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# Industrial decentralization and regional development in South Africa

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# INDUSTRIAL DECENTRALIZATION AND REGIONAL DEVELOPMENT IN SOUTH AFRICA

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A dissertation submitted to the Faculty of Architecture, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Master of Science in Town and Regional Planning

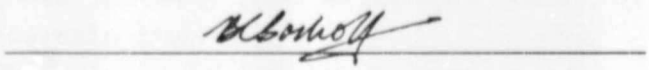
JOHANNESBURG, 1989

**ABSTRACT**

The dissertation begins by providing a conceptual framework for discussing industrial decentralization. This is done by assessing regional development planning in terms of its goals, objectives and theoretical base. Thereafter, one of the chief regional planning strategies - growth pole theory - is evaluated and found to be subject to numerous fashions and fads, and to be somewhat misunderstood. Industrial decentralization in South Africa (underpinned by growth pole theory), is then assessed and found to yield disappointing results even in terms of its main rationale of separate development. However, it is held that under certain conditions, an industrial decentralization strategy may be valid. These conditions are discussed, and the spatial and planning focus for such a strategy is considered.

## DECLARATION

I declare that this dissertation is my own unaided work. It is being submitted for the degree of Master of Science in Town and Regional Planning in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



29th day of MAY, 1989.

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B Borkoff

29th day of MAY, 1989.

## ACKNOWLEDGEMENTS

My grateful thanks to:

My parents, for backward linkages;
My wife, for forward linkages;
My supervisor, Dr. Richard Tomlinson, for patience, propulsion and the multiplier effect;
Louise Roggeband, for cheerful typing and retyping;
John Holland, for assistance with the production of certain figures;
The Development Bank of Southern Africa, for financial and temporal assistance.

Responsibility for the views expressed herein, as well as for any errors, lies with the author.

Soli Deo Gloria

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# CHAPTER ONE

## INTRODUCTION

The regional problem, like most planning-related concerns, is difficult to define. For example, most regional policy originates from a concern with regional and urban/rural differences in income and employment levels, and the perceived too rapid growth of the large cities. At the same time though, there is dispute as to whether regional imbalance should be viewed as a problem and whether urban primacy is not in fact desirable.

Many policymakers prefer to adopt a laissez-faire approach and to leave the market mechanism to redress imbalances. In the neo-classical view, regional imbalance is a function of disequilibrium in factor markets. It is held that factors such as capital and labour will move naturally (over space) to where they are most needed, thus redressing regional imbalances and restoring equilibrium.

This view has been hotly debated, particularly by disequilibrium theorists, such as Myrdal (1957), with his theory of cumulative causation; and Perroux (the initial architect of growth pole theory), in 1955. Disequilibrium theorists hold that growth, especially in capitalist systems, is a naturally disequilibrating process. Equilibrium therefore is not automatic. Whether equilibrium should indeed be striven for, and whether it is possible for it to be achieved, is another matter altogether.

Nevertheless, governments like to be seen to be responding to "regional problems" - the result is the articulation and implementation of regional policies. Traditionally, these policies seek to address three main regional problems:

- inter-regional inequalities;
- rural-urban inequalities; and
- the excessive size and rate of growth of the national metropoli.

Amongst the strategies employed to address these problems are integrated rural development, selective closure and agropolitan development, and urban industrial growth poles. It is the latter strategy which underpins much of the dissertation - growth poles have been one of the main regional planning tools in many countries, and they provide the theoretical basis for industrial decentralization strategies.

However, industrial decentralization has met with limited success world-wide. Why? The reasons are many: for one, critics hold that growth pole theory provides a poor foundation for policy. It has also been shown that growth poles have been used in a variety of situations, some of which are wildly inappropriate.

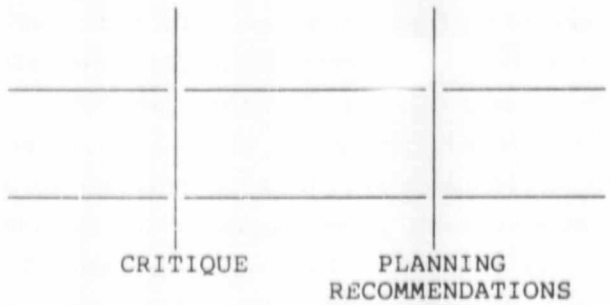
The latter strategy has also been engaged for the wrong reasons, because it is easily used for political opportunism.

The question thus arises: is there any hope for growth poles, or for industrial decentralization? The answer, it is argued here is: "perhaps". The contention of this dissertation is quite simple: **Industrial decentralization with its theoretical foundation of**

growth poles has met with relatively little success worldwide. However, under specific conditions, and against some of the current fads in regional planning, there is perhaps room for such a strategy in South Africa.

The dissertation will attempt to show **how** and **why** this is so, but this is a much more difficult task. Essentially there are intersecting facets to the argument: on the one hand world-wide experience is contrasted with the South African scenario. On the other hand, there is a critical element to the discussion, as well as a component which seeks to make planning recommendations. These elements wind their way through the dissertation and may be depicted diagrammatically as follows:

FIGURE 1: DIAGRAMMATIC CONCEPTUALIZATION OF THE STRUCTURE OF THE DISSERTATION:




Industrial decentralization cannot be considered in isolation though - this would be somewhat parochial in view of the fact that it is but one of a number of regional planning strategies.

**Chapter two** undertakes the task of contextualising regional strategies and theories. Given that the decentralization of industry is a regional strategy,

this begs the question: what are regional goals? In order to determine this, the chapter looks at the nature of regional planning, or regional development planning as it is sometimes called. The aim of the chapter is to determine the ramifications of regional planning - what are its goals and strategies and what theoretical base is there to draw from? The discipline is fraught with definitional and terminological problems, not least that of "what is a region?" The definition of a region can have major implications for the nature of state intervention and resource allocation. Closely allied to this is a brief investigation into the nature of regional pathologies - in other words, what are the problems that regional planning seeks to redress? It will be shown that there are four basic issues which have to be addressed in regional planning and they meander through much of regional planning theory.

