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The Urban Fringe in the Third World

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Abstract

In this paper the evolution of the urban fringe as a concept is discussed, with reference to urban growth in the Third World. A review of approaches in the literature is presented and a definition advanced which emphasises the zone's dynamic and heterogeneous character. The need to develop an approach to the urban fringe which reflects the current reality of urban growth in the contemporary Third World is emphasised, along with the paucity of literature in this field which have adopted a specifically non-Western perspective.

The Urban Fringe in the Third World

The purpose of this paper is to explore the evolution of the concept of the urban fringe;[1] initially in general terms and then in relation to the form in which it manifests itself in Less Developed Countries (LDCs).

The basic nature of the urban fringe has been identified in a previous publication:

> "In the vast field of rural-urban relationships a topic of particular interest and importance is the fringes of the cities ... those zones where the cities, in the course of their growth, are transforming tracts of rural territory and society into city areas"
> (Leeming and Soussan 1979, p.273)

The urban fringe as a distinctive zone is created by, and is a reflection of, urban growth. From this viewpoint the urban fringe is an area in which a transition is occurring in situ over time for, as Thrift (1977) points out:

> "Without time we cannot study change" (p.65)

The emphasis here is different from that adopted by many commentators in the past. The fringe has commonly been seen primarily in spatial and land-use terms; as a zone situated between a city and the surrounding rural areas which has distinctive land-use characteristics which differentiate it from either:

> "A summary definition of the fringe area may be presented: location beyond the limits, of the legal city in the 'agricultural hinterland', exhibiting characteristics of mixed land-use, with no consistent pattern of farm and non-farm dwellings"
> (Kurtz and Eicher 1958, p.36)

This viewpoint is undeniably correct, but it does little to illuminate the processes of transition occurring within the urban fringe, and fails to place these processes firmly within the context of urban growth which lies at its heart. These points can be illustrated by a consideration of the literature on the urban fringe.

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[1] The term used in this paper, "urban fringe", may be used interchangeably with "rural-urban fringe", "metropolitan fringe", "fringe", "urban periphery" and any of the others scattered throughout the literature. The proliferation of different terms reflect semantic vageries far more than any genuine conceptual differences.

The Literature

The urban fringe concept first appeared in the literature on North American cities in the 1930's reflecting, no doubt, the emergence of an awareness of the suburbanization processes which were then operating so strongly. Pryor (1968) cites Smith (1937) as being the first author to explicitly refer to the concept. Smith described the "urban fringe" as being:

> "The built-up area just outside the corporate limits of the city" (1937),

an approach which developed little during the ensuing 20 years. Kurtz and Eicher (1958) review the literature on the urban fringe up to 1958 and advance a definition of their own.

Many of the works they consider offer definitions which are so broad and conceptually vague that they are meaningless. For example, Jaco and Belknap (1953) define the fringe as:

> "Suburbs, satellite cities and any other territory located immediately outside central cities whose labour force is engaged in non-farm activities" (p.551)

Fava (1956) considers the fringe to be the entire area outside the legal city limits but within commuting distance. Firey (1946), Beagle (1947) and Queen and Carpenter (1953) rely primarily upon administrative criteria in formulating their definitions without adequately considering the forces which lead to the creation of the areas they define as being fringes.

Martin (1953), Kimball (1949) and Kurtz and Eicher (1958) themselves do offer some insights into the basic characteristics of fringe localities. They all see the urban fringe as principally an area of mixed rural and urban land-uses and communities. They emphasise the diversity of fringe areas and characterise them as areas of net in-migration. Their primary orientation is still spatial, however, with the emphasis clearly being placed upon differentiating the urban fringe from adjacent urban and rural areas at any one time. The discussion up to this point is, moreover, still centred upon the urban fringe as it manifests itself on the periphery of Western, and in particular North American, cities with no attempt to discuss the existence or otherwise of the phenomenon in a non-Western context.

Even within this limited context, however, anything even vaguely approaching a concensus on the definition and delimitation of the urban fringe failed to materialise. The urban fringe was consistently confused

with other areas; in particular the adjoining zone of urban influence and the city's suburbs. This type of confusion was inevitable so long as authors searched for a static, spatially discrete area. The urban fringe is a product of urban growth and change over time, and is identifiable as a concept far more readily than as a tract of land. Problems of definition need to be clearly differentiated from the task of delimitation in any one context, a factor not readily recognized by many authors who have above all, been concerned with the characteristics of the urban fringe of a particular city. Nevertheless, in the 1960's, a number of authors advanced definitions which developed the understanding of the fringe phenomenon in general terms. The overwhelmingly Western bias was still present however. As we shall see, it is only in recent years that the importance and vitality of fringe zones in LDCs has been recognised.

