-v, indicates that the deteriorated sino-soviet relations in recent years are postulated upon a neighbouring power-center rivalry. The main problem at present involves the national interests of the two states compounded with ideological issues. Depending on whether both sides want to settle or not this situation, the alternative outcomes could be either a deterioration of the differences into conflict, a continuation of their cold war, or rapprochement. In the same way, other examples could undergo time-space analysis, keeping function constant (in this case at the political level).

### 3. Time-function Field:

The final dyad remaining to be analyzed correlates time and function. Here we replace the spatial with the functional dimension, so that we can trace the development of any function along time. The nine functional topics are thus treated according to the forecasting method that appeared in



the previous matrix. The difference here is that geography is no longer a variable, but is kept constant at a particular level. In the examples that illustrate the new matrix, the space was focused at the state level and applies to Canada in particular.

The following 9x9 matrix shows the longitudinal analysis of various functions, taking into account past developments, present conditions, and future projections. Thus recent cultural trends in Canada are shown in 2-e; while present energy problems involve waste of non-renewable resources (5-a); and the future 200 mile limit of territorial waters ogurs the universal adoption of such legislation by the international community. Our procedure, therefore can cover economic, social and political problems at any level of spatial analysis.

Comparing the time-space with the time-function matrices one notices that a time-space matrix could be constructed to correspond with each item of the functional continuum and conversely a time-function matrix applies to each of the levels of the spatial continuum. This means that time, which is the common element in both fields, allows for a longitudinal analysis of either space, function or a combination of the two. Thus the same gamut of functions could be specified for all states in addition to the one we have made for Canada. Thus, if one were to take the regional rather than the national level of analysis; the demographic problems of the third world would be the reverse of those shown in row-d for Canada.

In any case, whether one chooses a functional or a regional framework, the forecasting method would be equally applied along the chronological dimension. As the examples in both the preceding and the following matrices show, any public issue wherever it may happen can be traced longitudinally from the past to the future. The purpose in both cases is to forecast probable alternatives. Taken together, the three columns (7-8-9)

T I M E \* F U N C T I O N M A T R I X<sup>35</sup>

| T   | PAST (ANALYTIC) |                       |                        | PRESENT           |                         |                    | FUTURE (PROGNOSTIC)  |                      |                      |                   |                 |                 |                 |                 |                      |                   |                 |                 |                 |
|---|-----------------|-----------------------|------------------------|-------------------|-------------------------|--------------------|----------------------|----------------------|----------------------|-------------------|-----------------|-----------------|-----------------|-----------------|----------------------|-------------------|-----------------|-----------------|-----------------|
|   | FACTORS         | TRENDS                | ASSUMPTION             | DEMANDS           | PROBLEMS                | ISSUES             | POSITIVE             | NEUTRAL              | NEGATIVE             |                   |                 |                 |                 |                 |                      |                   |                 |                 |                 |
| E<br>C<br>C<br>O<br>N<br>O<br>M<br>I<br>C | RESOURCES       | Reserves              | Extraction             | Scarcity          | Availability            | Waste              | Cost                 | Quality              | Vulnerability        | Exchange          | Competition     | Migration       | Control         | Labour          | Affluence Birth Rate | Z.P.G.            | Demo-<br>graphy | POPULA<br>TION  |                 |
|   | TECHNO<br>LOGY  | G.N.P.                | Industrial-<br>ization | Complex-<br>ity   | Employ-<br>ment         | Employ-<br>ment    | Third<br>Option      | Dependence           | Diversifi-<br>cation | Trade             | MAPAET          | POPULA<br>TION  | Demography      | COMMUNIC        |                      |                   |                 |                 |                 |
|   | CULTURE         | Community-<br>ization | American-<br>ization   | Control           | Mass<br>Media           | Identity           | Restriction          | Assimila-<br>tion    | Mixture              | Mosaic            | Authority       | Instability     | Revolt          | Criminality     | Migration            | De-<br>population | Immigration     | Emigration      |                 |
| S<br>O<br>C<br>I<br>A<br>L                | ORDER           | Conflict              | Con-<br>frontation     | Anomie            | Justice                 | Terrorism          | Identity             | Revolution           | Revolt               | Instability       | Authority       | Emphasis        | Emphasis        | Authority       | Instability          | Revolt            | Criminality     | Migration       |                 |
|   | SECURITY        | NATO                  | Deescalation           | Deter-<br>rence   | Alliance                | Military<br>Budget | U.S.<br>Canada       | Over-laps            | Minimiza-<br>tion    | Emphasis          | Emphasis        | Emphasis        | Emphasis        | Emphasis        | Emphasis             | Emphasis          | Emphasis        | Emphasis        | Emphasis        |
|   | LAW             | Territorial<br>Waters | Extension              | Law of<br>the Sea | 200 Mile<br>Declaration | Fishing            | Quebec               | Self-<br>determinism | Independence         | Re-<br>constitute | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism      | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism |
| P<br>O<br>L<br>I<br>T<br>I<br>C<br>A<br>L | GOVERN<br>MENT  | Federalism            | De-<br>centralize      | Nationalism       | Provinci-<br>alism      | Quebec             | Self-<br>determinism | Independence         | Re-<br>constitute    | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism      | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism |
|   | GOVERN<br>MENT  | Federalism            | De-<br>centralize      | Nationalism       | Provinci-<br>alism      | Quebec             | Self-<br>determinism | Independence         | Re-<br>constitute    | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism      | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism |
|   | GOVERN<br>MENT  | Federalism            | De-<br>centralize      | Nationalism       | Provinci-<br>alism      | Quebec             | Self-<br>determinism | Independence         | Re-<br>constitute    | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism | Central-<br>ism      | Central-<br>ism   | Central-<br>ism | Central-<br>ism | Central-<br>ism |