Still in chapter two, the discussion turns to the body of regional development planning **theory** in order to ascertain how to overcome regional pathologies. To understand the nature of this body of theory, it becomes necessary to examine some of the dimensions of the building blocks of the theory, namely "development" and "space". Thereafter alternative theories of regional development and economic growth are elucidated, as are the policy implications of these theories.

It becomes apparent that the discipline of regional planning is somewhat in disarray. This is primarily due to growing pains (it is a young discipline), and goals which are both difficult to define and achieve, and are open to political opportunism. Furthermore, it is the truly multi-disciplinary nature of regional planning which makes its task that much more difficult.

Part of the problem in regional development planning is that "space" and "development" are poorly amalgamated in theory. Notwithstanding the many on-going debates in "development", there are a number of problems with conceptions of space - these are briefly identified, as are the effects of spatial and "aspatial" policies.

The second chapter concludes with a brief assessment of the regional planning discipline and the (difficult) role of the regional planner.

The nature of the dissertation means that the focus will concentrate on disequilibrium theories of regional development. One of the earlier theorists in this regard was Perroux, who laid the foundations for growth pole theory. As already mentioned, this theory underpins industrial decentralization - it is therefore important to understand its ramifications.

The **third chapter** initially reveals the alternating unpopularity and popularity of this "doctrine". To properly assess whether the theory should be in vogue or not, attempts are made to define growth poles, sketch their theoretical background and then evaluate them by reference to two brief case studies. Although the prognosis for continued application of the theory appears bleak, it will be shown that many problems are in fact due to misconceptions. Growth pole theory should therefore not so much be abandoned as extended. The form of extension is that of the secondary city, briefly introduced in this chapter and discussed more fully in chapter five.

Having laid some broad theoretical bedrock in regional planning, and having narrowed this down to growth pole theory, it is appropriate to discuss industrial decentralization in South Africa.

**Chapter Four** therefore begins by sketching a brief history of South Africa's regional policy, the cornerstone of which is industrial decentralization. It becomes clear both from international experience and from (the protean nature of) regional planning theory, that industrial decentralization is a difficult objective to achieve. There are, of course, different perspectives on how the policy should be assessed - the approach selected here is "developmental" - in other words, how the policy could contribute to the relief of poverty, inequality and unemployment. For ease of analysis, the policy is first assessed in economic terms, and then with regard to its political imperatives, which are shown to be paramount.

With respect to economic analysis, an overall empirical assessment is conducted. Part of this task is to assess industrialists' responses to the policy. This is in terms of labour, market and agglomeration economies, distance from suppliers and markets, bureaucratic problems and general chicanery associated with the policy. Although there is a vast overlap, the next subsection examines specifically developmental aspects of the policy. In effect the question is, how do industrial development points measure up to true growth poles and all that is expected from them? The answer is that they do not, and this suggests abandonment of the policy. This motion is substantiated when Bell's spontaneous decentralization thesis is considered in the following section. Essentially Bell observes that decentralization has been occurring independently of any policy incitements, and so the strategy should be seen as even more of a waste of assets.

The next section looks at the political considerations of ID. It goes some way in explaining why the policy has persisted and been revamped in the face of a demonstrated lack of success (in terms of achieving its economic and socio-political objectives).

Notwithstanding the disappointing results of industrial decentralization, it is held that the policy should not be abandoned completely. This assertion is on the basis of the extension of growth pole theory and equity considerations discussed in the next chapter. The motivation for pursuance of the policy is certainly not based on its existing rationale.

**Chapter five** considers the urban dimensions of regional policy and aspects of the settlement, urbanization and development nexus. It discusses in some more detail the legitimacy of the regional planning goal of stemming the size and rate of growth of large cities. Related to this are debates concerning the settlement hierarchy, and further aspects of the city in regional development, (and more particularly "secondary" and "intermediate" cities). Although urbanization is of singular importance in South Africa today, aspects of it are only briefly discussed since they represent a vast dimension of regional policy. The focus in this dissertation is more on whether a growth pole strategy could be employed, and if so, where "growth poles" should be "deposited" in space. Besides the urbanization debate, another series of equally important debates is hinted at - these are the issues of which form of economic growth (import substitution, export-led development and/or inward industrialisation) should be adopted and where this should occur in space.

**Chapter six** concludes by noting that South Africa's regional policy has not been been particularly successful, for a number of reasons. Firstly, the "regional planning portfolio" is not sufficiently diversified to comprehensively include other sectoral initiatives besides industrialization. Secondly, industrialization policy has not been adequately meshed with urbanization strategy and macro-economic and sectoral policies. The decentralization of industry has borrowed from growth pole theory, but has disregarded its tenets. The result is an expensive policy which is also wasteful of resources. It is held though, that in the interests of some form of spatial equity (but not equilibrium), "new generation" growth poles could be satisfactorily extended to secondary cities and that some form of decentralization would perhaps be desirable.

# C H A P T E R  T W O

## REGIONAL DEVELOPMENT PLANNING - STATE OF THE ART, OR THE ART OF THE STATE?

"Regional planning has come of age, it is part of the established machinery of Government" (Friedmann and Weaver, 1979: 1).

"Regional planning has become a necessity in most countries. But nobody seems to know quite what it is, and no nation seems to know how to do it" (Ross and Cohen 1974, cited in Gore 1984: 236).

"The manipulation of spatial forms has always been a means used by governments to secure popular co-operation" (Mabogunje, 1980: 12).

### INTRODUCTION

Regional planning in developing countries has taken a number of forms since the 1960s. It has included: a) locational programming of investments within a sector (usually the industrial sector), b) the creation of regional development agencies to bring about development in depressed areas such as river basins, c) the adoption of growth centres, and d) the decentralization of powers and functions of government (Gore 1984).

However, the evolution of regional planning commenced with the "utopian planning, cultural regionalism and territorial integration of the period 1925-1935" (Friedmann and Weaver 1979: 8). These authors state that the next phase was the "practical idealism"

(comprehensive river basin development planning) of 1935-50. This was followed by "spatial systems planning" (1950-1975), which concentrated on functional integration of the space economy. This phase comprised a) spatial development in newly industrialising countries (to be accomplished chiefly via growth poles), and b) planning for backward regions in industrially advanced countries.

