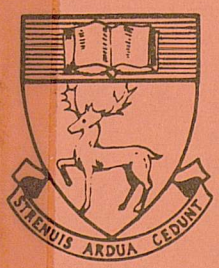
Department of Geography
University of Southampton

Inequality in Pre-School Provision: A Geographical Perspective

Steven Pinch

No. 16

Discussion Papers



ISSN 0140 - 9875

Inequality in Pre-School Provision: A Geographical Perspective

Steven Pinch

No. 16

January 1983

The Editor
Discussion Papers,
Department of Geography,
The University,
Southampton,
SO9 5NH

Price 75p

PREFACE

This paper is a preliminary analysis of pre-school services, a field which, with a few exceptions (Holmes, Williams and Brown, 1972; Freeman, 1977) has been ignored by geographers and indeed other urban analysts concerned with service allocations in cities. There are numerous possible explanations for this state of affairs, not the least important being the fact that study of the under-fives has been dominated by psychologists concerned with the intellectual, emotional and social development of young children. Furthermore, as this paper reveals, numerous elements need to be integrated to analyse this problem from a spatial perspective - accessibility indices within cities, the social structure of neighbourhoods, the operation of the local political system and the development of social policy at the national and international level. Various authors have examined these issues in isolation but few have brought the necessary synthesis for a spatial view of pre-school services. It must also be remembered that there are in any case relatively few 'official' pre-school facilities so that inevitably the major items of expenditure in the fields, of housing, transportation, social services and the like have received the lions share of attention. However, the major reason must be the fact that these services primarily affect the lives of women and in common with all such issues have been neglected by geographers. Despite a number of recent pleas for a redress of this imbalance (eg. Monck & Hanson, 1982) there has so far been relatively little empirical research (eg. Tivers, 1977). One final difficulty is that the complex almost chaotic nature of pre-school services makes the collection of comprehensive data extremely difficult. In this respect I have been extremely fortunate in Southampton for the extensive help given to me by Ros Park, Hilda Carter and Margaret Clarkson of the Pre-School Playgroups Association; Pam Whyte of the National Childminders Association; Mrs Jones of the Southampton Area Education Office and Maureen Booth of Hampshire County Council. None of these persons is of course responsible for any errors of fact or interpretation.

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

In the last decade geographers have examined many areas of public policy such as housing, the elderly, immigrants, education and health care. One set of services which has been almost totally ignored are those for children under five. Many of the fields hitherto studied, such as housing and health care, obviously have an important impact upon the welfare of young children but there has been little systematic geographical study of services directly concerned with care of the under fives. These services involve places where children can spend time outside their own home with people paid to take care of them. In Britain today such services are an enormously complex mixture of day nurseries, nursery schools, chilminders and playgroups. Such facilities are sometimes collectively termed 'nurseries' (Hughes, et. al. 1980) or 'pre-school' services (although the latter is something of a misnomer for nursery classes and reception classes for 'rising fives' are provided by local education authorities).

Although there has been some recent controversy over the closure of nurseries in certain local authorities, the provision of pre-school services is not a major political issue in the same manner as inflation, unemployment and housing. Indeed, compared with most fields of economic and social policy, expenditure on day-care facilities for the under fives is miniscule. In the financial year 1976 to 1977 net expenditure by local authority social services departments on council day nurseries and playgroups amounted to £35 millions while schooling for the under fives consumed £135 millions in education departments (Hughes et. al. 1980). This must be set against expenditure in the same period of £1,540 millions on primary education, £2,000 millions on secondary education and £1,930 millions on further and higher education. Furthermore, spending on pre-school services is currently planned to fall in the governments programme of expenditure cuts.

It is therefore somewhat ironic that one of the largest increases in pre-school services since the Second World War was planned by Margaret Thatcher when she was Secretary of State for Education in the White Paper Education: a Framework for Expansion (H.M.S.O. 1972). Following from the recommendations of the Plowden Report full or part-time nursery education was planned for 50 per cent of three year olds and 90 per cent of all four year olds. However, the increase in oil prices and subsequent expenditure cuts in the wake of the recession, meant that these targets were not attained. In 1977 there was the equivalent of nursery provision for 16 per cent of three year

olds and 50 per cent of four year olds. Consequently, pre-school provision in the U.K. lags far behind most other industrialised nations in both the capitalist and communist blocks (Tizard, Moss and Perry, 1976).