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\* SPACE is kept constant for Canada.

of the future conditional should give an overall picture of where the world may be going.

4. Three-dimensional combination:

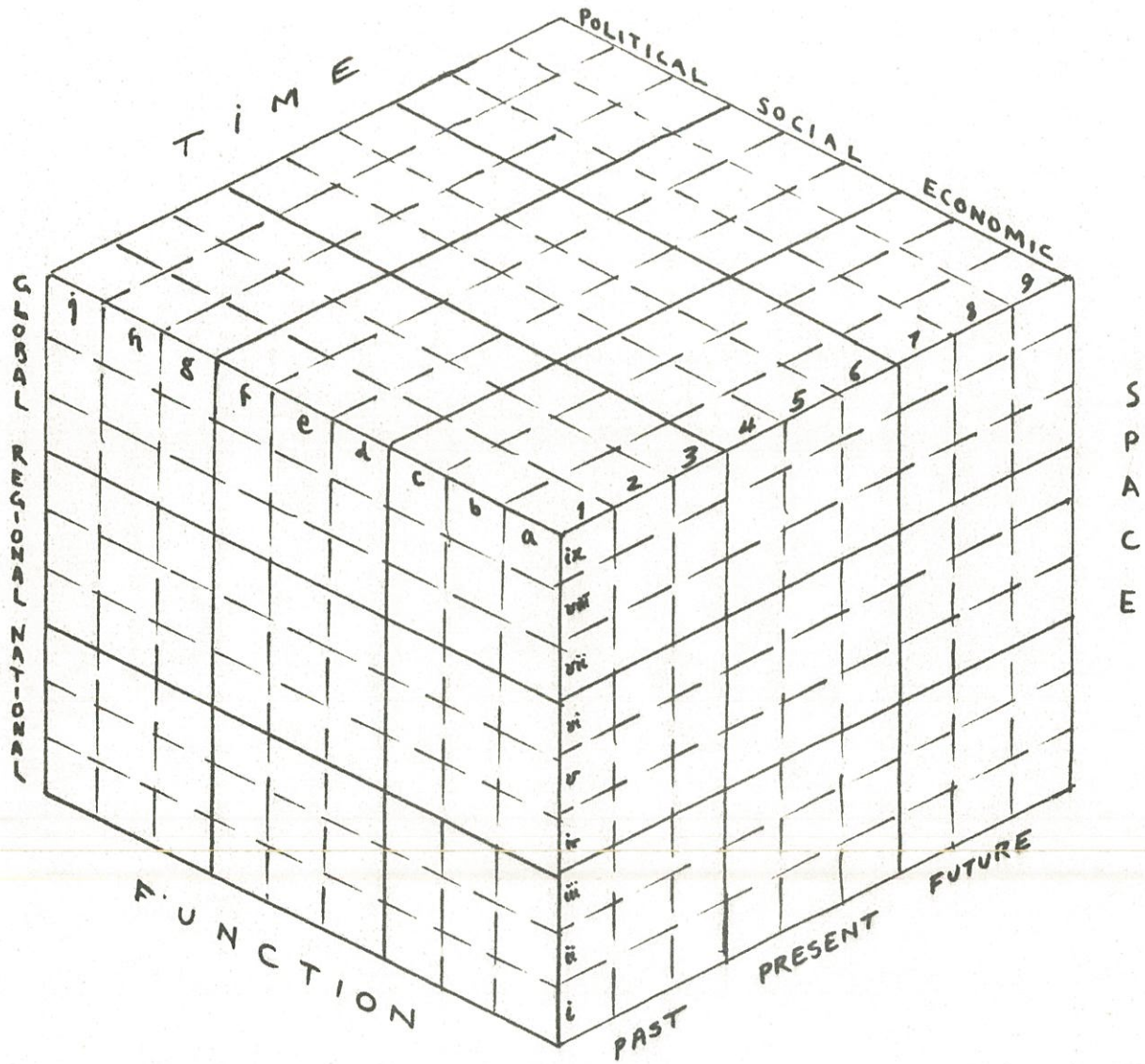
The three dual correlations we have made so far can be combined into a three-dimensional structure. In the same way as we combined the three continua into the cartesian framework, we can now place the three fields in right angles to each other to form the cube below. The new structure is the logical extension of the previous framework and as such completes the conceptualization of this study.