The post 1975 epoch has espoused "territory" more than "function". "Functional planning" encompasses essentially mathematical formulations of networks, nodes and linkages encompassing the whole world. It emphasises the location of economic activities and is assumed to have universal validity.

"Territorial planning" on the other hand, is concerned with historically defined populations inhabiting specific places. This type of planning searches for historical continuities, a general "quality of life", full development of productive potential and political autonomy (Friedmann and Weaver 1986). The latter epoch finds expression in the selective regional closure and agropolitan development approaches, with Friedmann and Weaver being its chief exponents. These approaches have been convincingly downtrodden for being somewhat utopian, assuming a regional tabula rasa, artificially separating "territory and function", and underplaying the existence of conflict and class differences (Dewar et al. 1986).

This dissertation deals with the decentralization of industry (via growth poles) in a regional context. Consequently a more "functional" planning approach is adopted. Growth centres cannot be divorced from the overall framework of regional planning, for they are

but one strategy in the armoury of regional planning strategies. However, as Gore (1984) observes, there is currently a paradox in regional planning - governments are embracing regional planning at the same time as theoreticians are confessing the poverty of theory. Is something amiss? Should regional planning be abandoned in favour of a laissez-faire approach? Or is Gore's assertion incorrect? The task of this chapter then is to examine the ramifications of regional planning - it's premises, aims and objectives, and the pathologies it seeks to address. This provides an adequate framework with which to decide eventually what form South Africa regional policy should take (if any), and specifically whether industrial decentralization should be pursued, and if so, how. A tortuous path follows, but it starts simply, by examining the nature of regional planning.

## THE NATURE OF REGIONAL PLANNING

A suitable launching pad for the discussion is a manageable definition. After Gore (1984: 2):

> The technical basis for making decisions about where resources should be allocated and where projects are located, where urban growth should occur and where particular types of land-use be encouraged, lies in a growing literature which may be designated as "regional development theory.

As has been noted, regional planning is very much a part of government machinery (or "machinations" as Bell (1987a) would have it!). According to Shaw (1977) regional development has become a macro-economic policy objective and takes its place alongside those of full employment, price stability, economic growth and the international balance of payments. The goal of regional development in this context is usually "balanced" regional development.

The phenomenon of uneven development is one which confronts many developing countries and is usually expressed in dualistic terms - for example - the North-South issue, rural-urban income differentials, the formal-informal sector and so on (Prantilla 1981). Although this phenomenon is also expressed regionally, development problems are highly contextual, and are a function of the geography, systems of government, level of development, history, tradition and societal goals of a country. However,

> behind all the country differences, an almost universal perception is of a lack of regional 'balance' and of spatial distortions in the pattern of national economic growth. In most countries, a regional policy rests on much more than an administrative game plan for more efficient growth (Richardson and Townroe 1986: 651).

Given that South Africa also experiences "regional imbalance" and regional policy ostensibly attempts to redress this imbalance, this chapter intends to sketch some of the broader theoretical issues which extend beyond "game plans". It is clear from a literature survey though, that regional planning as a discipline is in disarray. This discussion will attempt to show why this is so. To do this requires some broadening of the nature of regional problems, and some of the strategies which have been employed to overcome these problems.

According to Hoover (1975: 5), spatial and regional economic problems anyway, are built on three facts of life: i) natural resource advantages (translating to imperfect factor mobility); ii) economies of concentration (imperfect divisibility), and iii) cost

of transport and communication (imperfect mobility of goods and services). What then, is regional development planning (RDP) about?

There are many opinions: Friedmann (1966 cited in Gore (1984) has somewhat catholically defined RDP as the "where" of development. Hoover and Giarratani (1984: 3) extend this definition by summing up regional or "sp tial" economics as dealing with the question of "what is where - and why - and so what?" Here, **"what"** refers to every type of economic activity (firms, households and private and public institutions); **"where"** refers to location in relation to other economic activity (this includes questions of proximity, concentration, dispersion, dis/similarity of spatial patterns at different spatial scales); and the **"why"** and **"so what"** refer to "interpretations within the somewhat elastic limits of the economists' competence and daring".

These authors correctly identify that the spatial dimension has for a long time been missing from traditional economics. But regional development planning is not based solely on economics and the hopeful inclusion of the spatial dimension into analysis. In fact, RDP has a tetratomic nature - it is made up of economics, theoretical geography, location theory, and town planning (Misra 1981). This tetratomic nature contributes to both the strengths, and the weaknesses of regional planning, especially of late. Economists have often ignored the spatial or "where" dimension, whilst geographers have concerned themselves directly with this issue. However, the latter have "lacked any real technique of explanation in terms of human behaviour and institutions to supply the "why", and so geographers have resorted to mere description and mapping (ibid).

Traditional city planners, similarly limited, have remained "preoccupied with the physical and aesthetic aspects of urban layouts" (Hoover and Giarratani 1984: 4). Although there is a need for a "multi-sectoral" approach to development which co-ordinates various disciplinary skills and the activities of sectoral agencies at different spatial scales (Richardson and Townroe 1986: 651), this "multi-disciplinary" approach can clearly be as much a weakness as it is a strength.

This leads Misra (1981: 3) to suggest that the "discipline is unable to find a core, a direction, and hence a meaning which can be related to human destiny in clear terms", although it has "noble and important tasks to perform". Part of the problem in finding a central theoretical core is due to the myriad of endeavours and disciplines which development encapsulates. Planning therefore has to draw on all related disciplines, "between the two extremes of physics and linguistics" (Misra 1982: 2).

To compound these difficulties, planning itself has been subjected to much criticism - Muller (1987: 8) has noted the disturbing tendency in planning theory to separate the substantive and the procedural fields. The procedural model becomes severed from context and it is a "theoretical construct separated from socio-political reality". Misra (1982: 2) further enquires whether regional development planning is a) a "disaggregated version of national development" and b) whether "most of the so-called regional economic theories parading as regional development theories are really theories of economic growth applied at times inappropriately to regions" (ibid). He feels that the regional planning discipline is dying, (having been subsumed under regional economic and urban planning), and it will soon become a discipline of the past.

