

GROWTH POLES, GROWTH CENTERS AND DEVELOPMENT

GROWTH POLES, GROWTH CENTERS AND POLITICS :
AN EXAMINATION OF THEIR ROLES IN
DEVELOPMENT

by

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ABSTRACT

This paper is a general examination of the applicability of the growth pole and the growth center concepts to development planning in underdeveloped nations. It is found that, because of the problems which are unique to each concept and the characteristics which are unique to each economic setting, the notions are not generally applicable. Analysis also suggests that the prime factor determining the success or failure of any development strategy is the political environment of the host country. The future does not appear to be particularly bright, due to the lack of progress with these growth notions and the existence of no real alternatives, and due to the political and institutional inertia prevalent within underdeveloped nations.

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CHAPTER ONE

INTRODUCTION

Since the end of the Second World War, governments and peoples in the richer countries of the world have become increasingly conscious of the economic problems of their poorer neighbours. It has become an accepted policy of the advanced countries to assist in furthering the development of the human and material resources of these countries (Mountjoy , 1971, preface). Yet despite the tremedously increased effort, economic and social conditions in Third World nations are not getting any better. In fact, they seem to be getting much worse (Myrdal, 1969). Why?

It is the purpose of this paper to explore the contention that the failure of the development efforts in many underdeveloped nations can be traced, in large part, to two factors :

- (1) the choice of development strategies which use as a foundation the notions of growth poles and growth centers; and
- (2) the unwillingness of political systems in underdeveloped nations to adopt those policies and institutions necessary to make development successful.

The interest in development planning in many less-developed countries (LDC'S) coincided with the growth and popular acceptance of the growth pole notion of Perroux (1950, 1970), and the growth center concept, which is due to the work of Myrdal (1957) and

Hirschman (1958). Unfortunately, certain problems associated with both notions do not permit their successful application as strategies for growth. While detailed analysis is reserved for the main body of the paper, a few preliminary comments are appropriate here : first, the growth pole notion is still in a relatively incomplete state, and is consistently and erroneously applied to geographic space, when in fact it applies only to abstract economic space. Second, the growth center concept is not a theory of growth, but a congeries of related ideas from a number of separate areas of spatial analysis. These ideas do not explain the mechanisms which control growth process - they merely describe growth and the spatial form it may take. Third, there is a persistent trend to arbitrarily combine growth poles with growth centers, when in fact it is not yet possible to do so. Convincing arguments on this point may be found in Darwent (1969) and Hansen (1970, 1975). Fourth, the specific physical and socio-economic characteristics of any LDC greatly impede the applicability of these notions. A review of the Latin American experience is presented in support of this contention.

However there is no one factor which so determines the success or failure of any development strategy as the political variable. The contention that is examined in this paper is that the poor correlation which exists between development efforts and development results is due to the fact that LDC politicians appear to accept development only insofar as it does not threaten traditional wealth and power distributions. What they have yet to

recognize is that change is inevitable, and that it is only the form which this change takes that they control.

In exploring the above statements, this paper has three specific objectives :

- (1) to identify and clarify the position of growth pole theory as a theory of development. Specific attention is given to its intended role in development versus the role in which it is frequently cast.
- (2) to define the origins and terms of reference of the growth center concept. Emphasis is placed on :
 - (a) showing that a growth pole does not equal a growth center and that the two notions are not necessarily equivalent in geographic space.
 - (b) illustrating that the strength of the concept lies in describing how polarized growth situations are arrived at, rather than in providing the mechanisms necessary to manipulate the processes which produce such situations.
- (3) to illustrate that there are important factors which are exogenous to these concepts which have a large bearing on the outcome of their application. Two factors are stressed :
 - (a) the physical, social and economic characteristics of the setting to which a development strategy is applied. Latin America is used for illustrative purposes.
 - (b) the political and administrative structures and attitudes towards development which prevail in LDC's. These structures and attitudes are viewed as the keys to successful development.

In what follows, a chapter is devoted to each of these objectives.

CHAPTER TWO

THE GROWTH POLE CONCEPT

Very few geographical concepts have emerged in recent times which have had the intuitive and logical appeal of the growth pole concept. Then again, there have been few to emerge which have been so ill-defined and indistinct. As a result, the large body of literature which has accumulated on the subject is rife with semantic confusion, contradiction and misinterpretation. The blame for this is due in part to Perroux's initial formulation, (Perroux, 1950), and in part to the overeagerness of later analysts to exploit the concept, much to the neglect of informative, descriptive or analytical content. As a result, the concept is frequently misplaced into geographic space, with only the barest of possible allusions as to how it got there, or why it even belongs there. Examination of the literature suggests the following interpretations concerning the growth pole concept :

- (1) Growth pole theory can only apply to abstract and functional economic space. It is a theory which purports to explain the generation, development and transmission of growth impulses throughout the "economic landscape" only.
- (2) It has no direct applicability to the spatial element, other than as input to some future concept, as yet undefined, employing both the theories of growth poles and growth centers.
- (3) The attention which Perroux gives to the spatial element is considered to be no more than lip service to its role in regional

and national development planning.

These interpretations are made possible by Perroux's statement that geographic space is banal and too restrictive (Perroux, 1950, p. 94).

He specifically states that :

"...the spaces which directly concerns us are economic spaces. They are defined by the economic relations which exist between economic elements. These economic spaces conveniently reduce to three : (1) economic space as defined by a plan; (2) economic space as a field of forces; and (3) economic space as a homogenous aggregate."

(Perroux, 1950, p. 94).

The balance of this chapter is devoted to the exploration and analysis of these observations on growth pole theory, under the following sub-headings :

- (1) definitions and terminology,
- (2) what is a growth pole?
- (3) the polarization process - how a growth pole grows,
- (4) the transmission of growth,
- (5) summary.

2.1 DEFINITIONS AND TERMINOLOGY

A major source of the general confusion surrounding the growth pole concept lies in the definition and use of the terminology employed by Perroux, especially his various categorizations of firms and industries. The following definitions form the basis of the subsequent discussion in the analysis presented here. They do not derive solely from Perroux, but represent the consistent inter-

pretations of later analysts who have sought to clarify Perroux's terminology. For example, see Hansen (1970), Lasuen (1969), or Hermansen (1971).

Forward Linkage.

A firm or industry which sells a high proportion of its output as intermediate inputs to other firms or industries, as opposed to selling it to the various sectors of final demand, possesses high forward linkages.

Backward Linkage.

A firm or industry which uses a high proportion of intermediate inputs to its total input requirements possesses high backward linkages. All non-primary sectors develop backward linkages. Primary sectors traditionally use high proportions of land, labour and/or capital as inputs.

Key Industry.

A key industry is an industry a firm which possesses high backward linkages. By its own growth characteristics it exerts a considerable influence over the growth patterns of its suppliers.

Dynamic Propulsive Industry.

An industry or firm is considered to be dynamic and propulsive if it is large, capable of self-sustaining growth and innovation, and if it dominates other industries.

Leading Dynamic Propulsive Industry.

An industry or firm attains a position of leadership or dominance if it is, in addition to being dynamic and propulsive :

- (1) relatively new;
- (2) technologically advanced;
- (3) operating in markets with high income elasticities; and
- (4) able to transmit growth and innovation impulses to other firms or industries.

This types of activity encompasses the previous two activities.

Industrial Complex.

An industrial complex is a set of firms or industries which form around a core of dynamic propulsive firms or industries having high forward and backward linkages. The complex is characterized by a high in-group multiplier and accelerator. A leading industrial complex possesses the features of a leading dynamic propulsive industry. Note that agglomeration at a geographic location is implied, but is not a necessary condition.

These are the most important terms and distinctions between firms and industries which Perroux uses in his discussion of poles and growth poles. In themselves they are relatively straightforward, but when combined in discussion on the nature and definition of growth poles, the resulting picture is confusing and inadequate.

