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URBAN PLANNING AND THE COMMUNITY: AN EXAMPLE FROM THE THIRD WORLD.

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Introduction

Cities in the Third World have become an increasing focus of attention in recent years. A number of vivid, often emotive accounts of conditions in these cities have illustrated the problems of present patterns of urban development and, consequently, emphasised the need for effective planning strategies. The identification and implementation of solutions to the worst features of the urban problems of Less-Developed Countries (LDCs) have proved notoriously difficult, and in particular successful exercises in urban planning are few and far between. This is due in part to the intractable nature of many of these problems, but is also the consequence of the misconception of these problems and the adoption of inappropriate and unrealistic planning aims based on alien and equally inappropriate planning philosophies. As Stretton (1978) points out, examples illustrating the fate of imported models of urban planning in LDCs could be drawn from many countries. In this paper the experiences of Delhi are discussed, but many of the points could be applied with equal vigour to attempts at integrated, comprehensive planning in other LDCs.

Physical planning is not new to Delhi; both Shahjahanabad (Old Delhi) and New Delhi were planned and laid out as prestige capitals by imperial conquerors. The present planning era began in the 1950s, and was a reaction to the rapid and chaotic growth of Delhi in the period following Independence and Partition from Pakistan in 1947. The violence and disruption of this brought a massive influx of refugees to the city. At the same time, Delhi's status as the capital of a newly-independent and extremely important country led to growth in diplomatic and administrative functions, and the first signs of rapid industrial growth in the area were emerging. These developments generated swift and largely unplanned growth which in turn strained the city's physical fabric and social capital close to breaking point.

These pressures generated widespread concern and made some form of planning effort inevitable. That it took the form it did reflects the dominant planning philosophies of the time and indicates a sublime optimism on the part of the planners over their ability to intervene in and control a large, complex city such as Delhi.

The Government of India established the Delhi Development Authority (DDA) in 1955 and charged this organisation:

> "To prepared a Master Plan for indicating optimum directions of growth and expansion of the city." (Sundaram, 1977, p. 6)

A high-powered team of international planners was assembled and a number of studies of the city conducted. The DDA, in conjunction with the Town and Country Planning Organisation (TCPO), prepared the document which was to form the blueprint for the subsequent planning exercise: the Delhi Master Plan.

Judging the success of a planning exercise is a difficult process, as it involves establishing some standard upon which to base one's appraisal. Such criteria are by no means self-evident; their generation has continually proved to be a difficult and contentious issue. The most satisfactory basis for assessing any particular planning exercise is perhaps to judge it on its own grounds, by considering the extent to which it has realised its declared aims. On its own, however, this will not be enough. It is also necessary to consider the planning aims themselves and reach some conclusions on both their viability and their desirability. Judgements here will inevitably reflect one's views on the degree to which planners can control the urban system under consideration. As Scott and Roweis (1977) point out, any planning exercise is embedded in the socio-political processes operating in the country under consideration. Planning is inevitably subject to a spectrum of constraints concerning which aspects of the urban system are susceptible to control and which are not. This issue is of particular salience in LDCs, as the nature of urban problems, the resources available to planners, the rapidity of change and the possible scope of state intervention in many aspects of a city's life all differ widely from the picture familiar to students of planning in the cities of the developed world. The failure of those responsible for the conception and the implementation of planning policies in Delhi to realise these basic truisms has been one of the principal causes of the developments discussed below.

Much of what follows comprises a serious indictment of planning in Delhi, and will perhaps create the impression that the experience has been entirely negative; that the planners have achieved nothing

and probably made things worse. To be fair to the DDA and related bodies, it is possible to cite specific developments which have undoubtedly alleviated pressures on the city's fabric; most notably large-scale construction and engineering projects. These developments have occurred largely on an ad hoc basis, however, and it is as easy to cite examples of DDA actions (or inaction) which have had as demonstrably a pernicious effect, in that they have exacerbated problems the plans were intended to remove. The relative merits or demerits of individual projects are incidental, however, when considering the plan as a whole. It is necessary to assess whether the policies implemented have made any overall progress in improving the conditions in the city.

Delhi Master Plan: Objectives and Strategies

The overall aim of the Plan reflects the factors which created the perceived need for planning in Delhi in the first place. The Delhi Master Plan was intended to be a strategy by which the spatial and population growth of Delhi could be restricted:

> "To achieve a rational growth of Delhi which has been expanding in a most haphazard way." (Master Plan, p. 1)

Along with this highly generalised statement of intent, a number of other objectives were advanced.

The first was to improve conditions in existing urban areas, especially high-density areas such as Old Delhi and settlements such as Kingsway Camp which had sprung up to house the influx of refugees from what is now Pakistan. The Plan also aimed to rehouse the population of existing 'unauthorised' residential areas and prevent future unauthorised housing.

The future pattern of industrial location was to be controlled; mixed areas of industry and housing regularised; services and community facilities provided and the city's notorious transport problems improved.

Whilst these objectives appear laudable in themselves, their comprehensive and highly generalised nature renders them largely tautologous; in effect the aims of the Plan were to improve the city by improving the city.

This was reflected in the policy proposals of the Master Plan, which was conceived as a :

> "Comprehensive spatial planning exercise undertaken as a long range basis ... . Only a long-term and sustained effort could bring about the desired changes in Delhi and its environs." (Master Plan Review, p. 2)

The plan operated at both an urban and a regional level, and was an attempt to control all aspects of the city's structure (including radical changes in the existing urban area) for a period of 20 years. A picture of the desired spatial, economic and demographic structure of Delhi for 1981 was advanced, and this blueprint has ostensibly formed the basis for all policies proposed and adopted during the planning period. In other worlds, the Plan was a static conceptualisation of a desired 'end-state', and as such reflects the philosophy that all aspects of the forces generating the city's structure were amenable to control mechanisms based on physical design and spatial arrangements. As is so often the case, Western planning models were transposed directly to an Eastern setting with scant regard to their appropriateness. These philosophies see the planner as some form of detatched, omnipotent controller, able to mould a systems' structure along desired lines to create an optimal form. That physical and spatial arrangements were the mechanisms whereby this end-state was to the attained reflects the dominance of architectural and civic design concepts typical of much of post-war urban planning throughout the world. Many of the experiences discussed here for Delhi have parallels in other planning experiments in LDCs, and in some cases in developed countries as well, and as such offer valuable lessons to those concerned with generating effective planning strategies for the cities of LDCs.