This would probably delight neo-Classicists since in their view, imbalances in income and employment will reach equilibrium through factor mobility. Thus capital and labour will move to where they are most scarce in the regional system (Richardson and Townroe 1986: 654). Daly (1981) has suggested that capital and labour were indeed crucial factors in the changing spatial systems of the 1970s. However, this mobility did not occur in the way that the 1950s neo-classicists had predicted, because they viewed capital and labour in "contained" spatial entities normally called regions. The assumption of closed economies was a fatal flaw - clearly there is some importance attached to how a region is defined.

A more thorough discussion will follow, but even at this stage it seems that regional policy is compromised by shifting paradigms and the lack of a central theme and distinctive philosophy. This is compounded by the confusion surrounding definitions of "development", "regional development" and "regions" themselves (Misra 1981: 3). Given the task of trying to assess the state of regional development planning in order to ultimately make planning recommendations, it is here that this tortuous journey begins - with the question - what is a region?

Regions in Regional Development

Many regional economists shy away from attempting to define a region since it is such a difficult task. Instead, they prefer to work with administrative regions, the excuse being that this is due to the dictates of policy and data not being available for other spatial units (Richardson 1978). Defining a region is a difficult issue - Gore (1984) cites some possible definitions: i) "regions are simple generalizations of the human mind" (Isard undated); ii) regions are a "methodological tool used in analysis, or a starting point in which the problem under study - poverty or backwardness in a certain part of the country is given definite boundaries" (Massey 1978: 110); and somewhat facetiously, a region is an area where a researcher gets a grant to study (Hoover 1975: 511).

The USA Regional Science Association has also grappled with the problem. Regions were viewed as units of data collection and analysis and "mechanisms for monitoring and controlling social affairs". Thus Gale and Atkinson (1979: 60) state that it is "difficult to find a consistent and well-articulated set of discussions on the idea of a region".

Whilst neo-classicists view a region as an area delineated by producers and consumers, geographers traditionally classify regions on the basis of:

(i) homogeneity, using common characteristics in sub-areas, for example, income levels and cropping patterns.

(ii) polarization (nodal, functional), where sub-areas are inter-related by flows of goods and services and income.

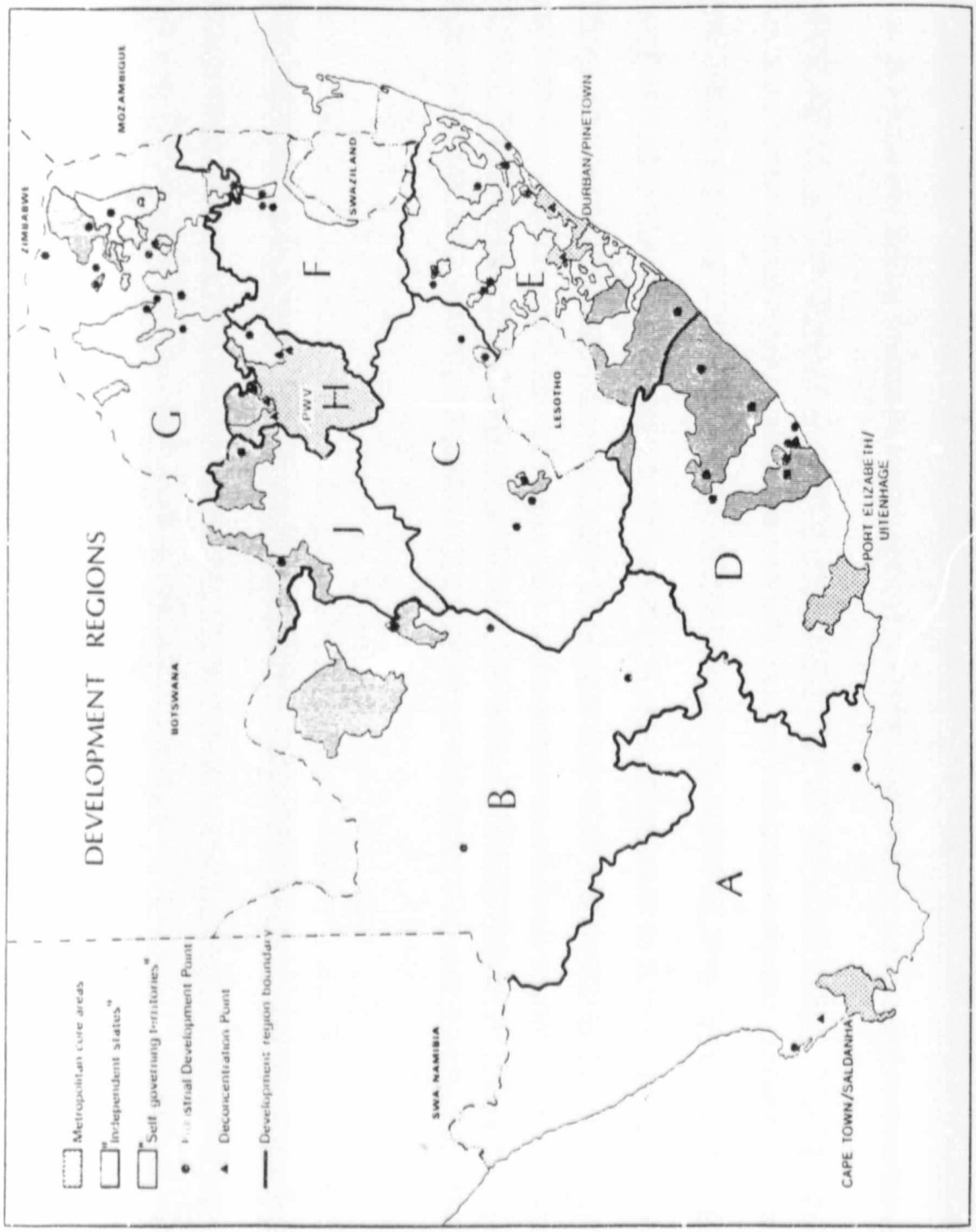
(iii) programming sub-areas, falling under the jurisdiction of a planning or administrative authority.