2.2 WHAT IS A GROWTH POLE ?

There are two distinctions to be made when discussing the nature of growth poles. These distinctions concern the differences among :

- (1) simple poles;
- (2) mute poles; and
- (3) growth poles (after Darwent, 1969).

Clear distinctions among these various types of poles can only be made through a clear specification of the space in which they operate, and the characteristics which each pole possesses in relation to the rest of the space.

Visualize a flat, homogeneous and closed plain or space, which may be termed economic space, as this is the only type of environment in which the growth pole concept is traditionally examined. Economic space is a dimensionless space and, as a concept, it simplifies and clarifies the discussion of economic processes. Economic space is distinct from geographic space but, within growth pole theory, the two are frequently merged. When economic space is thus applied to geographic reality, it is frequently transmuted and reduced to two dimensions which have considerable conceptual appeal : height and length, or distance. This discussion should become clearer in a moment.

Within economic space are "located" (not in a geographic sense) the firms, industries and activities which serve to comprise an economy. It is assumed that the space is closed, such that there are no exogenous influences upon the behavior of the economy. These industries are connected via the economic forces and processes which describe the relationships which exist among the activities in space. Therefore these forces are measures of the degree of interdependence and interrelatedness of the economic activities and, based on this criterion, serve to cluster the activities into identifiable functional groupings.

In growth pole theory, a pole is defined as a cluster of economic activity which is set in its own field of centripetal and centrifugal forces (see Thomas, 1972, p. 54). When Perroux discusses economic space as a field of forces, he is referring to these forces in particular (Hansen, 1970, p. 124). This growth pole setting corresponds directly to the situation described above. Hence, there can be as many poles in economic space as there are clusters of interdependent economic activities. This is where the notions of "pole height" and "force length" create problems. The word pole implies (1) that the grouping of economic activity is arranged or clustered together, and (2) that somehow the size (or degree of relative importance) of the activity is related to the size of a pole. Thus, "pole height" describes economic growth and strength. The idea of economic forces carries a strong distance connotation, which implies a spatial connection between economic activities.

These concepts are correct, but only if one uses them to describe clustering and (economic) distance in economic space, and not geographic clustering and geographic distance. In economic space, the fields of forces determine the growth or decline of economic activity, and in this sense may be defined as those economic processes which generate growth. The end result of the mechanical functioning of these processes is the growth or decline of the activities in economic space. Thus, in abstract space it is possible to equate pole height with economic growth and strength, and force or process length with economic distance.

Note that growth in economic space is distributed unequally, as it concentrates itself at the poles. Simple poles exist when the space is in equilibrium : that is, when all of the poles have an equal impact upon the economy. The activities which make up these poles are dynamic and propulsive, but each pole exerts an equal influence upon the other poles in economic space. In other words, polar heights are equal throughout, and all poles share equally in the growth of the economy.

The above state of equilibrium is clearly an ideal type. More likely, the economic surface is in a continual state of dynamic disequilibrium. In disequilibrium, simple poles are replaced by mute poles and growth poles. A growth pole is a pole which assumes the characteristics of a leading dynamic propulsive activity. Its field of forces possesses higher relative strength, and has a greater impact upon the economy than do the economic forces of the other poles. This formerly simple pole will attain a position of dominance within the economy...

"... by reason of its dimension, its negotiating strength, the nature of its activity or because it belongs to a zone of dominant activity."

(Hansen, 1970, p. 125).

Moreover, domination will occur when ...

"... a firm controls an abstract economic space the market for a product or service or a group of products and services."

(Hansen, 1970, p.125)

There can be more than one growth pole in economic space at any one time.

To summarize, there are two chief indicators which serve to identify a simple, mute or growth pole :

- (1) the degree of impact upon any pole, and upon the economy in general, of the economic forces associated with any given pole; and
- (2) the size of the share of total available economic growth which accrues to any given pole.

A growth pole is basically a cluster of economic activity which dominates in both cases.

2.3 THE POLARIZATION PROCESS - HOW A GROWTH POLE GROWS

The term "polarization" is one of the most misleading and confusing to appear in the literature on growth poles and growth centers. In geographical space, and in the classical Hirschman (1958) sense, polarization refers to the manifestation of growth and growth processes at locations in real (i.e. geographic) space - urban structures, populations, governments, firms and so forth. In economic space, and as defined by Perroux, polarization refers to the enlargement of a pole, the development and intensification of the field of economic forces in which the pole is set and which the pole generates. It refers to the emergence and growth of a dominant growth pole over the other mute poles in economic space.

The meanings are similar but they are definitely not the same. Polarization in economic space concerns growth processes - the interactions which take place between firms and industries which promote economic development. These processes are aspatial in the sense that they belong solely to the realm of economic space and have no necessary reference to a geographic location. However, they lead to economic growth, which does belong to both economic and geographic space. The impact of polarization in economic space upon an economy is reflected in the location of economic activities in geographic space. Economic activities locate in accordance with the economic and physical environment in which they operate, and the development which results is termed geographic polarization if the locations to which these activities are drawn result in large, urban concentrations of economic activity. Therefore polarization in geographic space is a direct reflection and manifestation of polarization in abstract economic space.

In growth pole theory, the polarization process is explained through the internal and external economies which give rise to large scale economic activity and through the role of innovation within the firm. Note that Perroux does not show how the polarization process begins, only how it supposedly proceeds once the economic plain has shifted from an equilibrium position to one of disequilibrium. In equilibrium, the plain is occupied by simple poles which share equally in any new increments in economic growth. Disequilibrium arises when, for one reason or another (not explained by

Perroux), the activity of one pole is able to gain a competitive advantage over the other poles, and capture a disproportionate share of any new growth. Once this inequality sets in, it cumulatively reinforces itself as the new growth pole develops stronger influences over the economic plain, and increasingly captures more of any new growth which becomes available. It generally follows from this that the dominant firm or industry will be oligopolistic and large, and will exert an important influence on the activities of suppliers and clients (Hansen, 1970, p. 125).

In order for the propulsive activities of the pole to be able to take full advantage of new growth potential, there are certain characteristics which they should possess. Internally, the growing propulsive activities must be able to generate the increased investment and employment necessary to produce the increased output which will be demanded of them. In addition, they must be expanding at a faster rate than the activities of the other poles, and have a higher initial level of output. If these economies are either already present within the pole, or if they have a high probability of being developed, then the pole should have strong capabilities for taking increased advantage of any new growth that appears within the plain.

Regarding external economies, Perroux limited himself to focusing on those processes which serve to transform the activities of the new growth pole into large activities exhibiting oligopolistic traits. Given that the activities at the growth pole are capturing

increasing shares of any new growth potential, then their outputs are expanding. These activities, once an optimum output is achieved, are able to lower their cost curves, which in turn permits them to lower the selling price of their outputs. This in turn stimulates demand for the products of the growth pole. As output is expanded, employment is increased, more income is generated within the economy, and is in large part spent on the consumption of the new, highly income-elastic goods of the growth pole. Demand for output is further stimulated. Therefore, as a result of capturing some or all of the growth potential available in a previous time period, the growth pole industries are able to expand. Through the workings of the market, expansion is further increased by the effects of lower output prices returning as new demand in later time periods. Throughout this process, growth cumulatively reinforces itself at the growth pole.

Perroux attributes much of the ability of any pole to capitalize on any new growth potential to entrepreneurial ability and the desire to innovate. In order for a firm or industry to achieve a position of dominance within the economy it must be a pace- and trend- setter. It must be able to generate growth-inducing factors within itself and within other firms and its management must possess a corporate personality conducive to risk-taking, investment and innovation.

If the above characteristics are present, then the movement from equilibrium to disequilibrium, and the emergence of

new growth poles, will be characterized by the birth of new (and the decline of old) industries as new, highly income-elastic products replace old, low income-elastic products (Lasuén, 1969). Throughout the plain, as the process continues over time, growth poles will emerge, grow and possibly stagnate as new growth potential generates increased competition, and shifting patterns of disequilibrium and inequality.