The regional aspects of the Plan are central to its overal strategy. The principal mechanism for controlling migration to Delhi from the surrounding provinces (and consequently limiting the city's overall rate of growth) was to deflect migrants away from Delhi to a number of 'Ring Towns'.[1] It was forecast that this strategy would restrict the growth of Delhi's population to an estimated 4,600,000 in 1981. The ring towns themselves were intended to be:

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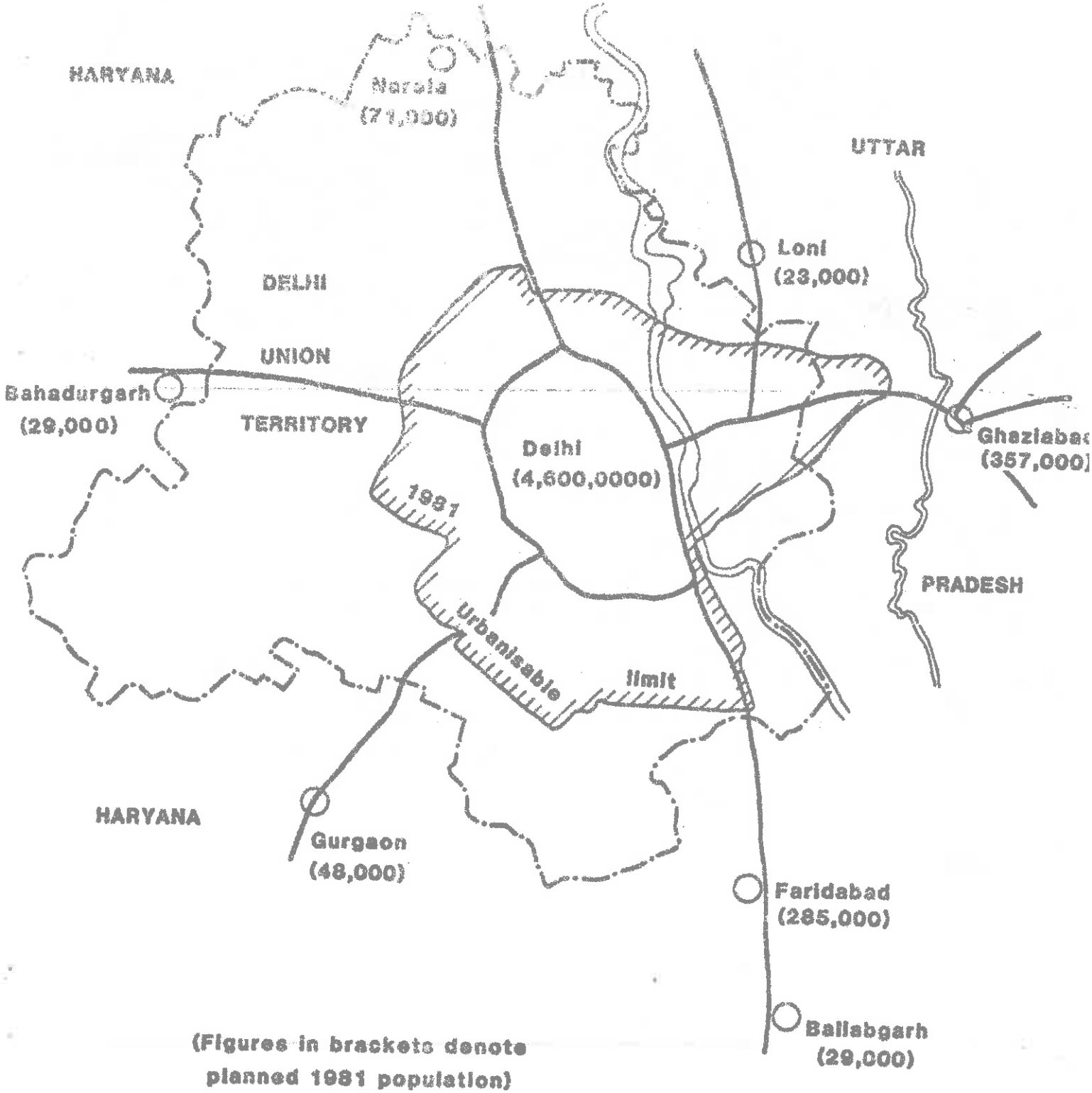
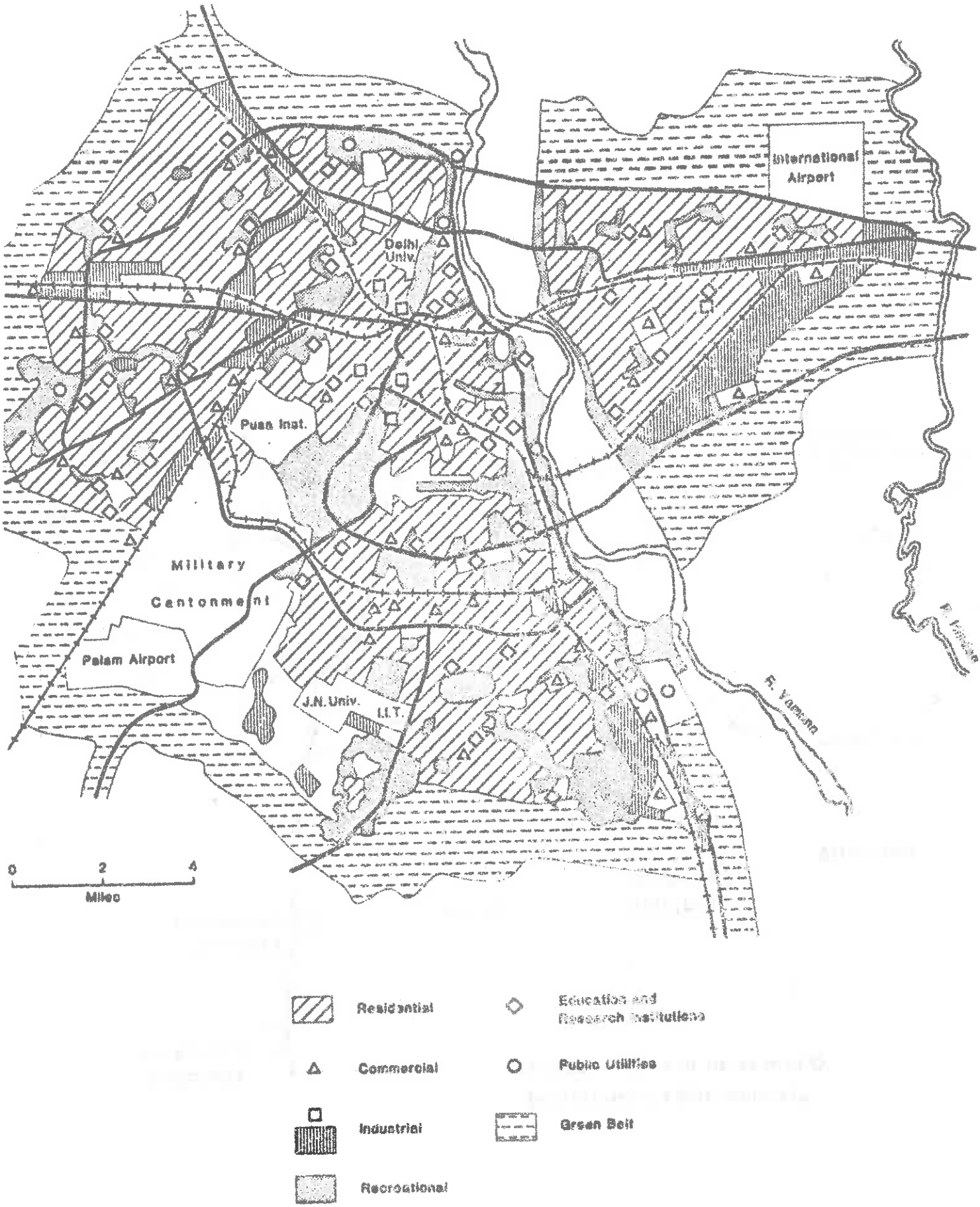
[1]The original Master Plan listed six Ring Towns. There were Ghaziabad and Loni in the state of Uttar Pradesh, Faridabad, Ballabgarh, Gurgaon and Bahadurgarh in Haryana state and Narela in Delhi Union Territory itself. Their position, along with their planned 1981 population are shown on Figure 1.