The definition of a "region" is of course of importance to any South African constitutional deliberations. For working purposes here, the 1982 Good Hope "development regions" will be adopted for the rest of the discussion. These are shown on the accompanying map.

South African development regions are defined on the basis of levels of poverty, unemployment and inherent development potential. The borders of these regions cut across homeland boundaries and are considered in some quarters to be constitutional building blocks for a federalist South Africa (Zille 1983). Hence, elements of all the above criteria are included in their delineation.

The predecessor of the 1982 regional strategy was the 1975 National Physical Development Plan. Here the 38 planning regions, derived from magisterial districts, were predominantly based on functional integration rather than homogeneity. In particular, the concept of a nodal region (different hierarchical levels of towns, each with a hinterland) was employed. It is also clear that on the basis of the above criteria there are inter-regional (and of course intra-regional differences) such that they are assigned relative development needs. The discussion now addresses the issue of the regional pathologies which regional planning attempts to overcome.

MAP 1: THE SOUTH AFRICAN SPACE ECONOMY AND DEVELOPMENT REGIONS



Regional Pathologies

> Regions, like people, want a doctor only when they are sick ... national attention is directed only to those regions that are in trouble, and there are always enough of them to worry about ... but to focus on regional pathology is both politically and economically rational (Hoover and Giarratani 1984: 363).

As was mentioned earlier, state intervention can be directed at backward regions or at developed regions in recession, for example, southern Scotland and Wales, northern England and parts of New England in the USA. Examples of the former are interventions directed at Appalachia (USA), the Maritime Provinces of Canada, the Mezzogiorno in southern Italy, and the northern areas of Sweden. Symptoms of regional depression include a persistent below average rate or growth, high and chronic unemployment and heavy outmigration. Whilst change is an unavoidable aspect of growth, the persistence of such problems may result in increasing inter-regional disparities and invite some intervention. The reasons for regional decline can be attributed to inter alia, an "economic arthritis" inhibiting the region's ability to adjust to rapidly changing conditions (ibid: 366), an intense degree of specialisation in non-growing activities, and a lack of diversification. (Diversification is less important than regional vulnerability to cyclical swings of cyclically sensitive activities such as durable goods and construction components though (Hoover 1975: 267)).

However, one of the most common areas of concern is that of the excessive spatial concentration of development, which in turn is related to the problem of too rapid growth in some areas, usually "core" areas.

This leads to the well-known excessive size and rate of growth of cities argument, which is discussed in more detail in chapter five.

In addition to this concern over excessive spatial concentration, there are another two policy problems which constantly recur - regional disparities and rural-urban inequality (Gore 1984). As far as Gore is concerned, these goals should not necessarily be assumed to be legitimate. Firstly, they are difficult to define, and secondly, whatever indicators are used to assess regional pathologies, (such as per capita income, employment opportunities, social facilities or infrastructure), they all merely describe a spatial pattern. For example, "excessive city size" is merely an aspect of the spatial distribution of population within a country. "In making these spatial distributions an object of policy, it is assumed that such spatial patterns are in fact social and economic problems" (ibid: 25).

Gore's dubiousness about these goals will be evaluated shortly, but first some of the basic issues of regional development strategy require attention.

## The Four Essential Issues of Regional Development Strategy

As Hoover and Giarratani (1984: 375) note:

> as soon as a national government assumes responsibility for the geographical impact of its actions, it needs to decide which areas merit its favourable attention. The answer is inevitably determined in part by political pressures, but it is clearly in the national interest to formulate and apply some more objective social and economic rationale.

Urban and regional planning then involves a range of interactions between the state and society (Gore 1984, Cooke 1983). The government is able to demonstrate that it is serving the national interest, even if this is couched in egalitarian rhetoric. But still, four basic regional strategy issues need to be addressed: place prosperity versus people prosperity; level of distress versus development potential; concentration versus dispersion, and the choice of means of assistance.

Some of the dilemmas inherent in these issues are whether aid to regions is really investment or just charity; whether areas should be selected on a "best-first" or a "worst-first" basis (targeting very distressed regions); and what the spatial focus of aid should be (which and how many urban points should receive attention). Naturally, there is no ready solution to these issues - besides the various approaches to development, developmental and regional problems are highly contextual. However, some general conclusions emerge, after Hoover and Giarratani (1984: pp 380-381):

Firstly, migration can, does and should play an important role in effecting desirable regional adjustments. (The racial nature of South African influx control has clearly compromised such adjustments by attempting to keep blacks resident in the inner and outer peripheral areas; that is, the platteland and the homelands.) Secondly, employment is not fully footloose - different areas experience different development constraints and opportunities. Thirdly, overemphasis on place prosperity is misleading since it largely ignores the poverty, inequalities and needs of

the people. Fourthly, "strong political pressure is to be expected in the direction of the use of local distress as a priority guide, the discouragement of emigration, and the diffusion of assistance to more and more areas". (These factors will be shown to be particularly relevant to South Africa's decentralization programme.)

Given that these issues are pertinent to regional development planning, it is nevertheless appropriate to move beyond broad conceptions of regional goals and the problems associated with regional planning and regions themselves. This chapter therefore continues with slightly more in-depth treatments of the general body of theory that has built up, especially over the last 25 years; some alternative theories of regional development and economic growth; and the policy and strategy implications of such theories. This is of course a somewhat ambitious task - whilst attempts will be made to provide a broad overview, the emphasis will necessarily be on those theories and approaches which are relevant to this dissertation, in particular, disequilibrium theories and growth pole strategy. Finally the role of the regional development planner in this morass will be considered.

## The Body of Regional Development Planning Theory

Comprehensive regional development planning theory should encompass explicit aspects of space, development and planning, yet it will be shown that conceptions of especially space and planning are often implicit, ill-conceived, or ignored. In fact, Gore (1984: 21) states that development theory, as a technical basis for regional planning, offers "non-solutions to non-problems". For Gore anyway, the only way out of this

impasse is to properly conceptualise space and development, and see regional planning as consisting of political choices.

Is Gore's contention correct? To find out, it is necessary to disaggregate the topic, even though this is paradoxical, because it actually requires holistic thinking (Mason 1986). Thus regional development planning is essentially based on conceptions of "space", "development" and "planning". "Development" provides the bedrock for the discussion.