It is therefore hardly surprising that there is evidence of considerable parental dissatisfaction with both the quality and quantity of existing pre-school services in Britain. The most comprehensive study was that undertaken by the O.P.C.S. (Bone, 1974). The results are rather complex for what is desired by parents depends upon the type of day care (if any) which is currently being used. The hypothetical nature of the questions also means that the preferences expressed in the study must be treated with some caution. Given the complexity of existing services for the under-fives and the fact that the full range of facilities is unlikely to have been available in certain of the areas in which the respondents lived, it is also likely that there was considerable misunderstanding about the nature of pre-school provision. Nevertheless, the overall pattern of the results is remarkably clear. Most striking was the enormous shortfall in provision levels. Provision was wanted for twice as many children as were receiving it, so that whilst 32 per cent of children were using facilities, some form of day provision was desired for a further 33 per cent who were not using services at the time of the survey. At a national level this means that well over a million of the under-fives are not using pre-school services contrary to the wishes of their parents. With the exception of childminding, preferences were expressed for more of all types of service but especially those of an 'educational' character. Disaggregated by age, some form of day care was wanted for 20 per cent of children under 1 year of age, 41 per cent under 2, 72 per cent under 3, 87 per cent under four and 91 per cent under five. Perhaps more significantly, less than half of the mothers interviewed wanted part time hours of less than four hours per day. This also seems to be a classic situation in which supply would create more demand and it seems that many more women would seek employment if suitable pre-school facilities were available. Bone's study also found there were three times as many unemployed mothers who wanted to start work as employed mothers who wanted to stop work. These preferences, which are supported by other studies, contrast sharply with the official view of the two departments responsible for pre-school services, the D.H.S.S. and the D.E.S., which is that children under three should not be separated from their mothers and then for only a few hours each day.

The aim of this paper is to illuminate the neglected geographical dimensions of the problems of pre-school provision. A spatial perspective would seem to be important in this context because, as in the case of many other services, there are enormous variations in the availability of pre-school facilities between different areas. Thus, the ease of access to pre-school services depends greatly upon the locality in which the family lives. A widely dispersed pattern of pre-school facilities would seem to be essential for, as Tizard, Moss and Perry (1976) note, in the first of their eight recommendations in the pre-school field:

> "1. The services should be local. In urban areas at least, pre-school services should normally be within walking distance of the home - the sort of walking distance that is feasible with two small children in tow. This means not having to cross roads or walk very far. If each pre-school centre served a small catchment area most of the children who came to it would live nearby" (Tizard, Moss and Perry, 1976, 207).

Three basic issues are therefore examined: first, what is the existing geographical pattern of pre-school services, second, how does this pattern match up with the likely needs and demands of families for these services, and third, what theories can best explain these spatial variations. These issues are examined at three spatial scales, first at the level of local authorities in England, second at the level of districts within Hampshire and third, at the level of local neighbourhoods within Southampton.

An understanding of the issues involved in the field of pre-school provision is immediately impeded by the enormous complexity of existing patterns of care. As Hughes and his associates note:

> "... like Topsy the services 'just grew' each starting at a different period in response to different needs and following different lines of development. The result has been a chaotic mismatch of anomalies, gaps, overlaps, inequalities and feuds" (Hughes et. al. 1980).

To put these problems into perspective it is therefore necessary to provide a brief description of the evolution of these services in Britain.[1] Those familiar with these issues need turn to page 10.

THE DEVELOPMENT OF PRE-SCHOOL SERVICES IN BRITAIN

Two factors have been particularly important in determining the level of pre-

school provision in Britain since the nineteenth century - the need for women in the workforce and related attitudes to the desirability of women taking up employment. Poverty was widespread in the cities created by the Industrial Revolution and, as Rowntree observed, was especially concentrated amongst families with young children. Many mothers were therefore forced to seek employment in order to increase their household income. Day-care facilities for young children were, however, grossly inadequate. In the absence of relatives or neighbours who were willing to care for their children mothers were forced to rely upon either childminders or the notorious 'dame' schools. Contemporary reports depict a bleak picture of care by many childminders at this time, while in the dame schools large numbers of children were crammed into what were frequently unhealthy conditions.

