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- URBAN PRIMACY AND REGIONAL ECONOMIC DEVELOPMENT IN THE THIRD WORLD *A. Lemon*
- VICTORIA FALLS — THE GROWTH OF A RHODESIAN VILLAGE *R. A. Heath*
- THE POLITICAL ORGANISATION OF CHINESE AGRICULTURE *J. R. V. Prescott*
- A GEOGRAPHICAL SKETCH OF TAIWAN *S. O'Donnell*
- THE LOCATION OF MANUFACTURING INDUSTRY IN RHODESIA UP TO 1952 *L. Zinyama*
- HUMAN SETTLEMENT PROBLEMS *P. van Hoffen*
- MEASUREMENT — THE KEY TO TOPOGRAPHIC MAPPING *R. W. Sleight*

The authors alone are responsible for the opinions expressed in these articles. Articles intended for publication and all correspondence should be addressed to The Hon. Editor, c/o Department of Geography, University of Rhodesia, P.O. Box MP. 167, Mount Pleasant, Salisbury, Rhodesia. (Tel. Salisbury 36635-265).

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# URBAN PRIMACY AND REGIONAL ECONOMIC DEVELOPMENT IN THE THIRD WORLD

ANTHONY LEMON

Many developing countries are now being persuaded that an appropriate urbanization strategy could provide them with one of the means of achieving the modernization of their societies (Mabogunje 1973). Unfortunately the information upon which to base sound urbanization policies is invariably lacking, and frequently assumptions are made without the relevant questions being asked, let alone answered. In this paper four critical questions are asked, and an attempt is made to suggest a framework within which answers may be sought. It is recognised that any answers will be at best tentative, given the current state of research into what is an immensely complex subject. But it is also true that Third World planners cannot await the conclusions of present and future generations of researchers: they need guidelines, however inadequately based, for immediate policy formulation.

The following are the questions to be discussed:

1. Is there in any sense a 'law' of primate cities, and can primacy be related to a country's stage of economic development?
2. Are primate cities effective agents of modernization and equalization in developing countries, or are they too big, economically inefficient, premature, and parasitic? Are they, in short, a growing pain or a disease?
3. Should development planning aim to modify the urban hierarchy of a developing country, and in particular to reduce the primacy of its leading city or cities?
4. If and where such modification is attempted, how suitable and effective an instrument is the 'growth pole' model, and in what ways must it be modified in order to be appropriate in different environments?

## **Is there a law of primate cities, and can primacy be related to a country's stage of economic development?**

It was Jefferson (1939) who first coined the term 'primate city', believing that the largest city shall be super-eminent, and not merely in size, but in national influence' (p.227). The empirical evidence available at the time gave some support to this hypothesis; but the number of 'exceptions' has grown as fast as the number of newly independent countries, as a glance at Table 1 suggests in the case of eastern and southern Africa.

It is possible to distinguish two schools of thought so far as the explanation of the phenomenon of primacy, where it does exist, is concerned. One school seeks to explain primacy in terms of unique regional and historical factors. Thus Browning (1958) found that primacy in Latin America existed both inland and on the coast, in both large and small countries, at different stages of economic development, and under very different political systems. Ginsburg (1955) discusses South East Asian cities in similar terms. A simple piece of empirical evidence to support this approach might be derived from England and France, where London and Paris have maintained their primate stature for centuries, and the United States, where the 'rank-size rule' has held from the first census in 1790 to the most recent in 1970 (Rosing 1966). For the Middle East, Clarke and Murray (1973) have shown that a number of countries, which exhibit several of the characteristics often linked with primacy, have intermediate or binary city-size distributions.