"Development" as a Component of Regional Development Planning Theory

According to Misra, (1981b: 7):

> Just thirty years ago, all those who mattered in development - politicians, academics and planners - appeared to know what development meant and how to achieve it. There was a mood of confidence, assurance and urgency. There were instant solutions - decolonization, economic aid, industrialization, etc. The West was the model of development: where else could development theories come from?

This success euphoria has, however, given way to some despondency and the realization that development is far more complex and difficult to achieve (let alone define!). Definitional problems abound - even Dudley Seers (cited) wondered whether "instead of worrying about brushing aside the web of fantasy and slipshoddedness surrounding the word 'development', we shouldn't simply abolish its use and look for a better and less debased word" (Mabogunje 1980: 35). Nevertheless, Mabogunje (ibid pp. 36-46) cites the major ways the word has been used in the literature:

(1) Where development is seen as equivalent to **economic growth**, in other words, a rapid and sustained rise in output per head and attendant shifts in the technological, economic and demographic characteristics of a society. Here, export promotion policies are favoured.

(2) Development leading to **distributive justice.** In this case, special attention is given to target groups such as small peasant farmers, landless labourers and so on. Strategy attempts to even out gaps in life chances and the emphasis is often based on a basic needs approach, although growth poles and industrial complexes have also been utilised.

(3) Development as **modernization.** Here development is still seen as economic growth, but can be seen as a much wider process of social change. Wealth-oriented and consumption behaviour and values are to be inculcated, even though these often lead to gross inequalities between individuals. Import substitution is the predominant strategy.

(4) Development as **socio-economic transformation.** For Marxists, distribution and social justice issues cannot be seen independently of the prevailing mechanisms governing production and distribution. "Development" therefore represents a transformation of the mode of production.

How one sees "development" therefore influences how one sees regional planning, when the spatial dimension is added. But in the end, development involves essentially four questions: What is happening to poverty, unemployment, inequality and self-reliance? (Seers 1969, 1977; cited in Mabogunje 1980: 35)

The "attainment" of development in turn hinges on a number of sometimes dichotomous choices, as outlined by Misra (1981b: 7). These are: growth versus distribution; agricultural versus industrial development; urban versus rural development; capital-intensive versus labour-intensive technologies; the modern versus the traditional; centralization versus decentralization and socio-economic versus physical planning. Naturally these choices could be discussed ad infinitum, but attention must be directed at the component of regional planning which has long been a fetish of regional planners - "space". In fact,

> efficiency in spatial organisation arising from an ability to transform spatial structures in a manner consistent with a particular mode of production, is a critical, if not a major factor in the development of a country ... one can speak of development as essentially a socio-spatial process (Mabogunje 1980: 50).

Space

According to Gore (1984: 170) regional development theory has been arrived at by merely applying development theories in a spatial context. Obviously, if development assumptions and approaches are unrealistic and inconsistent, then regional development planning theory can only be impoverished. The views of Smith (1973: 23) support this. He points out that for generations, micro-economic theory and welfare economics was implicitly devoid of geographical content. The unstated assumption was of a spaceless or one-point world. However, no matter which perspective or assumptions are adopted, it is the conceptions of space, and the way that these are related to 'development' that compromise theory, and weaken explanations of regional and urban development (Gore 1984).

At the same time, the subject matter of regional development planning is space and the dynamics of spatial change. This space is not inert, it constantly changes because of interference by man. Conseqently, "regional development planning space" without man has no meaning (Misra 1981b).

Regional development planners should ultimately be planning for people. Spatial strategies per se may only provide the appearance of a spatial solution to what in fact are social and economic problems, by merely relocating the disadvantaged across space. Thus, regional development planning must look to the combating of causes, not symptoms of problems, by utilising social, economic and spatial policies.

Faridad (1981: 87) points to the necessity of giving explicit attention to spatial considerations in the course of development. He quotes:

1. Friedmann and Alonso (1964): "... it has become clear that the arithmetic of macro-economics has need of, and is made more powerful by the geometry of regional considerations..." **Resource allocation has a spatial component.** "Regions and space are neglected, but are necessary dimensions of the theory and the practice of economic development"; and
2. Richardson (1973): "... any revision of regional growth theory must start from the explicit introduction of space and distance into the analysis, both in the sense of distance separating regions in the interregional system, and spatial differentiation within regions".

(Faridad himself goes on to propose a "spatio-economic" regional development paradigm based on these ideas).

Butler-Adam (1985: 1), however, bemoans the fact that it is merely **analyses** of space which have changed over the years and "space" itself has remained "a constant, objective (if poorly known) reality". We need to demonstrate that space itself is variable, although human **understandings** of it have varied through history and across societies. It is not enough to ascribe different **perceptions** of space to changing intellectual and ideological fads (with affective and cognitive differences), when in fact the underlying problem is the Euclidean view of space. This has been perpetuated under many guises, (even allowing for ideas of "relative space", "cognitions of space", and "capital and the making of space").

The foundations of this view (that space is concrete uniform and an **absolute** container of the things of our experience) are attributed to: a) the Pythagorian conception that space is a thing, not an idea; and b) the Aristotlian conception of qualities of substance and continuity. The limitations of this view have of course been challenged. But the challenge has not been directed at the **nature** of space, but rather at different **analyses** of space. These challenges are expressed paradigmatically in the Quantitative, Behavioural, Experiential and Marxian approaches.

Although **analytical systems** have transformed the nature of space mathematically, varied it according to cognitive processes and experiences, and shaped its outer forms, social meanings and uses through the political economy; there is still an Euclidean foundation -- space is a uniform, homogeneous,

continuous container. (This was particularly so in the neo-classicist view.) For us to experience space and reality as governed by our perceptions in a continuous, finite and uniform manner, is seen as comfortable, rational and common-sensical. Cassirer (1985, in Butler-Adam 1985: 8), argues that the continuity, infinity and uniformity of Euclidean space are **not** embraced by our senses - human cognition is not (even) infinitely capable. In fact, a less contained, less organized view of space more closely approximates human perceptions of space.