Looking at the diagram below, it is easy to see that it is a 9x9x9 cube, whose sides are the matrices we have already discussed. When one continues the two dimensional analysis that we performed for the matrices into a three-dimensional analysis required in this case, the interpretation follows without much difficulty. Any topic can be located according to its time-space-function (x-y-z) coordinates within the confines of our structure. Thus, Canada's activities in NATO for the past decade can be traced in 2-g-ii, which includes all national defense trends. Conversely, within the definition of critical problems of the trans-national social order, (5-f-vii) one could place the terrorist activities of the present.

Using the above coordinates, one could try to forecast the possible outcomes of contemporary issues. For the ones given in the preceding paragraph, the foreseeable future could be found within the bounds of 7-g-ii; 8-g-ii; or 9-g-ii; and 7-f-vii; 8-f-vii; or 9-f-vii respectively. Similarly, by utilizing the simplified forecasting methodology, one could attempt to analyse past, present and future developments of economic, social or political issues at the national, regional and global levels.

THREE DIMENSIONAL ANALYTIC STRUCTURE

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S-T-F CUBE

### III. APPLICATIONS (Structural Correspondence)

The policy analysis framework which we have built along with the forecasting methodology that goes with it, should now be applied to the operating structures of government. Since concepts and methods are politically useful to the extent that they apply to decision-making; we must find some correspondence between our analytic constructs and the actual policy process in the DEA. The concluding sections of this report, therefore, will attempt to explain how theory can fit into practice, at least in so far as the Canadian experience is concerned.

#### 1. Regional-Functional Organization:

It does not require too much imagination to see that the conceptual framework which we have proposed reflects fairly closely the existing organization of the DEA. The spatial-functional matrix corresponds approximately to the regional and functional units of administration. An exact coincidence, of course, is both unnecessary and undesirable because both concepts and practices keep changing along with circumstances. One should, therefore, interpret any correlation between the two in a flexible and dynamic way.

In order to illustrate the correspondence between the spatial continuum, which we have shown previously, and the regional structure of the Department; we are juxtaposing the two in the table on the following page.

|                | GLOBAL LEVEL   | DEPARTMENT                        |
|----------------|----------------|-----------------------------------|
| WORLD          |                | MIN: PDM                          |
| INTER-BLOC     |                | BUREAUX                           |
| TRANS-NATIONAL |                | GAP; GPP; GEP; GWP                |
|                | REGIONAL LEVEL | DIVISIONS                         |
| SOUTHERN       |                | GAA; GAF; GAM; GPL; GPS; GWL; GWC |
| WESTERN        |                | GPO; GEC; GEO                     |
| EASTERN        |                | GEA                               |
|                | NATIONAL LEVEL | SECTIONS                          |
| INTER-NATIONAL |                | GWU; COUNTRY DESKS                |
| STATE          |                |                                   |
| LOCAL          |                | CSP; FCO; FPO                     |