Fig. 1: Delhi Metropolitan Area: Planned Structure for 1981



(Figures in brackets denote planned 1981 population)

Fig. 2: Land-use plan for Delhi in 1981



"Self-contained in matters of work and residential places, but with strong economic, social and cultural ties with the central city." (Master Plan, p. 1)

For the urban area itself, a land-use plan for the envisaged structure in 1981 was prepared (see Figure 2) which proposed an 'urbanisable limit'; an arbitrary boundary, surrounded by a green belt, beyond which the city would not (it was proposed) grow.

The planned urban area itself was to be divided up into a hierarchical system of spatial units (see figure 3), each of which was to be self-contained in the provision of various functions.

Figure 3: Proposed community structure

URBAN DELHI

Eight Planning Divisions (each 300,000 to 750,000 population)

3 Central Business Districts and 15 District Centres (each District Centre serves 150,000 to 250,000 population)

Community Centre for 40,000 to 50,000 population

Residential Planning Areas (each 12,000 to 15,000)

Residential Units (each 3,500 to 5,000 population)

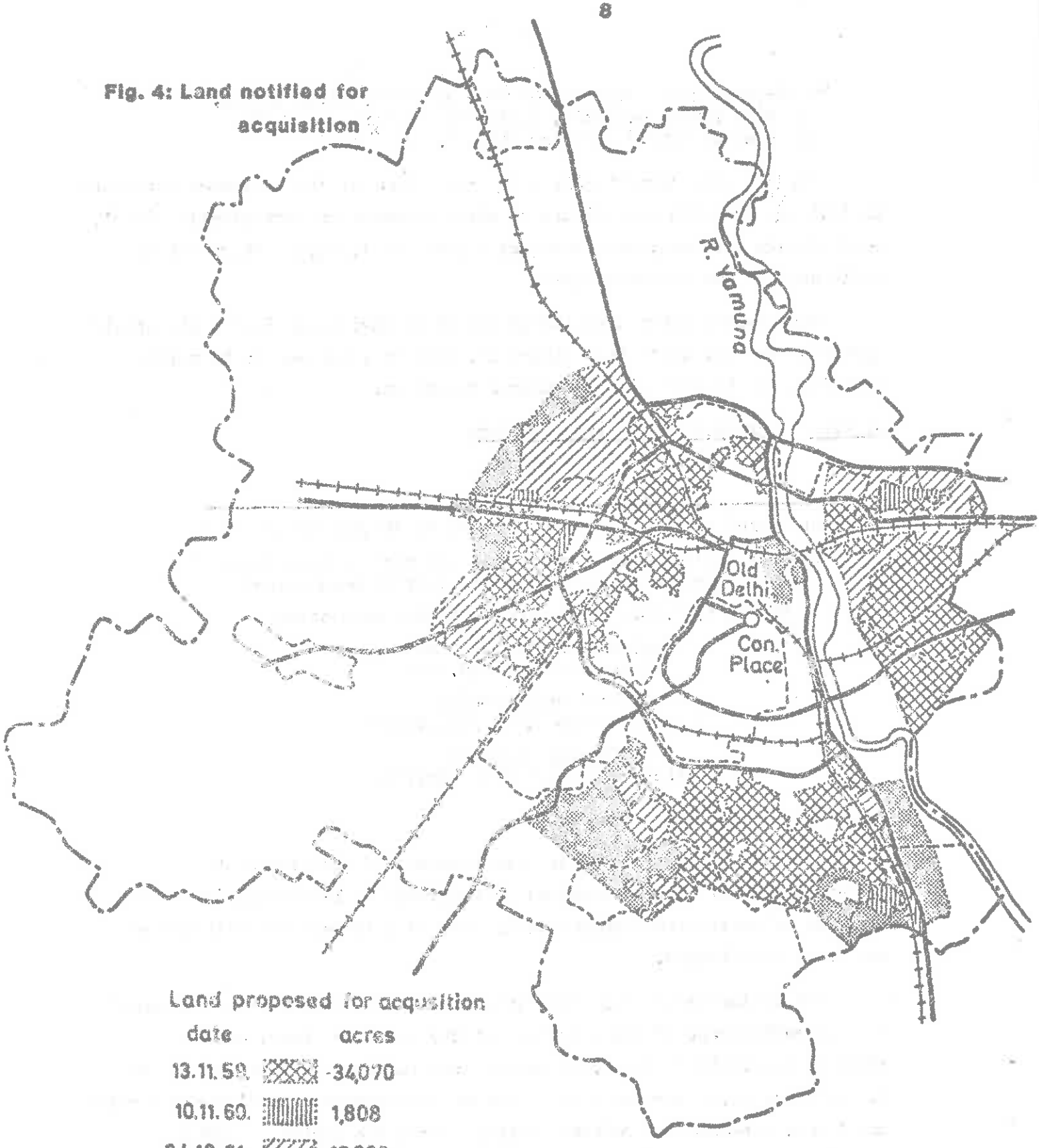
Housing Clusters (each 750 to 1,000 population)

(Source: Delhi Master Plan, p. 65)

Two main policy strategies were advanced to facilitate the implementation of these proposals: a programme of land acquisition and a series of zoning regulations covering the 1981 'urbanisable limits' and the Green Belt beyond.

The zoning regulations were intended to provided a legal framework for the enforcement of the proposals of the land-use plans, and are aimed at regulating both public and private land-use. They applied to the existing urban area as well as future developments, and 'non-conforming uses' were expected to relocate within a specific period. Emphasis was placed on controlling industrial location, with all large-scale industry in future precluded from locating within Delhi Union Territory (DUT) and other industrial activities being confined to a limited number of localities. This policy has had important implications for the form the city's development took during the planning period.