Butler-Adam illustrates his contention by discussing place and the conflict of state and the individual - **"place"** may be construed as **"meaningful space"**, and may mean many things to many people; different things to different individuals at different points in time.

"Places may be seen to provide a concentration of meaning about spaces as they have been generated by various groups of people, classes, societies, or even individuals" (ibid: 11). Government housing schemes, (and by interpolation, decentralization of industry), provide a good example of this. State capital is employed to express a certain kind of space, occupied by technologically based dwellings and with its axioms "founded on the assumptions of state control, authoritarian organization and the promotion of alienation" (ibid: 12). This is in dire contrast to the "place" of informal residential areas. Here there is less distancing, more cohesion, far less alienation and the homogeneity and uniformity of Euclidean space.

Similarly, it may be argued that the "place" of an industrial development point is some ideological construct of those who plan in another place in space

(a centralized place). Views about and of space amongst "planners' and beneficiaries will be vastly different - different social processes operate at and between different places.

To sum up, it is essential, (after Mabogunje 1980) and Gore (1984), to take cognisance of:

1. **Absolute space** - this is the surveyor's and cartographer's space, identified through grid references.
2. **Relative space** - this emphasises the relationship between absolute spaces, for example the relationship between different settlements, especially in a physical sense (like distance).
3. **Relational space** - here non-physical aspects are emphasised, especially the value society places on particular locations (for example a hectare of ground in a peripheral area will have vastly different financial and social values to a hectare of ground in a core area).

Although none of these conceptions of space is mutually exclusive, the latter two are clearly more significant for human activity. So, in a sense, spatial reorganisation implies development, in that spatial forms represent physical realisations of patterns of social relations (Mabogunje 1980). The organisation of space is itself a function of three processes - those of spatial **competition, integration** and **diffusion** (ibid). These are briefly outlined, since they are essential to an understanding of regional planning, but especially, growth pole theory.

## Spatial Competition

Aspects of spatial competition are reflected in agricultural, industrial and commercial location theories. Importance is therefore attached to labour costs, agglomeration cost advantages, but especially transport costs. Spatial competition gives rise to regional disparities and is inherent in Myrdal's (1957) theory of cumulative causation, discussed shortly. These disparities invite policy intervention because of the interdependency of spatial units which results in leakages. Although "regional disparities can be expected to be reduced as development matures in a country, the evidence that this will happen irrespective of the strategy or style of development is far from conclusive" (Mabogunje 1980: 60). It would seem then, that there is a case for policy intervention.

## Spatial Integration

Spatial integration is a corollary of spatial competition and involves the co-ordination of spatial activities through nodes (particularly the urban system) and linkages (transportation and communication systems). Although its nature is elusive, it is generally perceived that there is a relationship between the degree of development in a country and its level of urbanization (Mabogunje 1980). If a country's economy is spatially integrated, there is more chance that policies applied to any part of it will impact through most of the system. This of course begs the question of how such innovations diffuse through the economy...

Spatial Diffusion

Spatial diffusion has received much attention in the development literature and is generally concerned with the diffusion of consumer and entrepreneurial innovations. Whereas consumer innovations largely take place at the household level, entrepreneurial innovations are more selectively adopted. This diffusion tends to appear spatially as terminals of a set of spokes from a common hub, thus reinforcing the role of urban centres and the transportation network. The nature and extent of diffusion has been questioned in many quarters, and in some it has been resisted, for fear that diffusion could undermine the cultural integrity of a people.

In the end then,

> spatial reorganisation is seen as synonymous with development in the sense that spatial forms represent physical realisations of patterns of social relations. The need for a pattern of social relations which can incubate new processes of production thus requires the reconstruction of spatial structures both in the rural and urban areas of a country (Mabogunje 1980: 68).

But space is not all there is to development. Theories and policies of development and regional growth need to be tacked on to spatial cognitions.

Alternative Theories of Regional Development and Economic Growth

As identified earlier, much of the motivation for regional policy rests on the observation that the geography of economic growth is uneven. Inhabitants of different spatial locales become relatively less

prosperous and so there are calls for political remedial action. However, any policy intervention should be backed up by explicit social goals and explicit analyses of the ramifications of uneven development. These analyses generally conclude that development has been uneven because of increasing returns to scale, constraints on the free operation of factor markets and the role of government in a free market economy.

However, there are a number of perspectives on the reasons for persistent spatially uneven development. The ultimate effects of this pattern are a slowdown in the rate of economic growth and in the growth of aggregate social welfare. After Richardson and Townroe (1986: pp 652-655), these viewpoints are: cumulative causation and core-periphery models, radical interpretations and neo-classical models. Similarly, Cooke (1983) has undertaken an overview of theories in the regional system which are more applicable to industrial development. Three classifications become apparent: those of Keynesian regional development models, the regional equilibrium theorists and the regional disequilibrium theorists.

It would be essential to consider all perspectives and theories in the design of a comprehensive regional strategy. For the purposes of this dissertation though, the radical approach, and the Keynesian models and regional equilibrium theorists are omitted from the discussion.

Regional Disequilibrium theories

These theories are most relevant to a discussion on regional development and industrial decentralization,

because they are based on the assumptions that: **"Economic well-being is not evenly spread over regional space**, and that in consequence, regional development processes are characterized more by disequilibrium, than by a tendency towards spatial equilibrium" (Cooke 1983: 120, own emphasis).

The two foremost theorists here are Myrdal (1957) with his theory of Cumulative Causation and Perroux (1955) who initiated growth pole theory. It is these theories and their derivatives, which will be discussed and critiqued. Myrdal sees development as starting in a particular "region" because of a "growth trigger", such as a mineral discovery or development of a new export food crop, or better skills and resource endowments. These endowments will set in motion a process of attracting more growth, and where the development is industrial in nature, capital will be transferred from agricultural regions, rather than being re-invested. An industrial versus agricultural region wealth disparity is thus introduced. This becomes cumulative as "backwash" effects drawing off from backward areas increase. These include trade in less developed regions being dominated by products from the more developed regions, labour migrating to industrialized regions (to maximize on the inter-regional wage differential), and "developing area" firms appropriating agglomeration advantages.