2.4 TRANSMISSION OF GROWTH

Growth pole theory has been criticized for having many failings. Inadequate explanation of the transmission of growth is one that it justly deserves. As increments in growth cumulatively reinforce the growth of the growth pole, the interaction between the mute poles declines, both relatively and absolutely. The decline is relative because each mute pole gradually does more business with the growth pole industries than with those of the other mute poles; it is absolute because the growth pole is in the best position to capture further finite increments of growth. Perroux attempts to account for the transfer of growth through linkage analysis and the diffusion process - both of which have an imprecise relationship with growth pole theory and in fact say very little about how growth is transferred.

With respect to linkage analysis, the emerging dominance of a growth pole leads to increasing interaction between the growth pole and the mute poles, and decreasing interaction between the

mute poles. Clearly, this indicates a strengthening of the linkages of the growth pole activities, but linkage analysis provides little information concerning the process by which those linkages are supposed to be strengthened, or how this strengthening will induce growth in other poles. It can be assumed that the greater demands of the growth pole will call forth increased output in linked industries and that those industries may grow in the same fashion as do the growth pole industries (by increasing outputs and lowering their cost curves etc.), but this is far too simplistic an answer, and it still says nothing about how growth will occur.

The role of diffusion processes is even more cloudy. Perroux puts great faith in the progression of growth according to the actions of profit motivated entrepreneurs, answering the call to take advantage of new growth potential. In its most basic sense, the diffusion process consists of the successive generation of waves of innovation, with each new wave being affected by the feed-back character of previous waves. It is a complicated process, which takes place in social, political and cultural abstract spaces, as well as economic space. Yet aside from introducing diffusion as a process for transferring growth, Perroux does little to show how growth is transferred via diffusion processes.

2.5 SUMMARY

Growth pole theory has been the subject of a great deal of criticism during its short lifetime. Much of this criticism

stems from the fact that the theory has very obvious spatial implications. On the one hand the theory appears to provoke its own application in geographic space, while on the other hand it cannot adequately deal with geographic space because of its lack of precise definition and general incompleteness. It cannot be tied directly to the geographic element, but it is structured in such a manner that strong geographic connections seem almost inevitable.

This situation is nowhere more obvious than in Perroux's lack of recognition of agglomeration economies and tendencies. Both the notion of the industrial complex and the role of external economies in the growth process are seriously diminished because of this lack of recognition. The emphasis within the theory on large firms is narrow in outlook, as it totally ignores those small and medium sized firms which may locate together in order to take advantage of specialized, higher order services or mutually beneficial business conditions. Does the possibility not exist that these smaller firms could be considered as a growth pole if they exerted a strong enough influence on the economy? If this possibility does exist, then it becomes very important to identify and understand those factors which promote the agglomeration of economic activity in geographic space. This is a task which growth pole theory is not equipped to handle.

Similarly, the discussion of the process of polarization is seriously hampered by the absence of the ability to deal with agglomeration economies. Since the polarization (agglomeration)

of activities in geographic space is equally, if not more, serious than polarization in economic space, in terms of sustained impact upon national development and the national territory; then it again becomes important not only to identify those factors which promote geographic agglomeration, but also to discover the conditions under which polarization in economic space will lead to polarization in geographic space.

Adding to, and reinforcing, the above problem is the lack of consideration of real distance effects upon the locations and growth of new activity. This problem is contained within the much larger problem of the inadequate explanation of the role of diffusion processes and innovation in determining the rate and extent of the spread of new growth. Basically, the problem reduces to one of growth pole theory using strongly-geographic constructs to explain growth in economic space. But the use of these constructs is strongly suggestive of growth in more than just economic space - which is something which growth pole theory cannot cope with. This situation is the most serious drawback of growth pole theory.

Another problem of the theory is the large number of characteristics which a leading propulsive firm or industry must possess. Few, if any, leading industries possess all of these characteristics. The position of dominance which an industry attains is just as much a consequence of the attributes of the specific activity, and its setting, as it is of the more general economic traits which characterize large scale enterprises.

One of the main omissions of growth pole theory which contributes to its incompleteness is that there is no statement of how growth is initiated (i.e. how the economic surface moves from equilibrium to disequilibrium). It is assumed that growth poles will emerge due to a competitive advantage which the pole's entrepreneurs are able to cultivate, but the theory does not state how this advantage is initiated.

Finally, in an age which is increasingly recognizing social as well as economic variables within the development process growth pole theory is becoming less and less relevant. It is a "quantity" theory of economic development which cannot take cognizance of the "quality" variables which enter the development process (e.g. the distribution, as opposed to the level, of national wealth).

In view of the above analysis, growth pole theory can only be considered as a limited and conditional attempt to shed light on the dynamic aspects of development. It is narrow because it is restricted to the economic viewpoint and it is general because it refers to abstract economic space irrespective of specific situations or economies. These two conditions alone are significant enough to necessitate the formulation of alternative theories.

CHAPTER THREE

THE GROWTH CENTER CONCEPT

The growth center concept cannot be considered as a "theory" of growth in the same manner as growth pole theory. Rather, the chief components which serve to comprise the growth center concept derive from three separate areas of enquiry :

- (1) as a reaction against the limitations of growth pole theory, especially the omissions of the geographic element, diffusion explanation and agglomeration economies (e.g. Hermansen, 1971) ;
- (2) as a real spatial response to those theories which view development as a gradual, unbalanced process (e.g. Myrdal, 1957 and Hirschman, 1958); and
- (3) as an attempt to add a new dimension to the classical theories of urban, regional and industrial growth (e.g. Parr, 1973).

All three have a common concern for the real spatial element, the role of urban areas, and diffusion processes. Due to this common bondage, it is relatively easy to combine the more salient features of each into the growth center concept.

It must be understood from the outset that a growth center does not equal a growth pole. Growth pole theory states that sectoral growth at pole A will induce "X" number of dollars in increased output,

again sectorally, at mute pole B. This will occur in abstract economic space only, with no reference to geographic locations.

Growth center theory says that sectoral growth in an activity at location A will induce "X" number of dollars in increased output, still sectorally, at location B - and over time. Notwithstanding its ability to succeed, it operates over all abstract spaces, but in reference to specific, real locations.

Clearly there is no reason to assume that an optimal problem solution as derived via the growth pole framework will be the same as the solution for the same problem as generated through the growth center concept. At a bare minimum, this is so because of the lack of equivalency between abstract and real space. As stated in the discussion on growth poles, economic space is dimensionless. It exists in the mind and it is constructed using the techniques of economic analysis. There is no just reason to believe that this mental map will fit reality. Granted it would be a great advancement if economic and geographic space could be linked, but this cannot occur within growth pole theory until the ways and means to give spatial meaning to dynamic economic growth processes and mechanisms are identified. Until this is done, the two concepts must, as they are presently formulated, remain distinct from one another. This distinction forms the basis for the discussion of the growth center concept in this paper, under the following sub-headings :

- (1) rationale behind growth center strategies;
- (2) center-hinterland relationships
— the question of spread effect; and
- (3) summary.

3.1 THE RATIONALE BEHIND GROWTH CENTER STRATEGIES

There is now almost universal acceptance of the fact that economic growth, and societal development, are necessarily unbalanced processes (e.g. Masannat 1973; Schiavo-Campo and Singer, 1970; or Thirlwall, 1972). Many espouse the truly just ideal that economic progress should benefit all equally, but the reality of the matter is that social and economic inequalities are inevitable concomitants and conditions of growth (see Williamson, 1965; Frank, 1973; or Ilchman and Bhargava, 1966). There are, within developing economies, powerful economic, social and political forces which have served to concentrate growth in one or two large urban areas, at the great expense of the remainder of their national economies. It appears that economic growth and development will, if not regulated, automatically concentrate itself spatially in these centers. However, there is no guarantee that the very rapid growth of these urban complexes is representative of, or synonymous with, economic development within these economies. Without doubt, the presence of urban centers is a necessary condition for development, but it is far from sufficient. These centers must be moulded and shaped into centers of economic growth and strength, and they must be in a position to provide for the maximum dispersal of this growth, and of the pre-conditions necessary for additional growth. These objectives broadly define the *raison d'être* of growth center strategies - either to regulate and control the development of existing centers, or to stimulate the growth of new centers - both in order to hasten the

development of regional economies and the national economy at large.