Fig. 4: Land notified for acquisition



(Source: Howland, 1975, p. 24)

The land acquisition programme entailed the purchase, through compulsory order, by the DDA of all undeveloped land within the 1981 'urbanisable limits'. This involved some 60,000 acres, out of a total of 110,000 (see Figure 4), and as such is one of the most extensive exercises of its kind in recent planning history. This land acquisition programme had a number of stated objectives (see Figure 5). Although phrased in highly general terms, two specific intentions are clear: to control the urban land market and to provide land as and where needed for all sections of the city's population, including the mass of the urban poor. A key feature of this policy was its financial arrangements. The acquisition and disposal of land was to be financed by a revolving fund which used profits from the sale of commercial, industrial and high-income groups residential land to subsidise land for housing for the poor and community facilities. This policy sounds fine in theory, but as we shall see, has been readily open to abuse and corruption. See Howland (1975) for a further discussion of the details of the land acquisition policy.

Figure 5: Land acquisition policy: objectives

1. To achieve optimum social use of land.

2. To insure the availability of land in adequate quantities at the right times and for reasonable prices to both the public authorities and individuals.

3. To prevent the concentration of land ownership in a few private hands and safe-guard the interests of the poor and underprivileged.

4. To control urban land values and to eliminate speculative profits.

(Source: "Paper on urban land policy", Ministry of Health, 1961, p. 5)

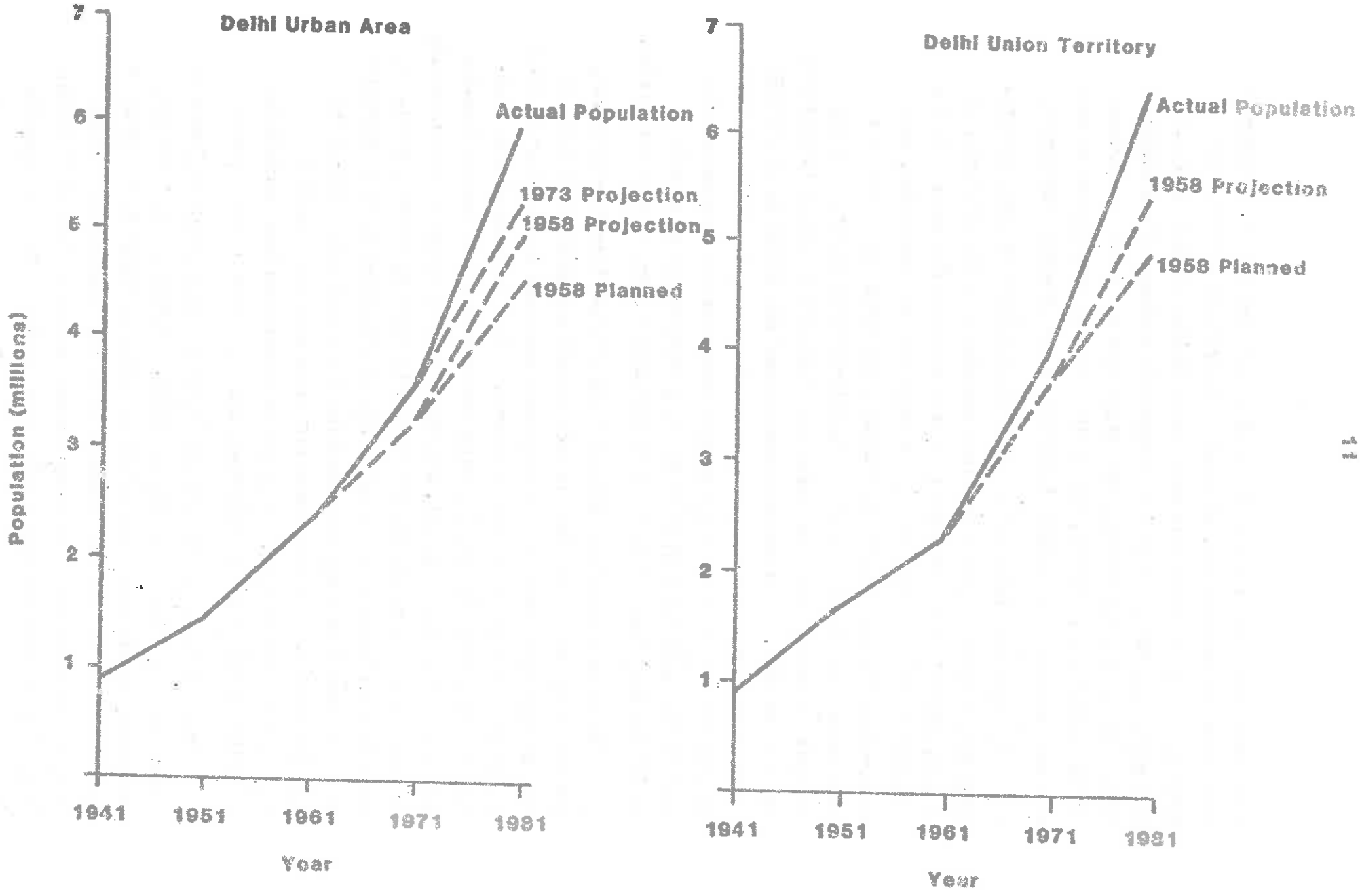
The Development of Delhi in the Planning Era

In the preceding section the goals and main strategies of the Delhi Master Plan have been outlined. The comprehensive, goal-orientated nature of the Plan's proposals is apparent, as are the assumptions that social and economic malaise can be erradicated by strategies based on physical construction and spatial arrangements. The inadequacies of this type of planning has been amply illustrated by the history of planning strategies in many countries, and have been widely accepted in WesternAcademic circles for some time. The message has yet to filter through to the planners and administrators in Delhi, however, as their actions and their continued contempt for and rejection of local criticism reveals.

In this section the implementation of the Master Plan is considered, with an assessment of firstly, the degree to which the declared aims of the planning exercise have been realised and, secondly, the relationship between the Plan's implementation and the development of Delhi as a city during the planning period.

The basic aims of the Master Plan, to restrict Delhi's growth to around 4,600,000 people and within a clear spatial limit by 1981, has clearly not been realised. The population of the urban area, however, defined, had reached at least 5,500,000 by 1979 and will probably be close to 6 million by the end of the planning period in 1981 (see Figure 6). If one includes settlements such as Faridabad and Ghaziabad within the urban area (as the present author believes one should; they are clearly part of Delhi in functional terms, and are joined to the city by more-or-less continuous development), then these figures will be greatly exceeded. The Master Plan projections forecast a 1981 population of 5 million if no intervention occurred; by any estimation a woefully inaccurate projection. That the actual 1981 population will be over 30% greater than that planned for this date obviously has serious implications for any form of planning exercise and makes a mockery of the detailed, blueprint style of planning adopted in Delhi. Many of the detailed strategies advanced in the Plan were based on these inaccurate population projections. Consequently, even if all other factors had been favourable, the failure to forecast the extent of future population growth on its own

Fig. 6: Delhi population : planned, projected and reality



would have made many aspects of the plan unimplementable. Accurate population projections are, of course, notoriously difficult to achieve. This is especially true for a limited spatial area such as a city, and for the volatile demographic patterns of contemporary LDCs. In a planning context, the fault lies not in the inaccuracy of the projections, however, but in the style of planning which uses such projections as a central dimension of the planning strategies.