TABLE 1

## POPULATION OF MAIN TOWNS IN THE COUNTRIES OF EASTERN AND SOUTHERN AFRICA

COUNTRY	DATE	POPULATION ('000)	LARGEST TOWNS ('000)
Angola	1972	5,792	Lobito 98 (1969) Benguela 35 (1969) Gaborone 18 Selebi-Pikwe 27 (1973)
Botswana	1971	596	Francistown 20
Burundi	1973 est.	3,600	Bujumbura 79 (1970 est.)
Kenya	1969	10,943	Nairobi 509 Mombasa 247
Lesotho	1975 est.	1,039	Maseru 14
Malawi	1966	4,040	Blantyre 104
Mozambique	1970	3,234	Maputo 355
Rhodesia	1975 est.	6,420	Salisbury 569
Rwanda	1970 est.	3,679	Kigali 54
South Africa*	1970	21,448	Jo'burg 1,433 (655) Cape Town 1,097 (691) Durban 843 (730) Pretoria 562 (544)
Swaziland	1975 est.	494	Mbabane 24
Tanzania	1967	11,763	Dar 273 Mwanza 35 Bugembe 32 Arusha 32
Uganda	1969	9,549	Kampala 331 Jinja/Njeru 53 Planning Area 47
Zaire	1974	24,165	Kinshasa 1,990 Lumumbashi 401 Mbuji-Mayi 335 Chingola/ Chitlabombwe 190
Zambia	1974	4,695	Lusaka 401 Ndola 229 Kitwe/ Kabulushi 292
			Umtali 62

\*Metropolitan populations followed by city populations.

The second school of thought regards primacy as related to a set of identifiable conditions. The often conflicting conclusions of proponents of this school, some of which are noted below, may well be a reflection of the artificiality of the units with which it has to deal. The internal and external political, social and economic characteristics of each country are, and have been at various past periods, so different that it is doubtful where statistical evidence can be used one way or the other to explain primacy and generalize about the conditions where it is likely to occur. More specifically it is true that many of today's independent states have not been so for long. Some have for varying periods of time been parts of larger political units, in which their present urban structures were formed. Thus the growth of Nairobi was assisted by the joint operation of many services throughout British East Africa, whilst the absence of a major urban centre in Botswana is partly explained by the location of the former colonial administration outside the territory in Mafeking. In other cases, the existing political unit represents an amalgamation of formerly separate parts. In Libya, for instance, Tripoli and Benghazi evolved as primate cities in Tripolitania and Cyrenaica respectively, during a period when connections between these two widely separated former provinces were much more tenuous than they are today.

Linsky (1965) found primacy to be characteristic of small countries, or countries (such as Kenya) with a small areal extent of relatively dense population. He also showed that several other conditions were commonly associated with primacy, although the presence of such conditions by no means guaranteed primacy. In countries with low per capita income, relatively few goods and services are needed, and the threshold demand may only be sufficient to support one centre. A similar argument was applied by Linsky to countries with a high national population growth; such growth creates an expanding demand for the type of services which are provided by large centres, but this demand may remain small enough to be catered for by a single centre. Export-orientated economies, by tending to concentrate wealth in relatively few hands, are also potentially instrumental in creating primacy. So too are agricultural economies; if primarily subsistent, per capita incomes will be low, and if more commercial the economy will be export-orientated. Finally, Linsky found that the urban hierarchies of former colonies tend to be dominated by the ex-colonial capitals. These were initially points of contact with the metropolitan power (usually coastal in Asia and Africa, but often on elevated interior plateaux in Spanish America for climatic reasons), where administration was centralized, and upon which the road network came to be focussed. As communications foci such cities remain advantageously located for the processing of raw materials. If coastally located they are even more convenient for starting those manufacturing industries which emerge by 'backward linkages' and gradually provide substitutes for imported goods. In addition, these ex-colonial capitals have benefited from the rise of nationalism and increasing centralization of political functions. ↵

Linsky included only the 39 countries which possessed 'millionaire' cities in the mid 1960's, but a similar study by Mehta (1964) considered 87 countries. The latter found little indication that primacy is associated with levels of urbanization, which appears to conflict with Linsky's positive finding in respect of agricultural economies. More important in the context of the present discussion is the fact that Mehta finds no evidence that primacy is a function of the level of economic development. This is quite contrary to the findings of Berry (1961) and El Shaks (1965).

If it could be clearly established that primacy is related to an early stage of economic development and later declines, this would be a strong argument for a 'laissez faire' attitude to primacy, rather than what might be seen as a premature attempt to correct the regional imbalances associated with primacy. El Shaks studied a cross-section of countries and found a near-normal curve of primacy and economic development: primacy was rare in very underdeveloped countries, rose during the 'take-off' stage, and decreased thereafter. This would suggest that primacy is a growing pain, and that as the economy matures, 'trickling down' effects or 'spread' in Myrdal's (1957) terminology, begin to operate, resulting in increasing equalization between different regions.