Golledge (1960), in his study of Sydney's peripheral areas, described the fringe as:

"A geographical no-man's land"

He viewed the zone as an area containing a mix of functions both urban and rural, hypothesising that there is a constantly changing pattern of land occupance, and that speculation is common. The dynamic nature of the fringe was thus beginning to the recognised, if only in a subordinate role to the dominant locational approach. Young (1962) and Mookherjee (1963) also recognised the transitional nature of fringe land-use patterns and the role of urban growth at an early stage.

Pahl's work "Urbs in Rure" (1965) is a classic in the genre. He recognises that the "Metropolitan fringe" is a "distinctive and dynamic entity" (p.72), and emphasises the importance of interactions between the urban fringe and the central city. He is predominantly concerned with the sociological consequences of fringe development in Britain, however, and many of his conclusions, while being valid in their own right, are only of limited use in a non-Western context. Pahl was the first author to approach the urban fringe as an area characterised by dynamic change, however, and if of significance for that reason alone.

Whitehand (1967) emphasised the heterogeneity characteristic of urban fringe localities:

> "Heterogeneous regions ... that derive their unity not from homogeneity of form, but from certain common factors that influenced their original location" (p.223)

He is principally conerned with land-use patterns in the fringe, but recognises that the fringe is a transitional stage for any one locality, which will subsequently be assimilated into the city proper. Whitehand also suggests that it is possible to identify types of land-use which are characteristic of fringe zones, as they:

> "Have generally found their requirements best served by a peripheral location" (p.223)

The idea that there are characteristic fringe land-uses is an important factor in giving urban fringes their distinctive, heterogeneous nature and Whitehand's concept is consequently an important contribution to the development of the fringe idea. The urban fringe is, in land-use terms, more than:

> "That area of interpenetrating rural and urban land-uses peripheral to the modern city" (Martin, 1953, p.iii)

identified by many authors. It also contains land-uses which are generally found in fringe localities only and which are, consequently, themselves transitory, a concept which emphasises the role of the temporal dimensions in the study of the urban fringe.

Pryor (1968) provides one of the most comprehensive reviews to date of the literature on the fringe. From an examination of some 60 case studies he identifies four main concepts used to define the urban fringe: location, administration, land-use and employment. This reflects the preoccupation with land-use and locational criteria which had dominated the debate up to this point. Pryor recognises the heterogeneous nature of fringe zones and suggests that the area may have transitional characteristics associated with the process of urban invasion. His own definition of the urban fringe (p.206) is, however, long-winded, incoherent and contradictory. Pryor attempts to include too wide a variety of concepts in his definition, and consequently does not achieve his aim of integrating them into a coherent appraisal of the processes involved.

Kishimoto (1970) identifies the main characteristics of the "fringing areas of Tokyo" (p.33) as being an increase in density of population, the evolution of an inner-urban agricultural ecology and the industrialization of the area. He sees the demand for land created by industrial growth as the prime motive force behind urbanization in Japan.

Hyma (1971) provides one of the first attempts to study in depth the urban fringe of a non-Western city, and explicitly relates the area to

urban growth:

> "Under the impact of urban expansion, the peripheral areas of a large city gradually change from rural to urban so that there is always a zone of transition" (p.21)

The author's preoccupation with delimitation and with secondary data reflects analytical criteria based on those prevailing in Western fringe studies. This renders the study less useful than would have otherwise been the case but, nevertheless, Hyma's work is of interest if only because it is one of the first serious attempts to study the nature and origins of the urban fringe in a LDC.

Thomas (1972) cites earlier works by, amongst others, Burgess (1927), Shaw et al (1929) and Colby (1933) as examples of the continued recognition of fringe belts around major cities. He sees the urban fringe as an area containing a mix of rural and urban uses, with the latter ousting the former over time:

> "Rural activities and modes of life are in rapid retreat and ... extensive (urban) uses of land are intruding" (p.83)

Thomas goes on to restate the concept that centripetal and centrifugal forces operate in urban areas to create characteristic arrangements of land-use patterns. Although conceptually neat, and consequently attractive, such an approach undoubtedly represents an over-simplification of the enormously complex and varied processes operating in the formulation of urban land-use patterns. As such, the approach is of little use in empirical studies of urban fringes.