The physical limits of the city planned for 1981 have likewise long been exceeded. Exact physical bounderies to the city are, of course, impossible to determine; a fact conveniently ignored by the formulators of the Master Plan. A broad zone of transition, the rural-urban fringe, invariably surrounds all urban areas and is a particularly important feature of rapidly-growing cities. By any criteria, however, Delhi stretches well beyond the planned 'urbanisable limits' for 1981. The greater-than-planned population is undoubtedly partly responsible for this, but, as we shall see, the DDA's own land acquisition and disposal policies have been directly responsible for pushing the developing areas of the city further out by creating artificial shortages of land for development in many central localities.

The other objectives advanced in the Master Plan have likewise, not been realised. Far from improving, environmental conditions in many of the worst areas of the city have continued to deteriorate under the pressure of rapid population growth. This is particularly true for Shanjahanabad (Old Delhi), which was earmarked for dedensification and substantial redevelopment, but which in fact houses a substantially greater number of people today than twenty years ago (TCPO, 1975). By any criteria, Delhi today contains substantial areas of slum conditions and, far from improving, the situation has deteriorated during the planning period. In some cases (in particular the squatter resettlement programmes), the planning authorities have contributed directly to the stock of inadequate housing by their own actions.

The city's transport problems increase daily, with improvements invariably occurring on a post hoc basis. 'Uncontrolled' housing, commercial developments and factories spring up daily in all areas of the city, despite sporadic attempts at punative measures. Housing costs (both rents and land/house prices) have, far from stabilising, soared at an ever-increasing rate (Bose, 1978). The accommodation

crisis in the city deteiorates annually, and is a topic of continual debate. House rents in many cases take up to a quarter of the income of even middle-class families and the cost of land within legally permitted residential areas excludes all but the rich from buying their own property.

It is clear from the above that the aims and objectives of the planning exercise in Delhi have not been realised. The characteristics of the city close to the end of the planning period bear little, if any, resemblance to the patterns envisaged in the Master Plan. The inaccuracy of many of the predictions upon which policy proposals were based is only partly responsible for this. The chief reasons are, firstly, the failure of the authorities responsible for the execution of the Plan to implement many of the key policy proposals, secondly (and, perhaps, more crucially) the unrealistic and inappropriate nature of many of the Plan's proposals.

These points can be illustrated by considering the implementation of some of the Master Plan's main strategies.

The regional dimension of the plan, the 'Ring Towns' policy, has failed to live up to its expectations.

The city's rapid growth during the planning period reflects their failure to develop as serious alternatives to Delhi for migrants from the surrounding regions. This is partly due to the failure of the responsible agencies to develop the envisaged range of job opportunities in these towns, but principally reflects a lack of understanding of migration processes on the part of the Plan's formulators. The proposed relocation of Government Offices from Delhi to the Ring Towns has in particular, not occurred. This is a reflection of the general unwillingness of Government departments to move away from the centres of power and prestige in New Delhi and the failure of the Central Government to take any concrete steps to implement these proposals.

Migration to cities such as Delhi was seen as a response by individuals to job opportunities, and as such it was believed that migration could be deflected by the relocation of these opportunities. This is not how migration in LDCs works, however. In most cases the dominant factor influencing the specific locational choice of

migrants, and especially the rural poor, are personal contact networks, rather than job opportunities. People move to the location of relatives or, in India, caste contacts, who act as a reception system and the medium through which knowledge of specific opportunities is transmitted. A programme such as the Ring Towns policy would have little effect on migration to a major metropolis such as Delhi, therefore, as it does nothing to alter the system through which migration occurs. This is reflected in the failure of the Ring Towns to act as effective counter-magnets to Delhi, and illustrates the necessity of developing planning strategies which understand and take account of the societal processes in operation in the community one is attempting to plan for.

The failure of the Ring Towns policy was recognised as early as 1973:

> "While the indicators are that urban Delhi would exceed the designated population of 4.6 million in 1981, most of the Ring Towns ... may have to struggle hard to reach their respective population magnitudes envisaged in the Plan."
> (TCPO, 1973, p. 19)

Some of the Ring Towns, most notably Ghaziabad and Faridabad, have experienced a substantial increase in industrial activity during the planning period. This has been greatly encouraged by the zoning restrictions within the DUT, which preclude the establishment of large and heavy industry within this area, and by policies in adjacent states designed to attract industrial location (Panini, 1977). To this extent, therefore, it could be argued that the zoning policies have achieved their objectives. These Ring Towns have not developed as self-contained, detached communities, however, but have as a consequence of the location of industry functionally orientated towards Delhi have become little more than industrial satellites. This is particularly true of Ghaziabad and Faridabad, each many times larger than the other Ring Towns, which are now connected to Delhi by intermittent development and which clearly lie within Delhi's urban fringe. The industrial zoning regulations apply to DUT only, and as a consequence the arterial roads connecting Delhi and the surrounding towns are lined with large factories and associated developments (ancillary workshops and services, worker's housing, etc.) between the state

border and the Ring Towns themselves. The resultant sprawling ribbon development is seen most clearly along the Mathura road, south of the city, where the ten kilometres between Faridabad and Delhi are lined almost continuously with factories.

The Master Plan's zoning provisions have, therefore, contributed significantly to a pattern of industrial decentralisation, ribbon development along arterial routeways and an increased peripheral sprawl far more accute than would have otherwise occurred. The responsibility for this lies partly in the underestimation of the rate of industrial growth which would take place in the region during the planning period. The specific form of development which has occurred, however, is chiefly a consequence of the failure of the different state authorities involved (the State Governments of Uttar Pradesh, Haryana, DUT and the Central Government) to establish any overall planning body with authority throughout the region.