The validity of this argument rests on the assumption that Myrdal's spread effects take place at a relatively early stage of economic development, corresponding with the take-off stage. Alonso (1969) clearly believes this to be true, explaining the trickle-down effects in terms of the spread of literacy and administration, the opening up of the transport network, the spread of universal education and the standardization of many aspects of life. These are claimed to lead to an integration of the space-economy, making more distant manufacturing opportunities more accessible and more attractive to developers.

The trouble with these and similar arguments is that, whilst they remove some of the reasons for *not* investing in remoter or backward regions, they do little to counter the positive attractions of established primate cities (see below). They may even strengthen these attractions, by improving access to regional markets, and by raising demand only within the limits easily satisfied by one centre.

More fundamentally, Alonso appears to misinterpret Myrdal's position. Basically Myrdal's hypothesis of 'circular and cumulative causation' states that a growth region develops initially because it has easy access to natural resources or good transport facilities. Thereafter, *even when the initial location factors have ceased to operate* (this aspect of Myrdal's argument is seemingly ignored by Alonso) it would grow more rapidly than the surrounding areas, because of internal and external economies. This would have disadvantages for the surrounding regions which Myrdal calls 'backwash'; by this is meant selective migration and the movement of capital and goods to the favoured region. The greater profitability of this region attracts capital, and Myrdal even notes that freer trade and improved communications will allow the growth region to undercut established industries in the periphery.

It is true that Myrdal also envisages the possibility (he nowhere says inevitability) of 'spread' effects occurring at a later stage of economic development. But some of these effects — the development of a market for agricultural products of the remoter regions, the development of industry on raw material sites — will clearly result in very limited development relative to the growing region, on whose fortunes they will be clearly dependant: in other words, an internal colonial model. It is these spread effects, if any, which accompany the 'take-off' stage of economic development, and they are certainly inadequate to promote greater equalization. Other spread effects Myrdal sees as a result of the growth region suffering from diseconomies of scale — and, as we shall see later, there is little evidence that such diseconomies are present as yet in most of the developing world's primate cities.

Thus it seems clear that spread effects, where they occur, are too weak or much too late in occurrence to justify an association between primacy and the 'take-off' stage of economic development. From this it must be concluded

that regional equilization through spread effects is unlikely to occur unless a very definite policy of decentralisation and regional development is vigorously applied.

**Are primate cities effective agents of modernization and equalization in developing countries, or are they too big, economically inefficient, premature, and parasitic?**

To answer this question it is necessary to look more closely at the 'pull' of the primate city. It is well-known that much rural-urban migration in the Third World is partly generated by a misguided perception of the economic opportunities awaiting the migrant: an illusory 'pull'. Migration is also generated by the 'push' of rural over-population, at least in relation to traditional agricultural economies, and by the social inadequacies of traditional rural society. In the absence of any alternative poles of attraction, migrants are inevitably attracted to the primate cities, thus leaving the rural, and usually the interior, regions denuded of their younger, more skilled and educated, and more enterprising elements.

Brutzkus (1973) rightly distinguishes between basic factors which account for continued demographic and economic growth in primate cities, and less basic factors which tend to accompany them. It is the element of growth engendered by the latter which could, theoretically at least, be eliminated. 'Basic' factors include the following:

- (i) agglomeration economies, in the tertiary sector as well as secondary industry;
- (ii) communications: international airport, and often port facilities, plus a location at the focus of inland communications;
- (iii) technical infrastructures, and miscellaneous technical services including repair shops and stores;
- (iv) banking facilities. The concentration of these in the primate city also contributes to the drainage of savings generated in the periphery, and their reinvestment in primate cities;
- (v) proximity to government offices. Subsidies, licences, building contracts and allocations of credit all depend on government decisions, and direct access to government ministers can be very important;
- (vi) relatively large local markets with a purchasing power far exceeding the national average in a given country;
- (vii) a larger pool of labour, including specialist skills; to attract specialists to other regions, substantial inducement allowances may be needed.
- (viii) superior educational, cultural and entertainment facilities, creating a social environment relatively attractive to foreign investors and entrepreneurs, as well as to expatriate employees.