Strachan (1972) questions conventional wisdom by suggesting that a fringe zone of rural-urban interaction has been a feature of cities throughout history. In a case study of Edinburgh he identifies two zones of interaction: one intensely developed with many urban uses and one which has a far lower, but still significant, degree of urban orientation. The idea that there are two distinct zones <u>within</u> the fringe (what Pryor (1968) calls the 'rural fringe' and the 'urban fringe' (p.206)) is a common theme in the literature. A coherent rationale for, or an adequate method of, differentiating between the two is conspicuous by its absence, however. These two supposed sub-components of the fringe clearly represent nothing more than different stages in the transition from rural to urban, a process which is not convincingly broken up into two or more distinct stages. The attempt by Pryor (1968), Strachan (1972) and others to enshrine such a categorization in our theoretical picture of the fringe is superfluous, therefore, to the development of a true understanding of the concept.

Carter (1976) advances a brief review of the literature in this field, and identifies two main approaches to the study of the peripheries of cities:

> "1. The notion of the fringe as a distinctive physical area ... primarily designated by characteristic land-use associations.
>
> 2. The notion of the fringe as that area where urbanization impinges upon rurality" (p.304)

His own definition again emphasises the mix of rural and urban land-uses and identifies the fringe as an area with its own distinctive characteristics. Nangia (1976) adopts a series of variables based on the work of Johnson (1967), Wehrwein (1959) and others to define and delimit the fringe of Delhi. She defines the fringe as:

> "The zone which lies immediately outside the city area, and has strong interaction with the city proper in terms of daily commutation, exchange of goods and services and bears an urban reflection on the physical, occupational and demographic structure" (p.80)

It is clear from this somewhat obscure definition, and from the mechanistic delimitation procedure which follows, that Nangia sees the urban fringe in static terms. She also fails to adapt the criteria gleaned from other authors to a form more appropriate to the non-Western context with which she is dealing.

Gopi (1976, 1978), provides a more useful definition of the urban fringe as an area which:

> "Is neither urban nor rural but combines the features of both. In other words it is a transitional area which is in the process of rapid change under the influence of the expanding city" (1976, p.557)

Both Robinson (1978) and Russig (1979) present sophisticated models which perport to simulate conditions prevailing within the urban fringe. Unfortunately, neither author presents an adequate conceptualization of the zone they are interested in, and both are clearly more concerned with methodological considerations than with the nature of the urban fringe. As such they contribute little, if anything, to our understanding of this area.

The Urban Fringe in the Third World

In the first part of this paper the main developments in the evolution of the fringe concept have been considered. It was noted that the amount of literature dealing specifically with the urban fringe in LDCs was sparse, and that much of what there was did not question the orthodoxy derived from Western commentators.

There have, however, been a number of studies which examine localities which we can identify as being in the urban fringe of Third World cities even if, in many cases, the authors did not explicitly use this terminology. It will be a useful exercise to consider briefly a number of these studies, as many have been instrumental in the evolution of the view of the fringe experience presented here.

For many years it was widely believed that cities in the Third World were generally characterised by fairly clear boundaries between urban and rural:

> "Traditional Asian cities were relatively sharply distinct from surrounding rural areas in spatial terms, and in probably the majority of Asian cities of the present, the rural-urban line is easier to draw than in almost any present Western city" (Murphy, 1966, p.3)

This view was particularly prevalent in studies of the morphology of Indian cities, reflecting the influence of authors such as Ellefsan (1962) and, in particular, Brush (1962):

> "The fringes around all but the largest urban agglomerations as yet show remarkably little alteration of the traditional form of rural settlement" (p.68)

This viewpoint has been increasingly questioned in recent years by authors who have studied the fringes of cities in LDCs. Nevertheless, it is a concept which is still widely accepted: in particular by commentators such as Lipton (1977) who are not primarily concerned with urban growth and morphology:

> "In poor countries, one can usually draw a fairly sharp line between city and countryside ... poor countries have townscape and countryside, and the break is sharp" (Lipton, 1977, p.57)

In recent years, however, it has become increasingly apparent that fringe zones, many of them extensive, are a characteristic feature of the morphology of urban areas in LDCs. Indeed, given the prevailing high rates of urban growth, extensive urban fringes are

inevitable, and can be expected to continue to expand for the forseeable future. To suggest that a clear distinction can be drawn between city and country in LDCs, therefore, is to misrepresent reality. This is true whether one is concerned with social, economic or, in the case of the urban fringe, spatial identities.