According to the above table, the three analytic levels (Global; Regional; National), correspond to the principal administrative levels (Bureaux; Division; Section). Four Bureaux deal with the inter-regional level; while their eleven geographical divisions concentrate on the intra-regional level. Above and below these levels, of course, are to be found the Ministerial offices at the top and the country desks on the bottom. At these two extremes the geographic units cross-cut the functional. Senior positions tend to be multi-functional as well as global; and conversely, certain functional roles focus primarily on the local level (ie., Consular; Inter-provincial; Public Services).

To complete the picture, we should also show the correspondence between the conceptual and actual sub-divisions in the functional areas. Using the same tabular form as the regional comparisons, we have:

### ECONOMIC FUNCTIONS

|            |          |
|------------|----------|
| RESOURCES  | ECS      |
| TECHNOLOGY | ECT      |
| MARKET     | ECD; ECL |

### SOCIAL FUNCTIONS

|            |          |
|------------|----------|
| POPULATION | CSP      |
| CULTURE    | FAP      |
| ORDER      | PSI; UNP |

### POLITICAL FUNCTIONS

|            |     |
|------------|-----|
| SECURITY   | DFP |
| LAW        | FLP |
| GOVERNMENT | UNO |

It is evident that for our purposes we have excluded the administrative functions of the Department (ACP; AFP; APP; APR). Thus, apart from the service function, the three other ones are found in both columns above. The main difference between them is that whereas the conceptual categories are equivalent, the operational ones are not. Only the economic function is clearly covered by a single bureau (ECP; the other functions combine a mixture of bureaux and divisions and sometimes overlap jurisdictions. Given that absolute separations are hardly possible, especially in real situations; both the above categories are distinctive enough to be comparable. On this basis, therefore, the analytic framework corresponds adequately to the departmental structure.

#### 2. Time-Method Comparison:

Although comparing the first two dimensions of our analysis with the organization of the DEA, did not present any problems; doing the same for the third dimension certainly does. The methodological and chronological dimensions do not easily correspond with administrative divisions. The two blend together in some areas, while they leave

unattended many other areas. This spotty concentration in some and complete absence from other periods, reflects the classical preoccupations of diplomatic practice.

Traditionally, policy making and implementing concentrates on contemporary affairs. The current problems of the world, both domestically and internationally, dominate the politics of both regions and functions. From daily routines to crisis management, problems tend to be tackled as they arise; so most of the activities of government are concentrated around the present. In so far as history is necessary to enlighten present decisions, officials do spend some time studying the past. Keeping documents and interpreting them, therefore, occupies a portion of the energies of the DEA. The Library, Records, and Historical Divisions, obviously, bring the experience of the past to bear on the activities of the present.

If the past is secondary to the present in worldly affairs, the future is tertiary. The primacy of the present and the immediacy of its demands, leave little energy for considering the future. Not many officials have either the time or inclination to look beyond next year's budget. A few months ahead is the average foreseeable future for most people and rightly so. Probing into the future is left to the few, usually concentrated in central staff and planning units. In the DEA, this function is primarily performed by PAG or SRB; although there are certain other sections in various bureaux devoted to planning services (i.e., ARC; APD). The longer the horizon ahead, the more difficult it is to discern, and so the fewer people trying to foresee it. It is, therefore, not surprising that the bulk of the work of both the regional and functional bureaux focuses on contemporary affairs.

When one turns to compare the chronological dimension from the methodological point of view, the situation becomes even more complicated.



The detailed procedure explained in the previous report and its simplified form presented here cannot be explicitly compared to traditional practice. Naturally, to a certain degree, some analysis, forecasting and planning is going on in the DEA. Most of it, however, is carried out in the administrative or service divisions. The substantive areas of the Department, i.e., the regional and functional bureaux, engage in these activities only implicitly and haphazardly.

External Affairs does not use any standard methods of policy-analysis, problem-solving, decision-making, or event-forecasting. Whenever attempted, these operations are performed in a subjective or idiosyncratic way. Certain uniform procedures are developing for the presentation of policy proposals in which the objective must be clearly defined, various factors be taken into account, cost-benefits calculated, alternatives enumerated, and priorities recommended. Such systematic analyses, however, are the exception rather than the rule so far. If they can be perfected, then the art of diplomacy would be infused with some science.