All these advantages, once achieved, are self-perpetuating, and not easily transferred to or created in other regions. The most basic and probably the most enduring advantage of primate cities which are also ports is their suitability for new manufacturing industries which emerge mainly by a process of 'backward linkages' and import substitution.

Four less basic factors deserve consideration. The first concerns the priority accorded to the industrial sector within the economic strategy of many

developing countries, particularly in the early years of independence. This often requires a highly protectionist policy aiming at far-reaching substitution of industrial imports. Such an emphasis clearly encourages the growth of primate cities. On the other hand, most agricultural development policies would displace at least some agricultural workers, for whom jobs must be found in other sectors if agricultural reform is to be a net benefit in terms of productivity.

Preference for 'spectacular' investments in 'prestige' industrial enterprises and public buildings also favours primate cities, where such projects are more easily displayed. Kwame Nkrumah in Ghana may perhaps be credited with initiating this unfortunate trend in the continent of Africa.

Thirdly the sensibility of the ruling groups to the reactions of the urban population must be mentioned. The people living in the primate city are capable of stronger political influence and challenges to the rulers than those living elsewhere, especially if communications are poor. As a result, the needs of this population are given priority, giving rise to the accusation that democracy, where it exists in the developing world, means little to those outside the major towns. Although strictly speaking a 'less basic' factor, it is not easy to see how this can be removed from the realm of hard political reality. The same applies to a fourth factor, namely the concentration of socially privileged and influential élites (including big estate owners in Latin America and some Asian countries) in primate cities. Many government contracts, credits and subsidies pass to these groups in one way or another, only to be re-invested within the confines of the city, so increasing by multiplier effects their economic and demographic growth.

Given the theoretical possibility of reducing or eliminating the significance of these less basic factors, it is pertinent to ask whether primate cities are actually economically inefficient. We have shown that primacy is unlikely to disappear of its own accord, but it does not follow that planning should seek to reduce primacy.

The usual argument for regarding concentration in a primate city as excessive and economically inefficient rests on the belief that per capita costs, particularly for infrastructure investment such as water supply, sewerage and roads, rise after a certain size. In fact the empirical evidence for this, as reviewed for instance by Moseley (1976), is weak, and there is little agreement concerning the size at which such diseconomies set in. Absolute size is clearly what matters, whereas all too often cities may be regarded as excessively large simply because they contain a large proportion of the national population. Thus Fair (1972), in appraising the arguments for industrial decentralization in South Africa, points out that the country's five largest cities, dominant as they may be economically and demographically, have a combined population which only approximates to that of Chicago.

Even if some primate cities exceed the threshold at which diseconomies begin to operate, this does not necessarily mean that they are too big. Not only is it possible that higher levels of municipal expenditure reflect greater benefits conferred in larger cities (Moseley 1976 pp.70-71), but it is also possible that the rise in per capita costs is more than compensated for by increased productivity per capita; as a result of internal or external economies in the secondary and tertiary sectors. The evidence is strong that per capita income increases with city size, whilst the incidence of poverty is reduced and the distribution of income probably becomes more equitable (Richardson

1973 pp.51-54). Such factors are all too often ignored in discussions of 'optimal' city size.

Whilst there is thus little evidence in terms of size to prove that primate cities are economically inefficient, it may be strongly argued that they are premature. In Western Europe and North America, industrialization preceded urbanization, but in the Third World the reverse is true. Thus France in 1856 had 10,7% of her population in urban areas, but 29% of her labour force in industry; Brazil, on the other hand, had 28% of her population in urban areas in 1960, but only 9,5% of the labour force working in industry. African cities such as Dakar, Abidjan and Accra may well reach a population of one million before even 5% of the labour force is engaged in industry. Thus, whilst these cities may not be economically inefficient because of their size, there is no doubt that their current economic activities are an insufficient basis of support for so large a population; in this sense they are premature.