This contention can be supported by a wide range of literature, some of which is considered here.

The main characteristics of fringe localities may be identified as heterogeneity and change; characteristics which reflect the impact of a growing city upon surrounding rural areas. This impact takes many forms, and indeed affects all aspects of life in the localities experiencing it. The change in the land-use pattern of a fringe locality from one dominated by agricultural activities to a complex of urban uses is the most obvious manifestation of the transition process, partly because it is the traditional focus of fringe studies and partly because it is the type of change visible to even a casual observer. The transition process occurring in the urban fringe involves far more than this, however. Changes in land-use patterns in a locality are paralleled by, and to an extent a reflection of, the transformation of the area's demographic, social, economic and political make-up. This is reflected in the literature.

There have been a number of studies which have considered certain aspects of the process of change in urban fringe localities without placing their findings within the overall transition process. Somjee (1964) and Chawla (1964) discuss changes in the political relationships in fringe communities in India, while Bose and Singh (1969) discuss the effects of a sudden influx of wealth from the sale of land on the inhabitants of a village in Delhi's urban fringe. Sundaram and Tyagi (1972), Fakhouri (1972), Barclay (1964), Agarwala (1970), Thapar (1978), Gopi (1976, 1978) and a number of other authors provide case studies of the response of individual villages in the urban fringe to the influx of urban-orientated people and activities and the opening up of opportunities in the city to the inhabitants of the fringe. Sundaram and Tyagi and Gopi, in particular, provide a wide range of useful information which illustrates both the dynamism and the diversity characteristic of the urban fringe.

Srivastava and Ramchandran (1972) advance a "conceptual framework for the study of the transformation of the rural-urban fringe". Their six-stage model suffers from a number of faults, the most important of which is perhaps over-simplification of many of the processes involved. Nevertheless, it firmly places the fringe experience into a dynamic context, with the temporal transition of fringe villages from rural to urban identified as the zone's most important characteristic:

> "The few studies that have been undertaken so far have focussed attention on the limited problems of identification, definition and delimitation of the zone, rather than on the study of the dynamic aspects of the rural-urban fringe" (p.2)

Stanley (1978), Ward (1976), Lomnitz (1977), Wiebe (1975) and a number of other authors provide case studies of fringe residential developments in LDCs, many of which also provide information on patterns of social and/or economic organization.

Alam (1965), Hyma (1971), Alam and Khan (1972), Silva and Gunawardena (1971) and, to an extent, Nangia (1976) provide studies of the urban fringe of particular cities in South Asia at a 'macro'-level which are a useful complement to the locality-based information found in case studies based on fieldwork. In particular, these city-level studies have helped to illustrate the degree of heterogeneity characteristic of urban fringes by demonstrating that the diversity observeable within fringe localities is complemented by a diversity of characteristics among different localities within a city's urban fringe as a whole.

Silva and Gunawardena (1971) and Hyma (1971) also illustrate the importance of population growth in the fringe, demonstrating that it is in these peripheral zones that much of the overall population growth of cities in LDCs is occurring.

Nangia (1976) and Hyma (1971) provide examples of the problems encountered when attempting to provide spatial delimitatations of the urban fringe on the basis of indices derived from secondary data which is almost inevitably out-dated and incomplete. The delimitation of the urban fringe is a problem which has, as Srivastava and Ramchandran (1972) show, dominated the thinking of many commentators in this field. The complexity and rapidity of change which are at the heart of the fringe experience render such attempts to determine precise (or even vague) spatial boundaries to the zone useless.

This appears to contradict the contention that the urban fringe is an identifiably distinct area. This is not so. The fringe is readily identifiable in conceptual terms, but the practical problems associated with clearly delimiting the fringe of any one city make such a task thankless and, in all probability, worthless. As soon as one had achieved a satisfactory delimitation it would be out of date, for the fringe process is a process of transition, and the fringe experience for any one locality is, in essence, transitory. M.S.A. Rao (1970, 1974) views the urban fringe as an area of dynamic change, and he clearly sees urban growth as the precipitator of that change:

> "The urban fringe is relative to the expanding metropolitan city. A village in the fringe today may be engulfed in the developing metropolis tomorrow" (1974, p.504)

Moreover, he illustrates the way in which all aspects of life in the village he studies (land-use patterns, economic activities, social and political patterns, etc.) experience changes under the presence of the expanding urban influences experienced by the area. As such, Rao illustrates both the diversity and the dynamism characteristic of urban fringes.