It is in this area that the proposed methodology could make some contribution. The present study is an attempt to improve the process by which world affairs can be forecasted. By extension, this attempt overlaps with political analysis in general and so could also help policy-making as a whole. The steps presented here are a sequence of operations to ensure that public issues are considered as exhaustively as possible. This procedure makes it more difficult to overlook any factors or to ignore certain facts. It is, therefore, a new tool designed to enhance the potential of the policy advisor, not to replace him.

### 3. Canada in World Affairs:

Now that we have correlated the activities of the DEA with the analytic framework; let us complete this operation by showing how the

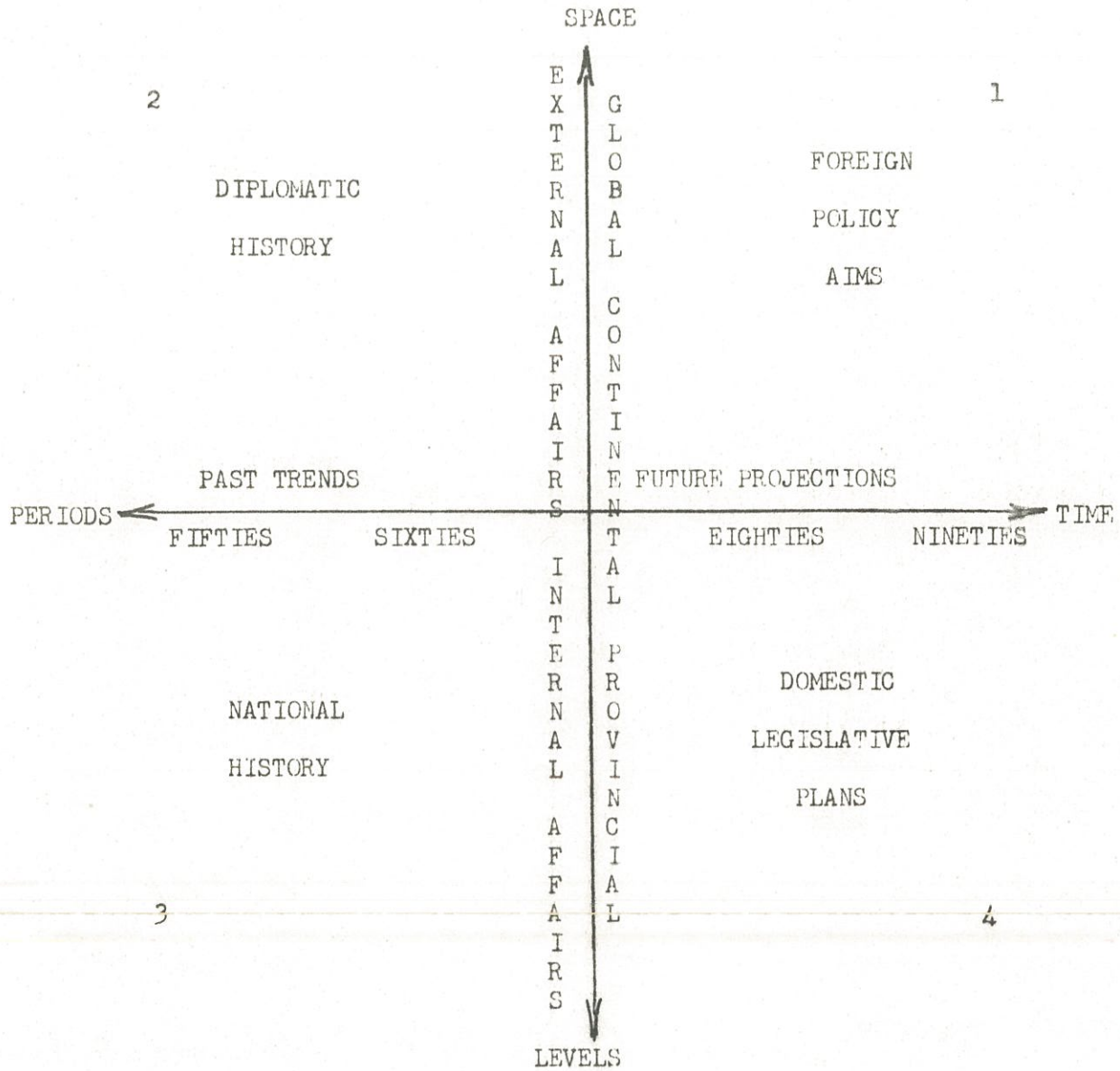
world may be looked upon from the Canadian perspective. For this purpose, we shall take two of our dimensions: space and time; and form the field diagram. The structure of this diagram is similar to the time-space matrix, which we have already discussed; but it has one significant difference: the point of origin is located in Canada. Accordingly, both geography and history are seen from the point of view of this country.