This situation has, of course, many parallels in both LDCs, and the Developed World, and typically acts as a major constraint upon the effective implementation of regional scale planning policies. To be effective, more than correct planning strategies are required. It is also essential that an administrative system capable of implementing these policies is established, and that the political will exist to direct this system and, where necessary, to subordinate local interests to broader regional ones. Both an effective administrative machinery and the political coordination essential to the implementation of the regional dimensions of the plan have been comspicious by their absence in Delhi. In their place has been perfunctory meetings of state officials at which purely parochial interests dominated and any effective agreement was absent. The need for coordination of local political units was not recognised in the formulation of the Master Plan, as planning was seen as an activity detached from the societal and political realities of the area. The consequences of this attitude can be seen in the failure of the regional strategies of the Master Plan, and this reflects the necessity of approaching urban planning as a process firmly embedded in the political realities of the system one is attempting to guide and control. Treating planning as some form of detached, idealised, apolitical process ensures that the planning exercise will inevitably be distorted by the societal

realities of the system and, more often than not, subordinated to local vested interests whose goals are unlikely to coincide with those of the plan's formulators. These points are vividly illustrated by the fate of the regional dimensions of the Delhi Master Plan, but apply with equal force to the rest of the planning exercise and are one of the most important lessons to be learnt by academics and planners concerned with urban planning in LDCs.

One of the most important features of the implementation of the regional dimensions of the Plan is that it has had an effect upon the development of the city which differs widely from that anticipated in the plan. The same comment can be made with equal force to the land acquisition programme.

As noted above, all underdeveloped land within the arbitrary 1981 'urbanisable limit', some 60,000 acres, was to be acquired by the DDA, and this aspect of the plan was the one which was persued with the greatest vigour. All the land within this area had been notified for acquisition by the beginning of 1965, and the effect of this was to remove virtually all potential development land from the city's land market. The intentions were to stop land speculation and inflation and to make land readily available for the purposes of the development authority. Behind this policy was the implicit expectation that all private development would suddenly stop and only urbanisation sanctioned or executed by the planners occur - a bizarre assumption under any circumstances, and one of staggering naivety in the context of a rapidly growing city which already had an acute land shortage.

The consequence of this policy was that people and firms had to seek locations elsewhere. As there was virtually no land available within the 1981 'urbanisable limits', such location-seekers were forced in large numbers to look to the areas immediately outside this boundary, extending the urban fringe by a considerable area and leading to a far more dispersed form of development than would otherwise have occurred. This situation has been greatly exacerbated by the consistent failure of the DDA to release land for development at a rate remotely approximating to that assumed in the planning aims. After acquisition much of the land has lain vacant for many years, reflecting in part the time lag in plan implementation and in part,

the DDA's disposal policies which are open to criticisms far more serious than that of mere inefficiency. The consequences of this policy on the ground have been and still are large areas of 'dead' land surrounding the old urban area with more recent developments beyond and a leap-frogging location process which has necessitated the widespread adoption of sub-optimal locations, and has resulted in more severe strains upon the city's circulation system and social capital than would have otherwise been the case.

The number of residential plots released by the DDA for lower- and middle-income groups is derisory and the allocation system long; complicated, riddled with corruption and out of step with the social processes operating within the city (Chatterji, 1978).

Exact data showing the contemporary state of development and allocation of DDA-held land is not available, a consequence of the obfuscation and secrecy characteristic of the operation of that organisation. Howland (1975) and the TCPO (1973) do provide useful insights into the level of development which had occurred up to the mid-1970's, and their data is summarised in Tables 1, 2 and 3.

Table 1: Shortage of Pucca residential units in Delhi by income groups, as on 1st July, 1970

Monthly income of households (Rs.)	Number of units (in thousand)
0 - 100	165.7
101 - 250	146.3
251 - 500	47.5
501 - 1000	14.4
1001 and above	6.2
All groups	380.1

Source: Report of the Expert Committee on Methods of Achieving Low Cost Large Scale Housing Construction in major cities, Government of India, National Buildings Organisation, New Delhi, May 1970 (p. 9).

Years	LOW-INCOME GROUP		MIDDLE-INCOME GROUP		HIGH-INCOME GROUP		Total No. of plots*
	No. of plots	Av. size sq. yds.	No. of plots	Av. size sq. yds.	No. of plots	Av. size sq. yds.	
1961-62	126	98	103	133	-	-	229
1962-63	-	-	-	-	-	-	-
1963-64	215	106	91	150	841	334	1,147
1964-65	131	125	108	153	497	330	755
1965-66	26	129	23	157	446	284	514
1966-67	243	125	21	163	608	250	1,291
1967-68	225	130	1,227	167	807	367	2,595
1968-69	89	115	33	152	314	333	705
1969-70	47	125	739	168	472	344	1,473
1970-71	20	126	20	181	871	295	1,046
1971-72	346	125	890	164	919	292	2,273
1972-73	-	-	-	-	59	00	772
1973-74	-	-	17	164	329	279	512
1974-75	291	125	-	-	359	281	783
TOTALS	1,759	121	3,322	158	7,158	305	14,094

*including 'alternative allotments'

Source: Howland (1975), p. 30.

Table 2: Distribution and size of residential plots

As Table 1 shows, the shortage of residential units at about the mid-point of the planning exercise was close to 400,000. Compare that figure to the total number of plots provided by the DDA for the entire 1961-75 period (Table 2) of 14,000, then the extent of the inadequacy of the land allocation scheme is revealed. The situation was still as acute towards the end of the 1970s. It was estimated that by this time an *additional* 80,000 houses were needed each year just to house the city's annual population growth, whilst the DDA allocation scheme provided only 3,000 houses and flats in 1977-78 (The Indian Express, 28/9/78). It is clear, therefore, that the disparity between the

Table 3: Distribution of residential land under the large scale land policy: up to 1975

Income* category	Percentage of Delhi's population	Planned allocation of residential land	Distribution of residential plots	Distribution of residential land
High income group	3%	[illegible]	52%	68.8%
Middle income group	[illegible]	[illegible]	[illegible]	14.6%
Low income group	76%	50%	12%	6.5%
'Alternative allotment'	-	-	13%	11%

*Income categories as defined by the DDA: High income group: annual income exceeding 18,000 Rs
Middle income group: annual income 7,200-18,000 Rs
Low income group: annual income below 7,200 Rs

residential facilities provided by the DDA and the needs of the city's population is so vast that the individual developments the DDA does complete make no appreciable impact on the city's housing problems.

This situation is exacerbated by the DDAs allocation system, which invariably entails a wait of several years and which, according to a number of informants who have first-hand experience, involves delays and bribery at each of its many stages. The arbitrary allocation of locations takes no account of the importance of personal contact networks and, consequently, the value placed upon proximity, a factor which discourages large numbers of prospective participants from considering going to the DDA for a residential plot. In addition, the high cost of DDA houses and plots precludes 70% of the city's population from considering this option. For example, in 1979 the cheapest 'low-income group' flats in DDA housing schemes were priced at 40,000 rupees - many times the annual income of the bulk of the urban poor.