Finally, a number of studies have illustrated the variety of ways in which the actions of State agencies can influence the transition process in fringe localities.

Howland (1975), Hyma (1971), Sundaram (1977), Bose (1978) and Panini (1978) illustrate the impact urban planning schemes can have on the development of the urban fringe. Panini (1978) also discusses the growth generated in a fringe locality by State-sponsored industrial location, whilst Bose (1978) illustrates the effects of planning on the land and housing market in fringe localities.

D'Souza (1970) and Nangia (1976) provide examples of population growth in the fringe generated by the relocation of communities from the centre to the periphery by State authorities; a consequence in these cases, as elsewhere, of slum clearance schemes.

Nangia (1976) at a city-wide level and Stanley (1978) at a local level demonstrate that the State, in a variety of guises, can be an important direct user of land in the urban fringe, especially in the location of extensive land-uses (universities, public utilities, transport terminals, etc.) which may be identified as characteristically 'fringe'.

The above discussion presents the main works in the evolution of the concept of the urban fringe. The literature on the topic is, as has been suggested elsewhere: "discontinuous, uneven and often tantalizing" (Leeming and Soussan 1979, p.274).

Whitehand (1967) described fringe belts as: "A neglected aspect of urban geography" (p.223), and if anything the scope of the debate has diminished since this comment was penned. The lack of concensus over the precise nature of the urban fringe necessitates the reopening of this debate and the establishment of a generally agreed definition of the urban fringe which identifies its basic characteristics. It is hoped that the definition advanced here is a useful contribution to this debate.

The Urban Fringe: A Definition [1]

The urban fringe is a zone of land on the periphery of a city which is experiencing a transition from characteristically rural modes of production, social interaction and land-use to characteristically urban ones. At any one time the urban fringe acts as the interface between the city and the surrounding rural areas. It displays characteristics typical of both rural and urban localities, and may possess others peculiar to itself. The fringe is a zone of transition in both space and time and we may regard these two elements as parallel and complementary manifestations of the same thing. Defined in these terms, it is an identifiable zone, distinguishable from both city and country, with a heterogeneous character which is often in sharp contrast to the more homogeneous urban and rural areas with which it is associated. From this heterogeneity fringe areas derive much of their distinctiveness; at the same time, this heterogeneity arises from the transitional and dynamic nature of the fringe.

The urban fringe is, therefore, a transitional zone into which the city is expanding. It can be differentiated from both the suburbs (Kurtz and Eicher, 1958) and the zone of urban influence, which is usually a far more extensive territory. Even in LDCs, a major metropolitan centre will exert a considerable influence over a wide area; what has traditionally been known

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[1] The definition presented here is based on the concepts advanced in Leeming and Soussan (1979).

as its hinterland. There has been some confusion about the difference between the urban fringe and the hinterland of a city. This reflects the lack of a clear boundary between these zones as much as conceptual inconsistancies in the literature. They are, however, fundamentally different both as phenomenon and as concept. In the hinterland rural people and organizations use the city, and are used by it, in terms of movement of people, goods and capital,social transactions and administrative and services provision, to use one recent classification (Preston, 1975). In the urban fringe, however, the city is spreading physically into territory formerly rural, generating a transition which results in the area becoming absorbed by the city and, consequently, identified as part of the city.

Summary

To summarise, the urban fringe is a zone characterised by transition, both in space as a zone located between a city and surrounding rural areas and, more crucially, in time as the zone into which a city grows, generating a transformation from rural to urban over time.

The fringe may be characterised by the diversity and the impermanence of the pattern of activities found both within and between localities within it, with a mix of rural, urban and characteristically fringe people, activities and land-uses being typical.

The main impetus of change is generated by the city, and the bulk of the influx of people and activities comes from the city. Fringe localities are not passive recipients of these inflows, however. Many inflows generate internal changes which result, in some cases, in a process of self-sustaining transition which creates an environment which positively attracts the further movement of urban-orientated people and activities into the area. The transition occurring in localities within the urban fringe comprises an interaction between change and growth within those localities and change and growth within the urban system as a whole. Urban fringes can be approached from a city-wide level or from a local level but are best understood when both dimensions are considered together within a temporal context. In many ways, however, it is the changes occurring within fringe localities which are at the heart of the process of change in the urban fringe of LDCs and it is at this level of activity which the most rewarding work in this field could be done. Whatever perspective one adopts, however, the urban fringe is clearly a field in which a great deal more work needs to be done if an understanding of its working is to evolve.

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