Growth center strategies are basically strategies of public investment. The main assumption behind all growth center strategies is that increases in the rate of growth will be maximized if the government deliberately fosters the growth of certain areas and deliberately neglects to provide the same investment support for all other areas with aspirations for development (Cameron, 1970). There are a number of options open to any government which chooses to follow such a strategy. These options concern :

- (1) dispersal vs. concentration of investment;
- (2) investment in existing urban centers or in stimulating the growth of new centers; and
- (3) investment in directly productive activity (DPA) or overhead capital (OC), of which there are two types :
 - (a) economic overhead capital (EOC), which includes investment in industrial utilities, transportation and communication etc.
 - (b) social overhead capital (SOC), which includes investment in education facilities, housing, health and welfare etc.

Dispersal vs. concentration.

The objective here is to strike a balance between entirely dispersed and entirely concentrated investment. There once was a time when governments invested heavily in only a few centers, with the majority of funds going toward improving capital cities. Capitals tended to become showpieces, impersonating their foreign counterparts

(see Hoover, 1971; or Breese, 1966). However, most governments have given up making large investments in a few centers in favour of dispersing smaller amounts of investment to a greater number of centers (Hirschman, 1958, p. 190). Briefly, there are three chief reasons for this change of emphasis :

- (1) Political systems and environments have developed to the point where many governments are much more accountable to the public at large, or are at least more vulnerable to public opinion.
- (2) Partly due to the above reason, and partly because of a change in attitudes, governments are now more concerned with welfare. Dispersed investment is a more effective method of raising living standards.
- (3) Many projects serve as "demonstrations" in order to prove to tradition-bound and change-resistant people that improvements can in fact be had through the adoption of new techniques.

Of course it may just be that the best alternative for reaching a given planning objective is concentrated investment - in which case it would, no doubt, prevail.

Existing vs. new centers.

In most developing economies this is more of a theoretical than a practical option, and for very powerful reasons. First, many developing states are characterized by a high degree of sectionalism, fragmentation and general national distintegration (Williamson, 1965). Furthermore, many of them also suffer from grossly inefficient labor, capital and trade markets. These

problems form barriers to development which necessitate the stimulation of growth in those centers best able to overcome them and to spread the benefits of growth in an optimal fashion. In conjunction with the acute capital shortages which most of these states face, investment in new centers is, for the most practical purposes, no alternative at all. In most cases, the expected payoff is just not worth the heavy risk. Second, the costs of providing government services and infrastructure preclude not only the establishment of new centers, but also the expansion of many smaller centers. Not only are the marginal costs associated with these provisions at an absolute low in the larger centers, but they also do not have added to them the costs of completely providing or upgrading the transportation and communications networks which are necessary in order to integrate totally new or expanding urban centers into the national economy (see Gauthier, 1970). Third, there are the internal and external economies which attract economic activities to large urban centers. Internal economies are those which derive as a result of the market conditions associated with large cities. They include scale economies and those accruing to large, diversified and specialized production techniques. It is important to note that many of the larger firms and industries in developing nations, whether of native or foreign origin, operate under conditions of semi-monopoly or oligopoly.

External (agglomeration) economies may be broken down into three main categories (after Parr, 1973) :

- (1) Urbanization economies. These are economies which derive from an urban location. They include municipal services, public utilities at favourable rates, specialized commercial services and well-developed transportation and communications.
- (2) Localization economies. These are economies which arise as a result of locating near firms in the same industry in order to take advantage of skilled labour pools, the benefits of bulk purchasing, shared marketing and research costs etc.
- (3) Industrial complex economies. These economies benefit firms which are linked together in an input-output fashion and which locate together. Typically, these economies are savings in power and transportation costs and the benefit of readily accessible information.

These economies are not mutually exclusive of one another. Usually, at least two of them will be present in any industrial situation and they are generally self-reinforcing.

Once economic activities become attracted to large and vigorously growing centers, in increasing numbers, they create shortages in power, water supplies, housing, transportation etc. - all placing a heavy priority upon the investment plans of any government and doing little to slow down the inflow of new economic activities. Friedmann (1963, p. 50-51) has produced a comprehensive list of reasons for this trend :

- (1) the failure of diminishing returns to set in at the center;
- (2) the failure to perceive peripheral investment opportunities;
- (3) increased export demand for goods produced at the center;
- (4) the coincidence of the center with the national market;
- (5) the location of quaternary services at the center;
- (6) the heterogeneity of the center population, which is probably conducive to risk-taking and innovation; and
- (7) the inability of the periphery to make adjustments appropriate to constant socio-economic change at the center.

These factors, plus the internal and external economies discussed above, go a long way toward explaining why large proportions of investment funds are channelled into large, existing urban centers.

DPA vs OC investment.

Investment in directly productive activity by public authorities generally takes the form of direct subsidy or tax benefits. Overhead capital investments are primarily in those factors which increase the attractive power of any site or situation regarding new economic activity. Social overhead capital investments concentrate on human resource development, such as educational facilities, welfare programs, health and housing plans etc. Economic overhead expenditures by governments generally focus on providing

the urban and economic infrastructure necessary to attract new economic activity to any given location. OC investments are generally indirect, in that while their effects benefit firms and industries considerably, they are not paid directly to the economic activities in question.

Some of each type of public investment is usually necessary in order to attract private investment in economic activity. Increased private investment will in turn call forth increased public expenditures in both forms of investment - although probably at a lower marginal cost. Generally a combination of investment in both DPA and OC is used in order to attract new business, but the exact combination depends on the allowable time lag between public expenditures and private investment (Todd, 1974). For example, if OC comes first, the DPA use of, and response to, OC facilities will generally take a longer period of time than if development proceeds via a "shortage of OC". In this case, OC facilities are provided subsequent to effective demand from already existing DPA. This type of strategy is similar to that which Hirschman (1958) proposes, and is based on the premise that entrepreneurs would rather receive direct over indirect government assistance.

Government, in making a choice between DPA and the available forms of OC investment, is going to have weigh carefully how much capital it can afford to invest in DPA and EOC at the expense of investment in human resource development. Williamson (1965) points out the dilemma : investment in

activities and economic infrastructure will raise GNP per capita and promote a faster national and regional convergence than will investment in SOC, but at the expense of greater initial economic and social disparity within the economy. Conversely, SOC investment will neither raise GNP per capita nor stimulate convergence as quickly as will economic investments, but it will lessen disparity. Therefore, in deciding upon an investment program, a government must decide both how much, and for how long, it can tolerate a given level of social and economic disparity.

These are some of the basic issues which are central to stimulating urban growth within the growth center concept. However because the objective of focusing investments in existing or new urban centers is to foster, generate and extend new growth and development over a given region, the question of spread effects must be viewed as having equal, or even greater, importance in determining the success or failure of any given strategy.