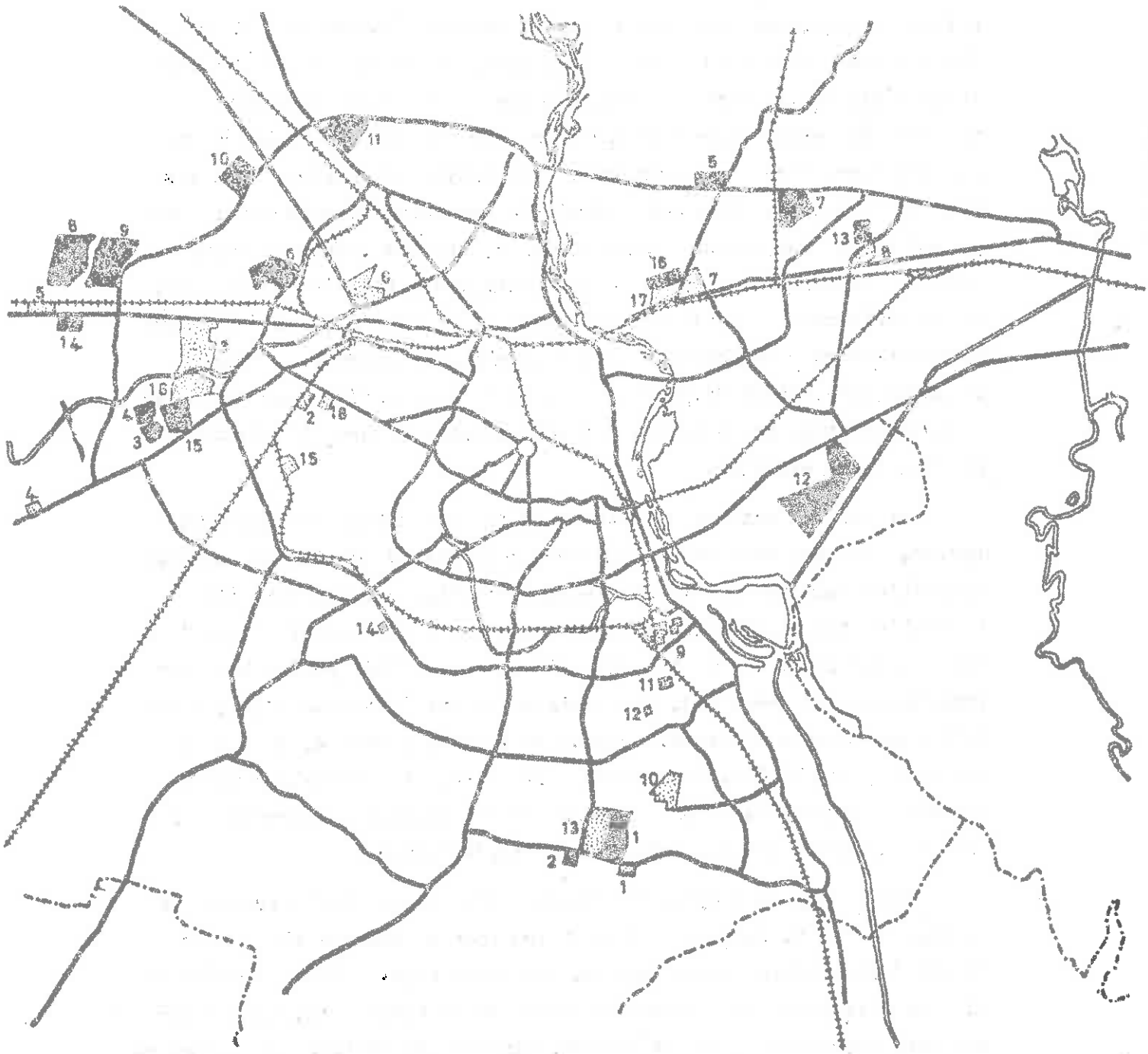
The DDA has consistently failed to use the tracts of land acquired in the early 1960s to ease the acute land and housing shortages in the city, therefore, and indeed by removing large tracts of the best potential development has added to these shortages and increased dramatically the extent of peripheral sprawl around the city. The rationale for the reluctance of the DDA to release the land they hold is hard to ascertain. Howland (1975) argues that the answer lies in a policy of profit maximisation on the behalf of the DDA which has resulted in conscious speculation and manipulation of the urban land market by this organisation. Such a case is, of course, difficult to prove, but the evidence to support it is extremely strong. In the 1971-75 period less than 2% of the profits from the auction of the high-income group and commercial land was used to subsidise low-income group residential developments (Howland, 1975), a ratio of income to expenditure which appears typical of the entire planning period. Whatever the reasons, however, there is no doubt that the land acquisition and disposal policy has been administered in a way which has directly exacerbated many of the problems the planning exercise was intended to erradicate. The removal of all undeveloped land within the 1981 'urbanisable limits' and the zoning regulations

prohibiting developments beyond that have constrained legitimate housing channels to such an extent that large sections of the city's population (and not just the urban poor) have been forced to adopt illegal residential locations: both squatter settlements and the 'unauthorised colonies' (residential areas where the households have legal title to the land but construction is illegal) which have proliferated around the city and which are now one of the principal housing forms for large sections of the city's population. It has been estimated that there are about 500 unauthorised colonies in and around Delhi (Hindustan Times, 27/4/79), and some, such as Palam Colony, are extremely large. This contrived illegitimacy has led to almost universal suspicion of and contempt for the DDA, the municipal authorities and the notion of urban planning in general. This attitude has further divorced the planning process from the community it is attempting to plan for, and consequently ensured the further demise of the exercise.

Of all the actions undertaken by the DDA during the planning period, however, none has caused more controversy nor created greater opposition than the policy of clearing squatter developments and resettling the population of these areas on 'Resettlement estates' on the extreme periphery of the city (Figure 7). This policy has been implemented by force and, particularly in the 'emergency' era, often with considerable violence. Close to 1 million people, or 20% of the city's population, were 'resettled' during the 1975-77 period, resulting in many cases of considerable privation and disrupting the fragile niche of the poor within the city's fabric.

The policy also directly violated the Master Plan's provisions, as many of the resettlement estates are located outside the Master Plan's 'urbanisable limits' and in the green belt. This boundary has also been violated by a number of other State activities, especially military bases and public utilities, emphasising further the degree to which the Master Plan's provisions have failed to be effectively implemented. One could discuss a number of other dimensions of Delhi's planning experience which would as readily demonstrate the inadequacies of the original concepts and the implementation system: the zoning regulations, for instance, or the proposals concerning the envisaged community structure. Further elucidation upon this is

Fig. 7: Resettlement colonies in Delhi



J J Schemes (1964-70)

Resettlement schemes (1975-77)

unnecessary, however. The examples discussed above amply illustrate the failure of the planning exercise to recognise and come to terms with the true nature of the possibilities of and constraints upon urban planning in a city such as Delhi. A number of valuable conclusions can be drawn from the experiences of Delhi, and in the last section of this paper these are discussed briefly.