The diagram in the next page dichotomizes space at the federal level; so that everything below it is internal affairs and everything above it is external relations. Similarly, the time continuum goes forward into the future and backwards into the past from the present time. The point where the two axes cross each other is the "here and now" of the Canadian federal government. From that zero point, one can relate any event in time and space. Moving towards the first quadrant (External; Future), one is concerned with Canada's foreign policy. Depending on how far forward or upward one goes, the foreign policy concerns deal with the short, medium or long range future and continental, western or global relations.

The other directions may be equally analysed. Thus, the second quadrant includes all events of world history; whereas the third quadrant contains the national history of Canada. Finally, the fourth quadrant involves the plans of the governments and people of Canada for the future of the country. Obviously, the DEA is primarily concerned with events in the first quadrant. The focus, as we have mentioned, is in the immediate future, as well as our immediate neighbour. The further one moves in time and space, the lower seems Canadian interest abroad. It is for that reason that the Global situation at the dawn of the next century is the least of our worries; whereas Canadian-American relations in this decade dominate our attention.

CANADIAN PERSPECTIVES

IN SPACE & TIME



N.B. Federal Government is located at origin (zero point), here and now.

Although such preoccupation with the here and now is realistic and understandable, it is becoming increasingly necessary to push our space and time horizons as far as possible. The greater interdependence of all geographical levels and regions on the one hand, as well as the faster rate of change in historical trends on the other hand, make it imperative for us to look farther and further. Even though, it is obvious that "one cannot look further than one can see," it behooves us to broaden and extend our vision to the limits of our ability.

The above diagram puts in perspective the various directions that the government could take and the different points it could focus upon. The two dimensions, of course, could be increased by adding function to the time and space. We have not done so here because it would obscure the diagram. Once the principle is understood, however, such addition can be made at any time, with the functional axis going through the point of origin at right angles to the other two.

Finally, combining this analytic framework with the forecasting method, we have the complete process leading to policy planning. From the point of view of the DEA (located at the centre of the diagram), Canadian foreign policy can be planned on the basis of the foregoing framework and method. Starting with the quantitative information of the Data Set, world trends could be projected from the past into the future for various regions and functions of interest to Canada. These givens, along with the policy intentions of other countries would then be compared to Canadian national interests, objectives and capabilities in order to find the areas of potential government intervention. As a result of this procedure, Canada's options in the world would be clearly presented and our policy response could then be more rationally decided.

#### 4. Thematic-study Outline:

We shall now try to illustrate how the proposed framework and method would apply to the study of a particular subject. For that purpose, let us take the specific example of a topic which is currently quite salient in world affairs: i.e., the North-South Confrontation. Following is an outline of the methodical way to tackle this subject, in order both to explore its future development and to prepare a Canadian response.

A) FUNCTIONAL ASPECTS. According to our framework North-South issues focus around the economic area of the functional continuum. This means that the salient points of this subject involve the utilization of the earth's resources, the production of social goods and the distribution of the common wealth. Although, the subject is primarily economic, it nevertheless, has crucial social and political implications. Undoubtedly, economic factors relate to population growth rates; cultural values; class structure; national security; legal rules; and governmental stability. For that reason, any complete analysis of the subject must take into consideration all these repercussions.

B) SPATIAL ASPECTS. Obviously, the North-South confrontation is primarily an inter-regional conflict. The geographical component of the issue divides the world between the northern industrial states and the southern developing areas. The complexity of the issues involved in this area, of course, go beyond the simple dichotomy of a bloc confrontation. What is at stake, spills over into many spatial levels, all the way from the plenary assemblies of the United Nations to the local conflicts between urban and rural areas. In between, the North-South dialogue is going on within the first, second, and third world countries as well as among them. Thus, although the study must focus on the central arenas of interaction, it should also consider the peripheral impacts.