3.2 CENTER-HINTERLAND RELATIONSHIPS - THE QUESTION OF SPREAD EFFECTS

From a planning viewpoint, one of the prime factors underlying the development of the growth center concept is that urban centers have a cardinal role to play in national and regional development. Nationally, there has yet to be seen the nation which can reach a high level of development without first developing within itself one or two centers of economic growth and strength. From a regional standpoint, it is now recognized that the size,

functions and characteristics of an urban center probably have the greatest bearing on the development or stagnation of any region with which it has considerable contact. Berry (1973) describes the situation :

"... continued urban-industrial expansion in major metropolitan regions should lead to catalytic impacts on surrounding areas. Growth impulses and economic advancement should filter and spread to smaller places and ultimately infuse dynamism into even the most tradition-bound peripheries. Growth center concepts enter the scene if filtering mechanisms are perceived not to be operating quickly enough, if "cumulative causation" leads to growing regional differentials rather than their reduction ... or if institutional or historical barriers block diffusion processes. The purpose of spatially-selective public investments in growth centers, it is held, is to hasten the focused extension of growth to lower echelons of the hierarchy in outlying regions, and to link the growth centers more closely into the national system via higher-echelon centers in the urban hierarchy."

In this regard, growth center strategies are essentially policy instruments designed to foster and to extend new growth to distressed and lagging regions. However, it must be recognized that the interaction which takes place between any urban center and any slow-growth region is a two-way process. Both give and both receive - but the probability that the resulting net effect will be positive for the slow-growth region is not guaranteed. More often than not it will be negative.

In order to examine the likelihood that this net effect will be either positive or negative, the more common urban-regional

relationships are presented as a prelude to a statement of the various arguments on the probable nature of the net effect (after Parr, 1973).

Favourable effects of a center upon the periphery include :

- (1) better transportation and communications links;
- (2) stimulation of agricultural production :
- (3) stimulation of light manufacturing industry;
- (4) increased commuting to the center for employment, which will :
 - (a) raise wages in the hinterland,
 - (b) bring more income into the hinterland via dormitory suburbs.
 - (c) allow for the development of service industries to satisfy higher demands.
- (5) decentralization of central functions, which will include :
 - (a) branch plants and subsidiaries,
 - (b) decentralization of government,
 - (c) extension of urban infrastructure, utilities and services.

Unfavourable effects may include :

- (1) a decrease in light manufacturing if comparable, but higher quality goods are manufactured in the center and become available in the hinterland via better transportation;
- (2) a brain drain as the most educated and talented people seek better opportunity through permanent migration;
- (3) a savings drain as capital seeks the highest rate of return in urban locations;

- (4) stepped-up natural resource extraction, which decreases or erases any possibilities of establishing resource - based industries in the hinterland.

The query regarding the net outcome of these effects can be traced back to the differences of opinion between Hirschman (1958) and Myrdal (1957). Both recognize the importance of urban centers in national and regional development, but they differ over the emphasis to be placed on spread effects. Hirschman's strategy calls for development via a shortage of OC, as he believes that this will be both efficient in terms of the provision of investment and will also maximize spread effects. He believes that there are forces in existence which make for the inevitable spread of growth, and that this growth transfer is best accomplished through the transfer of capital to lagging regions and through interregional trade. Therefore, he believes that inevitably the net effect will be positive in the long run. (see Hirschman, 1958, Ch. 10). Myrdal however, in his theory of "circular and cumulative causation" warns that growth will sap the resources out of hinterland regions, and will provide little in return unless the potential for spread effects is intensified from the beginning. In this view, Myrdal is in keeping with Perroux's belief that inequalities will cumulatively reinforce themselves overtime. It is not that he does not believe that spread effects will be generated; it is just that he does not believe that they are inevitable. He emphasizes that they must be planned and provided for from the outset. Many academics tend to agree with

him. For example, see Milne (1970), Tolosa and Reiner (1970), Friedmann (1963, 1969) or Richardson (1975).

It is surprising that a concept which is primarily intended to foster and spread growth to slow-growth regions should leave unreconciled a problem which is so central to its workability. If it can be accepted that a theory is only as good as the assumptions and value-premises which underlie it, then growth center "theory" is in deep trouble, for this problem of reconciliation is indicative of basic differences of opinion over those values and beliefs which should form the very core of the concept. These basic differences of opinion illustrate the lack of knowledge which still surrounds the mechanics of growth processes and hence, the structural and theoretical problems and limitations which plague not only the growth center concept, but growth theories in general.

3.3 SUMMARY

Growth center strategies are oriented toward immediate policy issues concerning the overconcentration of people and activity in one or a few large centers, and the problems of stagnation or decline in regional hinterlands. They began, in large part, as an attempt to grasp the complex technical origins and the dynamic interrelations of the growth process (Hansen, 1975) and they are primarily aimed at injecting a series of shocks into a system which is in a continual state of disequilibrium. While the ideal state of equilibrium is just that, they are supposed to lessen the gap

between equilibrium and disequilibrium, lessen disparities, generate growth and development, and promote stability. In order to accomplish these ambitious undertakings, they must be able to operate spatially, sectorally and temporally. The question is : can growth center strategies succeed in accomplishing these objectives ? The answer put forward here is a firm "no". The reasons for this negative response may be summarized briefly by focusing attention on the problems, in, and of, the growth center concept.

Problems within the concept.

First, there is a general lack of direction provided by the concept. It quite obviously relates to national, regional and urban growth, but the concept is so big, cumbersome and unsophisticated (bearing in mind its ambitiousness) that it is not possible, within the concept, to state clearly either what type of growth is desired or what the goals for this growth should be. Even if specific goals for a certain type of growth could be defined, the concept does not have the means to implement such goals. In brief, the concept is not precise enough. It provides a broad overview of the pattern which economic growth may be expected to take over a considerable period of time, but does not possess the tools with which to influence this pattern. This problem relates, at least in part, to the varied beginnings of the concept.

Second, there are problems related to recognizing and selecting growth centers. There is no statement in the literature

on the concept concerning the size of potential centers, the best types of industries to attract, or how to define the spatial relationships that a given-size center may or may not have with its hinterland. Concerning the appropriate size for a growth center the choices available range from the farm to the metropolis.

At the town and country end, Nichols (1969) suggests that investment should take place in towns with the strongest links with the hinterland. She does not dismiss the idea of investing in the agricultural base. Moving up the scale, Cameron (1970) suggests that the optimum center size is in the neighbourhood of 30,000 - 250,000 population - obviously a rather large gap to work with; while Thompson (see Richardson, 1969b) establishes the critical level for self-sustained urban growth at the quarter - million mark and above.

Regarding industrial types, there is a lack of concensus in the literature on the best size or type of activity to invest in. Much of the analysis focuses mainly on the types of external economies which can be expected from particular types of industry (e.g. Parr, 1973; or Darwent, 1969). But even in this regard there are pitfalls. Staley (1970) argues that there are serious problems associated with (1) defining what an external economy is, and (2) defining who or what causes external economies.

Key aspects of urban-regional relationships also are not very well developed in the concept. There are no real mechanisms available with which to assess dynamically the extent of a center's hinterland or the magnitude or the nature of the growth processes

which operate between the center and its hinterland. Therefore there is no way to guarantee that spread effects will in fact prevail as a result of adopting a growth center strategy, or how long it will take for them to appear.

In brief, it appears that the growth center concept does say something about why concentrated urban investment should lead to regional and national convergence, but it says little about the how, when and where of the matter.

Problems of the concept.

The main problem here is that, while the concept seeks to offer a dynamic interpretation of the growth and distribution of economic activities in geographic space, it consistently must fall back upon static techniques and practices in order to show where a strategy might be implemented, what the probable outcome may be, or how an existing strategy is progressing. Like growth pole theory in this respect, the growth center concept relies heavily on input-output derived linkages, multipliers and assessments of key industries - all of which can detract from a successful investment strategy due to their own particular problems.

For the same reason, diffusion theory is one area which has not received enough treatment within the concept. Recent developments in that area have been significant enough to warrant its incorporation within the growth center concept. Berry (1972) suggests that the growth center concept is a particular case of

diffusion which could, perhaps, be more adequately developed within the better developed general case of diffusion theory. This proposal has a lot of merit.