But, at the same time, a process of growth diffusing out from the developed areas occurs. This is manifested in an increased demand for primary sector products, and a possible eventual industrialization of activities such as food canning in the periphery.

Growth pole theory posits that growth occurs in different intensities in certain points in a region. The cause of growth at a pole is a specific innovative, propulsive industry, with a concentration of factors of production and exchange, and internal and external economies. "Spread effects" of growth (from the pole to its hinterland), and "backwash effects" (where less developed regions lose capital labour and markets, to the pole), also occur, a la Myrdal. Policy then takes the form of the state intervening and establishing counter-magnets to the initial "growth poles", so that income and other disparities between regions would be reduced.

Myrdal and Perroux both retain the idea that development does not spread out evenly over space. Whilst Myrdal somewhat pessimistically posits a vicious circle of po growth pole proponents feel that "successful ed" growth poles may "at least imply some re in the asymmetry of development, at least in the ..er-regional aggregate" (ibid: 123). Growth pole theory is evaluated more comprehensively in the next chapter since it is fundamental to an understanding of South Africa's regional development policy.

Alternative viewpoints of regional theories are now discussed in terms of Richardson and Townroe's (1986) categorization:

Cumulative Causation and Core-Periphery Models

Here, the work of Myrdal, Hirschman and Friedmann is prominent. To restate part of the above discussion, in the words of Richardson and Townroe (1986: 653):

> regional economic growth is, in effect, a process of cumulative causation, in which the high value cards are dealt to those regions which already hold a favoured hand. Any allocation of public expenditure among regions which seeks to maximise returns to the growth of the national product will tend to reinforce regional disparities. Market forces and state spending join in increasing rather than decreasing the inequalities among regions.

Friedmann's core-periphery model (1966, 1972, 1973) incorporated factors other than purely economic ones in describing the spatial dualism existing between the core-periphery. These factors include ideas, technology, capital and attitudes. Eventually though, regional disparities diminish as markets expand, communications improve, attitudes change and urban growth disperses. The key issue is of course whether this will happen sans policy intervention.

Neoclassical Models

This approach has been hinted at earlier, for example where regions are defined as aggregated production units. Imbalances in regions are held to be due to lags in the adjustment towards equilibrium in factor markets, or imperfections in the market process - regional economists are the most comfortable with this approach. Yet critics point to the approach's over-emphasis of the formal manufacturing sector as major change agent, a narrow explanation of regional growth patterns and the relative neglect of social and political factors.

Policy Implications of these Theories

Although the above approaches are not mutually exclusive, they tend to have different policy

implications. Basically, the neoclassical approach favours the use of incentives (especially in the formal manufacturing sector) in order to direct factors of production; whilst growth centre policies and improvements in infrastructure, transport and communications are the policy implications of cumulative causation theory.

Obviously, policy packages do not necessarily strictly adhere to these approaches. In general, the instruments for promoting development in selected regions and their major urban areas include cash subsidies to capital and labour, indirect protection from the tax system and import controls, the allocation of public sector investment, intervention in the location of public sector employment, licensing arrangements, the sponsorship of growth centres, new towns, and administrative decentralization (Richardson and Townroe 1986: 661). These authors go on to note that direct controls over migration are not successful, but granting some political and fiscal autonomy to regions often provides impetus to local economic development.

Nevertheless there are some key questions to consider with regard to regional policy:

1. **Causes of growth:** Why do some regions grow faster than others? What are the primary initiating factors responsible, and through what processes do these causes operate? What is the role of interregional trade, migration and investment in the spread of development from one region to another?
2. **Structure:** How does regional economic structure relate to growth? What kinds of structure are conclusive to growth, or the reverse? What structural changes are associated with growth?

3. **Convergence:** Why is convergence so much in evidence? It is universal and inevitable, or is it subject to reversals?
4. **Control over regional development:** Can regional development be substantially guided by policy? If so, what are defensible objectives and appropriate policies? (Hoover & Giarratani 1984: 314).

Although choosing a desirable policy mix is difficult, governments are notoriously unimaginative in their choice of policy options. Typically, lacunae in policy considerations include the need for and nature of regional planning agencies, and the importance of communications and human resources investments. However, for the purposes of this dissertation, the emphasis is on industrial promotion policies in the regional policy armoury.

## Industrial Promotion Policies in Regional Development

As Richardson and Townroe (1986: 664) note, the "choice of policy instruments in a regional development programme has to be made within the contexts of existing urban and industrial policies, the level and pattern of economic development, and the government structure". This choice is in turn typically influenced by criteria such as job creation, output, the use of scarce budgetary resources, the degree of administrative complexity, the bias introduced into resource allocation and anticipated local multiplier effects.

### Supply-led Regional Development

A popular policy choice is supply-led regional development. Typically, this involves the supply of

infrastructure since it is so controllable, and expenditures do not have to wait for responses from the private sector. This approach takes demand for granted - it assumes there is perfectly elastic demand for the region's products, so that regional activity depends on the availability of resources put into production (Hoover and Giarratani 1984: 329). The extreme form of this approach is the industrial estate. According to Richardson and Townroe (1986: 664), this is basically a sound approach since it invites agglomeration economies, savings in unit infrastructure costs and avoids "higgledy-piggledy land use patterns".

However, estates need to be planned in accordance with effective demand - building the estate from scratch and "sitting back and waiting for the firms to turn up - is very risky. **The supply of industrial infrastructure may be a necessary condition for regional industrial development, but it is far from a sufficient condition** (ibid; own emphasis).

Demand-led Regional Development

On the demand side, the output orientation of activities, backward linkages and final demand is emphasised. Economic base theory is particularly prevalent here - exports are viewed as providing the economic base of a region's growth. An increase in regional growth is assessed on the basis of linkage effects and the regional multiplier. (Very simply, the multiplier gives an indication of how income will increase after investment in that region. Generally, export multipliers tend to increase with increased regional size and diversity). But regional growth is not entirely a result of exports - in fact it is "more plausible to infer that a region's growth is enhanced

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**Name of thesis** Industrial decentralization and regional development in South Africa. 1989

***PUBLISHER:***
**University of the Witwatersrand, Johannesburg**
**©2013**

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