Whether they are also parasitic is a rather different question. This is so, to the extent that people are employed or incomes increased in primate cities as a result of a net drain of capital from other parts of the country. But a large proportion of the rural migrants to the city, as well as of those born there, are underemployed or unemployed. Many survive by working in the 'informal sector', sharing their poverty in what has been termed a 'bazaar economy' (McGee 1971). This involves self-employment in such 'services' as shoe cleaning, washing cars, selling newspapers, and collecting useful litter; it also includes the fragmentation of retail marketing amongst many small-scale vendors scratching a bare subsistence from their efforts. These activities are largely non-productive, and appear parasitic in the sense that the urban economy could easily adjust and function smoothly without them. But to arrive at a fair assessment the activities of these people must be compared with what they would have been doing in rural areas. Whilst they would probably have shared in agricultural work, they would have done so, in over-populated rural areas at least, only by relieving others of some of the work: in other words (at least if the youth and energy of the migrants is ignored) no net increase in production would occur if they returned to the country. Migration may well improve conditions for those who remain, and to the extent that urban migrants gain their living in ways dependent on the existence of wealthier classes, this actually reduces the degree to which these élites may be regarded as parasitic.

### **Should development planning aim to modify the urban hierarchy of a developing country?**

The economic factors considered above, in relation to our second question, appear to suggest a negative answer to the third question. There are, however, wider considerations both economic and social, which may tip the balance in favour of planned modification of the urban hierarchy.

Economically, much depends upon the relative priority given to industry and agriculture in national development plans. Many developing countries viewed industrialization as the only avenue to economic 'take-off' in the 1960s. Given this assumption, any deviation of investment from primate cities or restriction of their 'natural growth' with its accompanying agglomeration economies might be deemed detrimental to the very basis of national economic growth.



Such a view must now be seriously challenged. There has been a widening gap between lagging agricultural production and ever-increasing population, both rural and urban, in recent decades. Average yields per hectare for all developing countries increased by 8% between 1938 and 1960, whilst population increased by 46% in the same period (Brutzkus 1973, p.15). The gap has been bridged by steadily increasing food imports. The demand from urban élites for luxury foods has added a qualitative aspect to the problem, which is well illustrated by the *Zambian example* (Siddle 1971).

Until recently there was no doubt as to the capacity of the developed countries. This, together with the unfavourable ratio between prices of agricultural and industrial products, has contributed much to a disregard of the urgency of expanding agricultural sectors in developing countries. There is strong evidence that neither of these conditions will hold true much longer.

These circumstances partly explain the increasing realisation in developing countries in the 1970s that agricultural and rural development must be given priority. It is further apparent that, where most of the national population is on the land, the rise in yields per hectare, the commercialization of agriculture and the achievement of income surpluses are basic for the accumulation of capital by savings. They are equally the first prerequisite for any expansion of the domestic market for a national manufacturing industry.

The various innovations known collectively as 'the green revolution' hold out improved prospects for an accelerated increase in productivity, although the multiplicity of problems facing the primary sector in the developing world are well known. But progress depends upon the supply of fertilizers, much better technical services, storage and marketing facilities, road access and better transportation, and improved educational and social services in rural districts. The presence of technically skilled and generally better educated people within easy reach of rural areas is one of the preconditions of agricultural advance. In other words, it must be a high priority to accelerate the 'spread' effects of urban civilization over backward rural areas. The continued concentration of most of the urban population in remote primate cities, accompanied by a split into two economies and two societies, and by an almost total drainage from the periphery of its savings, skills and educated youth seems calculated to inhibit agricultural modernization indefinitely. What is needed is a much more articulated pattern of rural centres and regional towns to provide all relevant services for the rural population, and to serve as sites for storage, transportation and processing.

A further economic consideration concerns the use of non-agricultural resources, especially minerals. The use of these resources too is dependent upon accessibility and the existence of a range of technical facilities and skilled labour. In Sierra Leone, for example, the diamond fields constitute an alternative attraction to Freetown, which lacks the primacy of many other West African capitals. The copper-nickel mining town at Selebi-Pikwe in Botswana has quickly reached almost the same population as Gaborone, the capital, and has its own shanty town of Botshabelo with 10-12,000 inhabitants. The importance of the Copperbelt in Zambian urbanization needs no elaboration. Such natural resources are also the most promising basis for the development of heavy industries in developing countries. The resulting urbanization should, therefore, be adjusted to the spatial spread of national mineral and energy resources. The existence of major resources of this nature at a distance from the capital or major city may well serve, *ceteris paribus*, to lessen the primacy of that city.