In the final analysis one is faced with the prospect of deciding how applicable the concept really is in terms of planning and policy-making. On the surface it appears to have a good grasp on the reasons why growth is inherently polarized in geographic space. However, its real usefulness is extremely limited, not only because of its own particular problems, but because of the physical and institutional constraints which characterize each specific application.

CHAPTER FOUR

INSTITUTIONAL CONSTRAINTS ON DEVELOPMENT

The previous two chapters focused attention on the suitability of the growth pole and growth center notions as bases for strategies of development, based solely on the merits and demerits of each concept. It has been shown that, in theory, neither concept is entirely adequate in providing a solid foundation for development policy and planning. It is the purpose of this chapter to show that the same situation also prevails in practice - not only for growth pole and growth center notions, but for development theories in general. The tendency among theorists has been to take a broad and general view of development problems, looking for common characteristics in a number of different settings rather than stressing the unique characteristics of any particular problem area. In theory, this may be acceptable but in practice it can lead to disastrous results.

By using the Latin American context as an example, it is shown here that the physical landscape upon which development strategies are imposed plays a major role in determining (1) the suitability of any theory of development as a basis for development policy, and (2) the likelihood that such a policy will yield positive

results. It is also stated that socio-economic patterns are tied to the physical landscape and that they serve to reinforce the above situation. Three short scenarios are presented in support of this statement.

Regardless of the physical and socio-economic context of a problem area, no development strategy can succeed without the full support of the political sector. The centrality of the political factor to successful development is analyzed with an emphasis on policy attitudes and the need to be receptive to change. The discussion is then extended to include planning problems which may result due to insufficient political motivation to develop. In both instances the discussion is general.

4.1 THE LATIN AMERICAN CONTEXT

During the mid to late 1960's, many of the nations of Latin America adopted growth center strategies. Their development patterns over time have resulted in a severely polarized pattern of development which, it was believed, growth center strategies could ease. Growth center strategies held the promise of relieving the great economic, political and social pressures which have been a result of the intense polarization of growth in a few large core regions. However, a decade later, the same nations are rejecting the growth center notion almost as fast as they accepted them (Conroy, 1973) and, more generally, appear to be getting away from the regional bases of planning.

Richardson (1975) describes Latin America as a rimland-heartland continent. Friedmann (1963) discusses its development in terms of his center-periphery concept, and views it as a dual economy. The interpretations fit together hand-in-glove. The "rim" of the continent is composed of a band of territory perhaps 300 miles in width. Within this band are concentrated the largest proportions of the development, investment, non-agricultural production and population centers of those nations which have favourable coast-lines. Much of this activity is concentrated in what Friedmann (1969, p. 162) refers to as the "core regions" - large, deconcentrated urban regions, each of which may contain more than one, and often several, highly interrelated centers. These areas are characterized by their increasingly large size, and their dominance over peripheral regions.

While acknowledging those land-locked notions and inland centers of the continent, the rest of the land mass is referred to as the heartland, divided and subjected to the appropriate controls of each individual nation. These heartland regions are Friedmann's peripheries, and are for the most part rural, underdeveloped, relatively stagnant and marginal to the business of growing nations.

Between the two are very large and widespread gaps which concern nearly every aspect of daily life. It is these differences between the town and country, and all that they represent, which form the real bottlenecks to development planning (Wood, 1975). The problems which are consistently encountered in trying to solve

them are as much a function of the geographic conditions of the continent as they are of the characteristics of the economies, plans and strategies, and people who are charge to correct them.

The geographic constraints to equitable and efficient development have been compounded by the colonial experiences of the continent, and together they account for the present polarized patterns of development. Geographically the continent, and the nations which now occupy it, exhibits very extreme topographic and climatic variation. The mountainous and scarped coastlines, reinforced by dense jungles, humid swamps and dry plains, have successfully restricted most of the urban growth to coastal or marginally interior locations. The colonial experience has also played a role in cementing this pattern. The early explorers, and later the settling colonists, established themselves in coastal and port locations, partly in deference to Mother Nature, and partly out of the necessity to establish points of contact with the outside world. Internal settlement was in large part determined by the availability of natural resources, exploitable native labour or a suitable agricultural environment. Over time, these patterns have become solidified. Dense urban concentrations have reached huge proportions, with a great many Latin American ^R notions exhibiting primate city-size distributions (see Berry, 1961). Interior interregional and international transportation and communications networks have not been well-developed (see Gauthier, 1970).

Archaic systems of land ownership coupled with large proportions of good but underutilized land and absentee landlords, have resulted in poverty-stricken and poorly organized patterns of rural settlement (see Myrdal, 1969, chapter four).

This is the environment upon which growth center strategies were imposed. However, this environment is further complicated by social and economic problems which, as might be expected, reflect and reinforce the existing patterns of development. On the whole, Latin America is no different than most developing nations in that it suffers from :

- (1) low incomes;
- (2) low productivity;
- (3) high unemployment and underemployment;
- (4) retarded levels of social development;
- (5) severely maldistributed population and economic activity;
- (6) excessively high birth rates;
- (7) high rates of migration;
- (8) a neglected rural sector;
- (9) the absence of a strong middle class; and
- (10) the lack of entrepreneurial capital and ability.

This list is far from complete. Masannat (1973, p. 209) presents a listing of twenty problems which are of paramount importance in achieving sustained development. The correction of these ills necessarily precedes the correction of problems of spatial

organization. How these factors affect growth center strategies are illustrated in the short scenarios outlined below.

Scenario # 1.

Growth center strategies work best under conditions where large firms can diversify or build branch plants in intermediate cities. There are a number of problems which confront this arrangement in Latin America. First, most industries are relatively, monopolistic, highly protected and are of the import substituting type. This arrangement promotes horizontal (and often unrelated) integration, instead of the vertical integration of industries (Conroy, 1973). Second, there is generally very little choice as regards the type of production process to be employed. Frequently it is a case of finding a suitable location for one particular process. This leads to the third reason, which is the lack of healthy, viable regional centers to serve as investment alternatives to the core region. Fourth, fiscal incentives to promote relocation may be weak, and fifth, there is a great need to be close to centralized administrative services and functions (Richardson, 1975).

Scenario # 2.

DPA or EOC investment provide for the smoothest and quickest stimulation of new growth, regardless of the strategy that they are employed in (see Hirschman, 1958, p. 83-86). However, in Latin America the absence of middle class élites, managerial

talents etc., plus the lack of the purchasing power of a large middle class, necessitates heavy expenditures in SOC before DPA or EOC investments can be made. Both the costs and the increased time lag are considerable. There is also the greater possibility of making wasteful mistakes (Hirschman, 1958, p. 84).

Scenario # 3.

Growth center strategies are most meaningful in the context of induced growth (Hansen, 1975, p. 821). They are investment strategies which seek to maximize the spread of new growth and the benefits of established growth. However, at least two factors impede this spread in Latin America. First, any new physical plant which is generated faces the same locational problems as those outlined above. Second, most of the new investment is in either:

- (1) private business of native origin, which tends to produce for small, urban markets. In this case the benefits (savings and income) often flow abroad or go into luxury housing and other investment projects of low or zero priority for development. (Seers, 1969, p. 4).
- or (2) multinational corporations of foreign origin, which tend to minimize the inflow of benefits to the host country while maximizing the extraction of potential investment funds (via the balance of payments) and natural resources (Muller, 1973, p. 146-147).

These brief scenarios are only meant to establish the fact that the socio-economic environment has a great weight in determining the success or failure of any planning strategy, particularly growth center strategies. Length considerations do not allow a full

exploration of the whole range of social and economic pressures which come to bear on development plans which incorporate this growth concept. The point is that growth center strategies have not succeeded in Latin America, but it might be added that few other strategies have succeeded either. The balance of this paper shows that a major factor contributing to this lack of success is the political variable.