C) TIME ASPECTS. The Chronological dimension of the study should be future-oriented. The primary objective of analysis is to determine the outcomes of the issue. As such, the format may take the appearance of alternative scenarios of probable futures. The three principal developments to be elaborated upon could paint the optimistic, pessimistic and protracted pictures. The time-range for studies of this nature vary between five and ten years; so in this case, the object will be to forecast the evolution of the North-South confrontation in the 1980's. The futuristic focus of the study does not mean the exclusion of historical and contemporary analysis. On the contrary, as the methodology makes clear, both past and present will have to be considered in any speculation of the future.

D) METHODOLOGICAL ASPECTS. Using the simplified forecasting method we have proposed, the analysis of the North-South issues would require the following steps. First, gathering, and interpreting information. This involves studying documents, statistics, reports, and other pertinent background sources upon which certain trends could be based and some tentative hypotheses made. This step will provide the patterns of historical developments and the lessons of the past. Once we have absorbed this background information; the second step is to diagnose the present situation. In the case of the North-South confrontation, one must define the problem, its symptoms, and the interactions of its various factors. This means, we have to investigate the gap between the rich and poor countries; the demands of rising expectations of people everywhere, and the interest conflicts producing the confrontation. Only as a result of this procedure will we be able to take the third step of scenario-building of future developments, as explained above. These three steps, then, should provide a logical sequence of exploring the

future of this or any subject under consideration.

E) EVALUATIVE ASPECTS. Although the framework of this report does not include this phase; we are presenting it here to complete our example. The evaluation method is given in detail in the first, (methodological) report of this series. This phase is the logical extension of the forecasting method, because it evaluates the forecast from the point of view of a single actor. In this case, it means that we shall evaluate the North-South issues from the Canadian perspective. Once, we have the probable development of the issue, we must consider the demands that such evolution will impose upon Canada. How will these pressures affect the national interests? What role can Canada play in this evolution: Can we affect in any way the outcome of the confrontation? On the basis of our values and objectives, what outcomes will be preferable to Canada? The purpose of this exercise is to find what are our options for the future and how we should act to bring about the optimal conditions for the world and for Canada. These crucial points bring us to policy-planning, which as we have emphasized before, gives forecasting its purpose. It is with these final considerations that any practical study must conclude.

## CONCLUSION

An overview of the framework we have constructed here shows that three basic dimensions (Space-Time-Function) can combine with a forecasting methodology to form a comprehensive system of analysing world affairs. By utilizing the three matrices, one could define, describe, analyse, project, and evaluate international events. Along with the method explained in the other report, this framework completes the procedural considerations of any policy study. Moreover, an example of a substantive topic has been given in outline to show a possible application of the framework and method in dealing with an actual issue of the contemporary world.

It is important to note that this framework fits in directly with the proposals made in the previous report. In it were presented suggestions for the development of various information sets to supplement the existing data in PAG. Such background information as that proposed for a Trends Set; a Policy Set; a Problem Set; etc., would be indispensable for any systematic political analysis. The present report indicates the classification scheme for these sets. The facts, intentions, opinions, and values contained in the information sets would be filed and cross-referenced according to the various characteristics we have proposed here. In this way they would be readily available for updating and consultation in the DEA.

In this connection, we cannot overemphasize the significance of a systematic and systemic approach to policy-making in our complex, fast-moving and inter-related world. In order to survive, let alone prosper, in such dynamic, vulnerable and demanding social system as the international, one has to become much more prudent, rational and realistic, if not more humane, moral and committed. Before we can be any of



these, however, we must have more knowledge of what is going on around us, greater foresight of things to come, and better understanding of human behaviour. It can only be on that basis that we could rationally decide what we want and how to get it.

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This bibliography is only indirectly related to the text. The conceptual framework which has been presented here was not taken from any particular source, but was devised from a general synthesis of these and other books. The following list is the basic literature on the subject of world futuristics and as such contributes substantively to the systematic study of policy forecasting and planning. It is, therefore, a supplement to the methodological bibliography given in the previous report.

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