The social consequences of urban polarization in the Third World are well known. Inadequate housing is perhaps the most serious problem, insofar as it contributes to many other social ills. Those employed in the 'informal' sector, and even many earning regular but very low wages, have little chance of affording an economic rent for even the lowest-cost permanent housing. Squatter camps and shanty towns have thus become a major feature of almost every primate city in the developing world. Even the provision of 'site and service' schemes, or the supply of basic services to existing squatter settlements, are often beyond the resources of either local or national government.

The positive social aspects of such squatter settlements have been stressed by *inter alia*, Emrys Jones (1966) and R. J. Johnston (1971), but the problems and dangers which they represent are still far from overcome. Can they be reduced by a policy of decentralized urbanization? There appear to be several good reasons for thinking so. First, since land costs will usually be lower in small towns, the solution of housing problems will be cheaper. Secondly, decentralized urbanization makes possible more extensive commuting from rural areas, either on a weekly or daily basis, depending upon the distance involved. It thus becomes part of a gradual process of transfer to non-agricultural activities without any abrupt disruption of family life, traditional links and social controls, and far less urban housing and infrastructure is needed. Such a stage of 'peasant workers' or 'rural townsmen', with the male employed in town and the family often continuing to work on the land, is common in much of Eastern Europe and even in France, Germany and Italy, and in the developing world provides an important bridge linking the two halves of the dual economy.

But such decentralized urbanization, however, successful, will not halt the growth of primate cities, for that growth depends as much on natural increase as it does on migration. Even in South Africa, rigid 'influx control' policies have failed to stem the increased urban African population, which continues to grow faster than the urban white population (Lemon 1976). So it seems that, given the natural dynamism of primate cities, decentralization can at best reduce the social problems of rapid urban growth: it cannot eliminate them.

To sum up, whilst accepting that primate cities offer many economic advantages, especially in respect of industrialization based on backward linkages, they appear to be poorly correlated with the main long-range avenues of development strategy. Decentralized urbanization would not only be more appropriate to these economic aims, but it would provide a partial solution to the housing and related social problems of primate cities. Socially and culturally, decentralized urbanization would facilitate the smoother, less painful transformation of traditional societies.

### **How suitable and effective an instrument is the 'growth pole' model for the modification of the urban hierarchy in developing countries?**

In his original conceptualization of the growth pole, Perroux (1950) was concerned primarily with economic space, and actually dismissed geographical space as 'banal', although he does in a later paper (Perroux 1955) refer to 'territorially agglomerated growth poles'. Essentially, however, his poles are likely to be firms or industries, or groups of firms or industries. Certain firms or industries which 'dominate' many others are described as 'propulsive'. The growth generated by these poles need not be in the same location: it is growth within an economic sector, not necessarily at a particular place.

From Perroux' concept a whole school of what Jensen (1970) calls 'functional' growth pole theorists has emerged. This school basically asks the question 'how does economic growth occur?'. It defines a growth pole as a complex of economic elements exerting a stimulating effect upon an economic whole, the geographical location of which is of no relevance as such.

For purposes of regional planning, such functional growth pole theory is of little use. Many geographers have, however, tried to incorporate geographical variables: again it is French geographers — Chardonnet, Antoine, Hautreux, Labasse — who have led the way. Chardonnet (1953) looks for dependency relationships which can explain the specific geographical structure of the industrial complex. Antoine et al. (1968) see the metropolises as being propulsive on account of their well-developed tertiary sectors, which are the fastest growing part of the economy, and advocate investment in this sector in the metropolises, arguing that this will help the smaller towns of each region by generating multiplier effects. Hautreux (1966) and Labasse (1968) agree, the latter arguing that a highly specialized agglomeration with many services is likely to attract and retain the élites necessary for the decision-making process in economic development: otherwise, presumably, such élites would be lost to the primate city.