4.2 POLITICS AND POLICY ATTITUDES

There is little doubt that responsive political systems are of paramount importance in determining the success or failure of development strategies in less-developed countries (LDC'S). However, much of the literature on development planning and development strategies mention only implicitly the role of the political variable in successful development planning. There is much discussion regarding the necessary inputs to responsible decision making and the need for political and administrative decentralization, but very little concerning the likelihood of successful development based explicitly on responsible political action and the probability of its occurrence. Political structures are not subject to the same dissection and analysis as are the regional, economic and social structures of LDC's except, of course, in the literature of political science and political economy. Yet the importance of this factor to successful development may be summed up in Griffin's statement that "the essence of development is institutional reform" (Griffin, 1969, p. 31). And it is the political sector which

determines the direction and the extent of any institutional reform in an LDC.

The successful movement of any LDC from a traditional to a modern state may, in large part, be viewed as a function of the responsiveness and receptivity of its political structure to change. Economic development has historically always meant a far-reaching transformation of society's economic, social and political structure (Baran, 1957, p.3), and there is no guarantee that this transformation will be orderly. In fact, it is essentially destabilizing (see Olson, 1963; Johnson, 1964; or Tangri, 1964). If the instability which traditionally accompanies development is to be minimized, then the political system of the LDC in question must be most responsive to, and the prime agent guiding, the forces which act to transform a traditional society into a modern one. It must be able to adapt to and then sustain change within itself, and it must recognize the need for, and then create, the policies which are necessary to provide for those institutions which are needed in order to guide the transformation of society. There can be no orderly transition for LDC's unless their political structures change along the lines outlined above. Kautsky (1969) goes as far as to predict that any autocratic or dictatorial regime which refuses to adapt and to modernize will, eventually, bring about its own collapse. The question now is : are they modernizing? In order to answer this question , the effects of political structure and attitudes on development are outlined in

brief below.

Political Structure and development.

Political instability will arise when institutions fail to meet the demands which are placed upon them (Spengler, 1960). In many cases, adequate institutions and social organizations have not been provided to take the place of displaced traditional norms. A major reason for the lack of institutional and organizational development is the inward-looking focus of the polity in LDC's. Pye (1958), in a generalized treatment of non-Western political systems, produces no less than seventeen major structural limitations which are inherent, in varying combinations, in the political processes of LDC's. Five of the most important limitations are outlined below.

First, the political sphere is not clearly differentiated from spheres of social and personal relations. Compounding this is the prevalence of personal cliques. Concerning decision making, these conditions promote two developments :

- (1) political decisions are frequently made on the basis of whose friends will get what; and
- (2) political decisions are frequently made as a result of clique pressures and power politics.

There is a large degree of overlap between the dominant political interests and the dominant business interests. One can easily view political decisions as the outcome of competitive bidding among different factions, plus considerations of how friends and family

will benefit from any given decision.

Second, there is a high degree of role substitutability among élites. Roles tend to be functionally diffuse rather than functionally specific. Politicians frequently become involved in administrative decision-making. The civil service is not above taking an active political role and the military is sometimes called upon to intervene in the political process - as witness the fifty-six successful coups d'état in Latin America during the period 1935-64 (Needler, 1966).

Third, most political processes lack integration. There is a distinct lack of national unity within political systems. National, urban-based politics frequently has little connection with local, rural politics. Village feedback is weak due to the poor communications and urban politicians may have only the cloudiest of notions as to what the true rural situation is. Lewis (1959) points out that Cabinet ministers come from urban areas while the rural representatives are left to fill the back benches of the National Assembly, and therefore urban interests dominate in fund-allocations and development decision-making.

Fourth, there is little agreement as to the ends and means of political action. This is partly a result of the lack of urban-rural communication, but it is also apparent between different political factions at the national level. The result is a diminutive basis for political discussion and little consensus over the approach that political action should take.

Fifth, the expressive aspect of politics tends to override the problem solving or public policy aspect of politics. Considerable expenditures are made on ceremony, real estate and expensive military hardware. A large percentage of these expenditures go towards maintaining the status quo. Military and security forces, in particular, seem to spend more of their time quelling internal disorders than fending off external threats.

It should come as no surprise that the problems of development exist. To use Myrdal's (1963, p. 63) expression, the masses are everywhere the object of politics but nowhere the subject of politics. They are ruled by compromises, accommodation and sometimes infighting among the various groups that together constitute the upper class. Given the prevailing interests of the élite ruling groups, the failure of modernization efforts seems preordained. The success of development planning in LDC's reflects the degree of realism and awareness brought to bear on development problems by ruling governments.

Attitudes and Development.

Since World War II modernization has been embraced as a national goal by all LDC's (see Myrdal, 1969, Ch. 1). The post-war era has seen many of the younger generation of élites press for a divergence from traditional values and institutions. These young people are frequently Western-educated and they have seen for themselves what science and technology can do. They have pressed

for change and they have succeeded, either by attaining political power themselves or by convincing the established élites of the need for change (see Kautsky, 1969; or Baran, 1973). Their view of change, and how they chose to implement it, has had drastic effects on underdeveloped societies.

It is not an exaggeration to say that neither the developed nor underdeveloped world were quite prepared for the consequences which have been a result of modernization attempts. Both had a rather simplified view of the development process (Myrdal, 1969; Ch. 1), and were inclined to believe that internal unity and development would follow automatically as a result of concentrated physical investment. Centralized and urban-based policy-makers invested heavily and the developed nations backed them in developing new infrastructure - ports, roads, communications, urban utilities etc. Concentrated industrial investment favoured import-substituting industries following the heavily technological, Western style of development.

The results have not been encouraging. The world at large has learned that development is neither automatic nor unifying. In fact we are all too well aware of the disruptive nature of development, especially bad development. These early attempts at promoting new growth have generated at least two major destabilizing conditions:

- (1) They have been a major factor in attracting migrants to the large cities in search of better opportunity. They have generated rising expectations within the populace which the real achievements have not met.
- (2) Peripheral regions have become frustrated. Scarce capital and migrants have migrated to the largest centers. The lion's share of the largesse is concentrated in these few large centers. The result is that the peripheral areas have been neglected politically and financially as a result of the modernizing effort.

In this type of environment traditional norms crumble but are not replaced with alternative institutions. In the face of an incapable political and administrative structure, social and economic disparities increase. The great paradox of development becomes evident : central governments espouse greater equality and a reduction in social and economic disparities, while at the same time these very disparities continually and consistently increase (Myrdal, 1969).

The presence of the paradox in LDC's is explained, at least in part, by the receptivity of the political sector to change. LDC governments do want to modernize. But it appears as though they will accept change only insofar as it does not threaten traditional distributions of power and wealth. It should come as no surprise that this condition presents considerable problems for development planning.

4.3 PLANNING PROBLEMS

Waterson (1970) suggests that there are three key components which enter into the development planning process :

- (1) political willpower;
- (2) accurate preassessments of resource and economic potentials; and
- (3) adequate administrative capacity.

Political willpower.

Waterson suggests that there is a decided lack of patience on the part of politicians in LDC's to develop the will and the discipline necessary to see development strategies through to the end. He feels that politicians in general do not give development plans enough time to yield fruitful results before either scrapping them or searching for new alternatives. Reasons for this range from an unwillingness to institute the reforms necessary to correct the imbalances resulting from earlier modernization efforts, to the need to see immediate results in order to enhance their credibility in a political world where terms are short and political discontent and instability high. Regarding growth center strategies, this unwillingness has led to :

- (1) a continued urban focus for the majority of investment funds;
- (2) the continued neglect of the rural sector; and
- (3) the scrapping of most growth center strategies because they were either :
 - (a) erroneously planned from the start and may have produced industrial enclaves; or
 - (b) were not given sufficient time to yield positive results.

The net result in these cases has been a reinforcement of polarized patterns of growth.

Accurate preassessments.