The Planning Process in the Third World: Possibilities and Constraints

The above discussion of Delhi's planning experiences illustrate the clear inability of a comprehensive, blueprint planning approach to resolve the problems which led to the establishment of the planning exercise. This conclusion on its own will be no great surprise; the inadequacies of the planning traditions based on physical design and spatial arrangements are well-documented and widely accepted. The dominant trend in planning thought in recent years has been the development of increasingly sophisticated mathematical tools, building upon the concepts developed by McLoughlin (1969), Wilson (1974) and others. While in many ways attractive as theoretical concepts, such approaches have rarely, if ever, been fully implemented and doubts about their practical applicability have been continually raised. Such reservations are of particular pertinance in LDCs, as limitations arising from the identification of societal processes and access to data (Soussan, 1979) are acute. If urban planning is to make any constructive impact upon conditions in the cities of LDCs, effective, appropriate strategies must be developed.

One of the most elusive tasks of urban planning in LDCs is the identification of exactly *why* planning is necessary. For planning to be effective, it must have specific objectives which have some chance of being achieved. This in turn requires the identification of concrete problems which are amenable to the planning process.

In the formulation of planning aims, there is a danger that the monumental scale of the problems encountered in Third World cities will lead to planning aims which are, by their comprehensive nature, inherently self-defeating. When faced with problems of such scale and complexity, one instinctively searches for solutions of a comparable

stature. Such solutions are not possible, however, within the constraints which limit the potential of urban planning in LDCs. This is an unpleasant aspect of reality which must be accepted, understood and taken into account when generating planning strategies. It is only when the constraints which operate upon urban planning are recognised that its possibilities may be realised. These constraints are many and varied; restrictions upon the resources available; the rapidity of change and growth characteristic of many cities; the complexity and extent of the 'problems' themselves and a number of other factors ensure that if planning in Third World cities is to be effective, its horizons must be lowered. Rather than regarding planning as an idealised, problem-solving exercise, the way forward in LDCs lies in identifying limited goals which will make an impact upon specific aspects of conditions within cities. The identification of such goals will depend upon the resources available to and the priorities of the particular organisation formulating the planning exercise. Planning is not a detached, objective process. It is an integral part of the political processes in the city and country in question, and will be subordinated to the broader societal forces operating therein.

If urban planning is to be anything but an additional beaurocratic burden upon the hard-pressed population of Third World cities, priority must be given to strategies which are aimed at making a concrete impact upon the worst features of conditions among the most deprived sections of the community. The precise nature of these strategies will of course depend upon local conditions, but the provision of minimum services such as a safe water supply, minimal shelter (or, at least, the removal of constraints upon their own housing provision) etc., should be the first priority of any planning exercise. The sections of the community which inhabit the worst areas of Third World cities (and, indeed, their counterparts in the West) do so because they are the loosers in the competition for housing and services within the city. The central role of planning must be to attempt to compensate for this in some way by some form of reallocation procedure. Planning inevitably involves the redistribution of resources, for this is in its basic nature. To be more effective, it must be explicitly stated in the formulation of the plan, to whom the resources are to be allocated, and for what

reasons these particular sections of the community have been designated to be in need of help. The corrollery of this is, of course, that large sectors of the city's population will be left to fend for themselves. This is difficult to accept, but is inevitable within the confines of an urban planning exercise in contemporary LDCs. It is better that the sections of the urban community which are left out of the planning process are those which benefit from the broader socio-economic processes which have created the conditions inflicted upon the urban poor. Unfortunately, in reality the reverse is often the case; planning reinforces the position of the 'haves' by restricting the 'have nots'. Such egalitarian measures would be difficult to implement in many LDCs, and as such could be regarded as impractical. Our pragmatism must be tempered with a little idealism, however, for planners must be more than technocrats. They must be social animals, aware of the political implications of their actions and concerned with achieving a genuine improvement in the conditions of the most disadvantaged sections of urban society.

Urban planning in LDCs must, therefore, recognise the nature and extent of the constraints operating upon it and, within the restricted scope defined by these contrasts, formulate limited strategies which have more hope of making a real impact upon the worst aspects of conditions in these cities. The resources available to any planning exercise will inevitably be swamped by the scale of the problems confronting it, and consequently it is imperative that these limited resources are used in the most efficient, effective way.

A feature of the planning process which would go a long way towards assuring that this goal was realised would be to involve the sections of the community one is attempting to assist in both the formulation and implementation of the planning strategies. No one can tell us what are the 'worst' aspects of urban conditions, what would be the minimum facilities necessary to ensure a less degrading existence, etc., than the people themselves. The community's potential energy and resources could, through their involvement, be integrated with those provided by the planners rather than, as is so often the case, used to circumvent the restrictions the political system places upon them. This 'self-help' principle permeates life in LDCs, and has a long pedigree

amongst concerned western commentators, but its potential role within urban planning has yet to be realised.

A further benefit of genuine community participation is that it would ensure some measure of accountability and, hopefully, prevent the development of elitist planning beaurocracies which become alienated from the hopes and wishes of the people they hope to benefit. Nothing can be more destructive than the situation which has developed in Delhi, where the principal planning authority, the DDA, is regarded by the bulk of the city's population as a punitive organisation whose actions are to be resisted or, preferably, ignored altogether.

A number of other specific lessons can be drawn from the experiences of Delhi in the last twenty years.

Amongst these are the inherent dangers of basing planning strategies on predictions of future developments (in this case, primarily population growth) over which the planners have no control; the need for flexibility (a feature of planning often aimed for and rarely achieved) and for some form of monitoring system which studies the impact of planning measures on the city; the dangers of transposing western models to an entirely different socio-political framework; the need for an adequate administrative machinery and concerted political will if planning aims are to be translated into planning practice, etc. Whilst important in their own right, however, such aspects of the planning process are secondary to the fundamental questions about the scope and orientation of planning which have been raised above.

Conclusion

To conclude, therefore, Delhi's experiences clearly illustrate the enormous difficulties involved in achieving any significant improvement in urban conditions via conventional planning strategies. Clearly something other than a physical, end-state, approach is required, but viable alternatives are by no means self-evident. The most important point to be realised is that planning is an integral part of the city's social and political process, both affecting and affected by their development over time. The extent and nature of the constraints placed

upon the range of possible planning strategies by the scarcity of resources available, the rapidity of growth and change characteristic of contemporary Third World cities, the complexity of city life and, especially, the wide range of processes which lie beyond the control of planners within the existing societal framework, must be recognised before the possibilities of urban planning in LDCs can begin to be realised. We are a long way from achieving an understanding of the nature and extent of these constraints, and in many ways the sorts of generalisation advanced here leave one feeling dissatisfied. Without a recognition of their existence and concerted action to identify them more clearly, however, planning in the cities of LDCs will continue to be, at best, largely ineffective and, at worst, a system of interference which creates more problems than it resolves.

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