Myrdal (1957) places concentration in a much wider framework than the French geographers cited above. In his model, geographical concentration is made practicable by cumulatively improving production conditions in one place and cumulatively worsening ones in the remainder of the country. Pred (1966) has attempted to build on Myrdal's model, clarifying the mechanisms by which geographical concentration occurs. He introduces the concept of 'economic threshold', whereby with the growth of population and economic activity local and regional thresholds are crossed, which increase production scale economies and improve the range of services offered, thus leading to further economic growth. This concept therefore helps to integrate French location theories of the tertiary sector with the more voluminous theoretical literature on the industrial sector. Pred also emphasizes the importance of infrastructure in facilitating relationships between the growth region and its surroundings; he regards the nature and intensity of economic activity as related to the degree of success in organising this spatial interaction. Thirdly, Pred stresses the rôle of the growing region as a centre of innovation: the increased possibilities of communication through the concentration of activities, the increasing division of labour and specialization create a favourable environment for innovation.

These contributions do much to illumine the relationship between economic growth and geographical concentration. But the growth pole remains loose and ill-defined in terms of scale, the nature of growth, and its timing and even terminology (Moseley 1976), terms such as 'growth centre' and 'growth point' often being used interchangeably with 'growth pole'. Moseley has clarified many of these issues at least in relation to developed countries, but one essential weakness of the concept remains: it isolates one aspect of economic and geographical space, and does not consider the rest except in its relationship to the 'growth pole' or 'growth area'. The remainder of the country is, in other words, undifferentiated.

Friedmann (1966) provides a more comprehensive conceptual framework with his 'core-periphery' formulation. A polarized or 'interdependent' region is one in which the flow of goods is predominantly directed to one centre or core. Friedmann divides a polarized region into several parts, as follows:

- CORE the area around the centre itself, which has similar characteristics.
- PERIPHERY
- (i) UPWARD TRANSITIONAL — settled areas with growth potential and net immigration.
  - (ii) DOWNWARD TRANSITIONAL — old rural or industrial economies in decline, whose resources suggest less intensive development than in the past, and where emigration is characteristic.
  - (iii) RESOURCE FRONTIERS — zones of new settlement in which growth is potentially large in either agriculture or mineral working, associated with immigration and small new towns.
  - (iv) SPECIAL PROBLEM REGIONS.

Unlike the growth pole, this framework deals with the whole of economic and geographical space, although the nature of category (iii) might need modification to describe already settled but underdeveloped areas of developing countries. Such a framework enables a distinction to be made between geographical areas in terms of the necessary policies, yet it ensures that regional problems are not dealt with in isolation. It also has the great advantages of being independent of scale, and thus widely applicable, and of allowing for the incorporation of historically and spatially specific factors: practical regional planning is after all an art, and must always take cognisance of the unique.

Within this framework, a range of growth centre concepts of varying scale could be applied. Genuinely propulsive growth poles would be practicable only in the 'upward transitional areas'. Elsewhere, according to specific conditions, it is unlikely that anything more than small or medium-sized growth points or 'holding points' without propulsive or multiplier effects would be possible. These would function as employment and service centres enjoying relative growth compared with the surrounding areas, and acting as agents of modernization, which would help to reduce the dichotomy between modern urban living and traditional rural societies.

### **Summary and Conclusion**

It has not been convincingly established that primacy is related to an early stage of economic development; attempts to do this appear to overestimate the importance of Myrdal's 'spread' effects and wrongly to associate them with the take-off stage of economic development. Such attempts also ignore the importance of unique regional and historical factors. Whilst many 'basic' factors encourage the cumulative growth of primate cities, other less basic factors offer opportunities for the reduction if not the elimination of primacy. There is little evidence that primate cities are in themselves economically inefficient, although they are premature in terms of the relationship between population and economic functions. More important, is the conclusion that primate cities are poorly suited to the pursuit of the major priorities of development strategy in the Third World. Decentralized urbanization appears more appropriate in this respect, and could provide at least a partial solution to the housing and related social problems of primate cities.

The growth pole itself is too ill-defined and too spatially restricted a concept to provide a sufficient model for regional planning and decentralized urbanization. Rather it is suggested that a range of growth pole or growth

centre concepts at varying scales may be usefully employed within the framework of Friedmann's core-periphery model.