Preliminary surveys and resource inventories are rarely completed accurately and when they are, the data they yield are of dubious quality. Lewis (1959) states that preliminary surveys are starved of funds so regularly that those charged with conducting them frequently given up applying for any funding at all. Yet these searches are of particular importance in LDC's for at least two reasons :

- (1) While many of these LDC's possess large quantities of natural resources, they frequently do not possess the right combinations in suitable locations to allow for the industrialization which their governments are so fond of pursuing.
- (2) These searches may show that not only is a particular industrial strategy not the best alternative - it may not even be feasible. They may just point out that the best alternative is rural-based and is agriculturally centered.

These surveys assume added importance when it is borne in mind that LDC's do not possess the well-functioning market systems and the feedback and data-gathering services which such systems provide in the more developed nations (Stolper, 1970; p. 711).

Adequate administrative capacity.

The large and grandiose development schemes which most LDC's are prone to produce invariably fall upon an inept administration to implement. There are a number of by now familiar reasons for this ineptness :

- (1) a lack of basic training among administrators;
- (2) administrative appointments made not on merit bases, but on social and political criteria;
- (3) a lack of data, not only on resources but also on population characteristics, the state of the economy and international relations;
- (4) a lack of an integrated network of institutions which are sufficiently differentiated to allow for efficient administration; and
- (5) budgetary constraints.

Therefore, insofar as there may be a discernable and rational planning process present in these nations, it is automatically straddled with the inability to identify, assess and understand problems in the first instance and the incapability of administering proposed solutions in the second. As might be expected, the absence of a rational planning process compounds these problems.

Development planning, as a process, involves the application of a rational system of choices among feasible courses of investment, and other development actions based on a consideration of economic and social costs and benefits. A development plan is the logical outcome of the planning process. This plan must be arrived at through an ordered sequence of events which culminates in the selection and implementation of the most favoured or the most feasible alternative strategy from among a body of possible and feasible alternatives. This process is little more than an ideal in LDC's. The planning which is carried on in LDC's is necessarily

biased by the following considerations :

- (1) desires to maintain the status quo
(see Baran, 1973);
- (2) political desires of ruling governments;
- (3) favoritism towards industrialization and
Western technology;
- (4) urban over rural preferences; and
- (5) the desires of aid-granting institutions and/or
nations.

That which results is not planning, but an ad hoc series of developments favoring the maintenance of the current system. Rational and innovative planning on behalf of the beleaguered masses is rare. Where reformers do propose change for the betterment of the populace at large, they are invariably met by the solid and opposing force of the "establishment". It does not come as a shock to find that the majority of development strategies have failed, are failing or will fail because of situations such as these - unless drastic changes are made in the near future.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

A basic purpose of this paper has been to illustrate that, in both theory and practice, the application of the notions of growth poles and growth centers to developing nations are bound to result in, and have resulted in, failure. It has been shown in this paper that there are specific theoretical factors which limit the applicability of each of these concepts as bases for development strategies. As a result of the limitations of each of these concepts, three main conclusions concerning growth poles and growth centers are possible :

- (1) Growth pole theory is not a theory of development. It is an economic theory which purports to explain the generation and spread of economic growth in economic space only.
- (2) The growth center concept functions best as a static, descriptive tool of analysis which describes, in a general way, how polarized growth situations may be arrived at. It does not provide the mechanisms necessary to manipulate the processes which produce such situations.
- (3) A growth pole does not equal a growth center, as there is a frequent lack of equivalency between growth in economic space and growth in geographic space.

As a result of the limitations of each concept, and the inadequacies and specific problems of the settings to which they

are applied, most strategies which use the growth center as a basis for policy are being, or have been, rejected. However, the search for alternative strategies is still in the very early stages and actual efforts using alternative bases have not gotten very far. (Conroy, 1974). Richardson (1975) suggests that it is precisely because natural polarization tendencies are so strong, at least in Latin America, that there really is no effective alternative to the growth center approach. This viewpoint finds agreement here.

If there is no effective alternative to the growth center approach, then there needs to be a change of emphasis in the concept. This change involves three highly intrrelated areas of concern :

- (1) a shift of emphasis from supply to demand;
- (2) more emphasis on human resource development; and
- (3) more research on information flows.

There is a prevailing tendency in development policies to place the emphasis on stimulating the production and supply of industrial goods (Hansen, 1975; p. 830). More emphasis should be placed on stimulating the demand for such goods. In most LDC's, stimulating demand necessarily entails upgrading the rural sector, and there are a number of reasons why this may be beneficial (see Sutcliffe, 1971; p. 74-82) :

- (1) Agriculture composes a larger proportion of national product in developing countries; therefore, in the immediate future, expansion of the agricultural sector may most rapidly expand aggregate national product.

- (2) Investment in agriculture may be the most effective method of increasing employment.
- (3) Investment in agriculture may stem heavy rural-urban migration. It may even (as in the case of Costa Rica) promote net urban-rural migration.
- (4) Agricultural development may improve the distribution of income more than industrial development.
- (5) Expanded agricultural incomes may create a demand for industrial output.

This is not a new idea. For example, Mountjoy (1971), Nichols (1969) and Lasuen (1973) all question the heavy emphasis which has, until now, been traditionally placed on industrial investment. Basically the problem reduces to choosing between economic and human development, development via DPA and EOC investments or SOC investments, and assessing adequately the time lags allowable under each strategy before substantial improvements must be realized. More academics are now emphasizing human resource development over industrial development (see Myrdal, 1969; Schiavo-Campo and Singer, 1971; or Hansen, 1975).

Human resource development, if properly directed, is not without its benefits. Some of the more important potential benefits may include :

- (1) the growth of a strong middle class with higher purchasing power, and from which can be drawn the talent and capital necessary to build a solid, diversified industrial base;
- (2) an increase in the number of potential locations for growth centers in promising regions, via the strengthening of peripheral centers as a result of

- a healthier agricultural base;
- (3) the reduction of the disparities and instability which accompany development; and
 - (4) the reduction of the possibility that a given growth center strategy will backfire and result in an industrial enclave.

However, the success of any rural programme will be directly affected by how much is known about information flows, adoption rates, barriers to adoption etc. If the risks which are attached to the spread of agricultural innovations and agricultural extension programmes are to be minimized, then there needs to be a greater understanding in this area (see Lasuén, 1973). This greater understanding has a side benefit in that it will probably provide badly needed data on how to increase the spread of industrial innovations and benefits from core regions to peripheral centers.

The suggestions made above represent but one of a number of possible avenues which may be explored in the search for better development theory and practice. However the theoretical and practical structure of any development strategy must take a back seat to the external conditions inherent within the settings to which these concepts are applied in LDC's. It does not matter very much what the quality or potential of any development strategy is, as long as there is basic resistance to its complete and intended purpose within any LDC. Academics may pursue the relentless search to perfect existing theory. They may strain to discover the mechanisms governing growth

processes which have so far escaped identification and quantification. But the fact is that their results will have little applicability until political systems become more receptive. Politics is the prime mechanism governing growth and development, and it is not a particularly obscure mechanism. It is just downplayed among academics.

As Myrdal (1969, Ch. 1) states :

"... research tends to become "diplomatic", forbearing , and generally overoptimistic ; bypassing facts that raise awkward questions, concealing them in an unduly technical terminology , or treating them in an excusing and "understanding" way".

He suggests that optimism be replaced by realism, regardless of the discomfort that it may impose upon the traditionally comfortable academic life. Galbraith (from Myrdal, 1969; xii), supports this view in his statement that :

"... - it will henceforth be a matter not alone of pride, but of necessity, to say exactly what we mean and think. If necessary, we will oppose men, otherwise qualified, who are given to political rhetoric and where we suspect some gap between promise and performance."

The gap between promise and performance is controlled by the political variable more than any other. Wherever it is perceived that this variable will have a negative effect on the development of LDC's and the alleviation of poverty; it becomes the duty and obligation of all involved parties, not just academics, to bring considerable pressure to bear upon the miscreant - just as attention

is always brought to bear upon the theoretical short-comings of the development strategies themselves.

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