## REFERENCES

- ALONSO, W. (1969), 'Urban and regional imbalance in economic development', *Ekistics* 27, pp. 351-55.
- ANTOINE, S. and WEILL, G. (1968), 'Les métropoles et leur région', in *L'Espace et les Pôles de Croissance* ed. J. R. Boudeville, Presse Universitaire de France, Paris.
- BROWNING, H. L. (1958), 'Recent trends in Latin American urbanization', *Annals of the American Association of Political and Social Science* 316, cited by Linsky (1965).
- BRUTZKUS, E. (1973), 'Centralized versus decentralized pattern of urbanization in developing countries', *Tijdschrift voor Economische en Sociale Geografie* 64, pp. 11-23.
- CHARDONNET, J. (1958), 'Métropoles Economiques', *Cahiers de la Fondation Nationale des Sciences Politiques* 102.
- CLARKE, J. I. and MURRAY, J. L. (1973), 'Population dynamics of large Middle Eastern cities', in papers submitted to the *International Population Conference*, International Union for the Scientific Study of Population, Liège, 1973, Volume 1, pp. 271-85.
- EL SHAKS, S. (1965), *Development, Primacy and the Structure of Cities*. Unpublished Ph.D. thesis, Harvard University.
- FAIR, T. J. D. (1972), *The Metropolitan Imperative*. Inaugural lecture, University of the Witwatersrand.
- FRIEDMANN, J. R. (1966). *Regional Development Policy: A case study of Venezuela*. M.I.T. Press, Cambridge, Massachusetts.
- GINSBURG, N. S. (1955), 'The great city in Southeast Asia', *American Journal of Sociology* 60, pp. 455-62.
- HAUTREUX, J. (1966), 'Le rôle des métropoles d'équilibre dans l'armature urbaine', *Revue Juridique et Economique du Sud-Ouest* 4, pp. 791-809.
- JANSEN, A. C. M. (1970), 'The value of growth pole theory for economic geography', *Tijdschrift voor Economische en Sociale Geografie* 61, pp. 67-76.
- JEFFERSON, M. (1939), 'The law of the primate city', *Geographical Review* 29, pp. 226-32.
- JOHNSTON, J. H. (1971), *Urban Residential Patterns*. Bell, London.
- JONES, E. (1966), *Towns and Cities*. Oxford University Press, London.
- LABASSE, J. (1968), 'Le rôle des équipements tertiaires supérieurs dans la polarisation de la vie régionale en Europe occidentale', in *L'Espace et les Pôles de Croissance* ed. J. R. Boudeville, Presse Universitaire de France, Paris.
- LEMON, A. (1976), *Apartheid: a geography of separation*. Saxon House, Farnborough.
- LINSKY, A. S. (1965), 'Some generalisations concerning primate cities', *A.A.A.G.* 55, pp. 506-13.
- MABOGUNJE, A. L. (1973), 'Role of the city in the modernization of developing countries', *Canadian Geographer* 17, pp. 67-76.
- McGEE, T. G. (1971), *The Urbanization Process in the Third World*. Bell, London.
- MEHTA, S. K. (1964), 'Some demographic and economic correlates of primate cities: a case for reevaluation', *Demography* 1, pp. 136-47.
- MOSELEY, M. J. (1974), *Growth Centres in Spatial Planning*. Pergamon, Oxford.
- MYRDAL, G. M. (1957). *Economic Theory and Underdeveloped Regions*. Duckworth, London.
- PERROUX, F. (1950), 'Economic space, theory and applications' *Quarterly Journal of Economics* 64, pp. 90-97.
- PERROUX, F. (1955), 'Note sur la notion des pôles de croissance', *Economie Appliquée* 1 and 2, pp. 307-20.
- PRED, A. R. (1966), *The Spatial Dynamics of U.S. Urban-Industrial Growth 1800-1914: Interpretive and Theoretical Essays*. M.I.T. Press, Cambridge, Massachusetts.
- RICHARDSON, H. W. (1973). *The Economics of Urban Size*. Saxon House, Farnborough.
- ROSLING, K. E. (1966), 'A rejection of the Zipf model (rank size rule) in relation to city size', *Professional Geographer* 18, pp. 75-82.
- SIDDLE, D. J. (1971), 'Do-it-yourself policy for rural Zambia', *Geographical Magazine* 43, pp. 568-72.



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