The second half of the nineteenth century saw a progressive decline in the numbers of working married women. In 1851 (the first date when comprehensive information was available) the proportion of married women in Britain employed was 24 per cent but by 1911 this figure had declined to between 13 and 14 per cent for England and Wales. Amongst the most important reasons for this decline were increasing male earnings and the growing hostility to the idea of women working in Victorian society. Industrial changes also worked against women taking up employment. The textile industries in which women were highly represented were overtaken by mechanisation and the growth of heavy engineering industries from which women were largely excluded. (The relative importance of these factors - ideological changes and material changes in economic structures - and the inter-relationships between these factors has been the source of enormous controversy (see Scott and Tilley, 1975)).

Despite the decline in the proportion of working women in the latter part of the nineteenth century, day care provision for children increased in quantity if not quality. A number of voluntary organisations began to open day nurseries and kindergartens but the most important change was the introduction of compulsory schooling in the 1870s. This gave parents the right of admission for their child if over three but compulsory schooling did not start till five. Between 1855 and 1870 the proportion of all children attending state aided schools in Britain made up by three and four year olds doubled from 7.6 per cent to 14.6 per cent and by 1900 the proportion of children in this age group in elementary schools increased to 43.1 per cent. Thus, at the beginning of the twentieth century England had begun to provide an educational service for all children whose parents chose to use it. Unfortunately standards were poor and rigid methods of teaching encouraged by

the "payment by results" system. As Tizard, Moss and Perry (1976) note:

> "... the preposterous architecture of class rooms, the small playgrounds in the cramped inner city schools, the huge size of classes, the formal teaching,strict discipline and heavy emphasis upon religious instruction, and the use of young, unqualified teachers, supervised by head teachers who were themselves inadequately qualified and insensitive to the needs of children, all contributed to the low quality of early education that was common in the second half of the century." (Tizard, Moss and Perry, 1976, 57).

A number of reports to the Board of Education drew attention to these undesirable aspects of schooling arguing that children between the ages of three and five did not benefit from the mechanical methods of instruction. Some argued at the time that special schools should be established to cater for the needs of young children but resources were limited and the education authorities were pre-occupied with extending education for older children. In 1905 education authorities were given discretionary powers to withdraw the right of admission for the under-fives and after this date their numbers in schools began to decrease rapidly. This trend was the result of changes in the policy of the education authorities rather than the wishes of parents but there was no middle class involvement in the state education system to act as a pressure for improvement at this time. The dominant view was that for the first five years of life children should remain permanently at home with their mothers. This view was reinforced by British experience in the Boer War when difficulty was encountered in obtaining sufficient healthy and fit men for the armed forces. High rates of infant mortality and poor health amongst large sections of the working class led to a concern within the quality of childrearing during a time of increased military and economic competition (see Lewis, 1980).

Thus throughout the nineteenth century women found their roles increasingly confined to housework and childrearing. They were, however, needed in munitions factories during the First World War and nurseries to look after children were therefore provided through grants from the Board of Education. The inter-war period saw little extension of pre-school provision and it was only again with the Second World War and the urgent need for female labour that nurseries were developed.

Throughout most of the twentieth century the pattern of pre-school services was affected by a conflict between the medical and nursing professions on

one hand and educationalists. The former expressed an interest in the childs health and physical needs and dominated day nurseries and grant-aid voluntary nurseries established by the 1918 Maternity and Child Welfare Act. The education profession was concerned with the childs educational and social development and operated within the local authority nursery schools or nursery classes and voluntary schools established by the 1918 Education Act. Conflict between medical and educational groups made it difficult to evolve a national policy during the Second World War but the decision was eventually made in favour of day nurseries.

After the Second World War the distinction between educational and health needs was maintained. The 1944 Education Act empowered education authorities to provide nursery schools or classes for the under fives and the 1946 National Health Act empowered local authorities to provide day nurseries. However, the Ministry of Health made it clear that nursery schools and nursery classes were the preferred form of pre-school provision with day nurseries acting as small supplements for those mothers with particular needs. Many of the nurseries established in wartime were therefore transferred to local education authorities to be run as nursery schools, and the numbers of day nurseries was reduced.

The 1950s was generally a period of stagnation in the field of pre-school provision and indeed throughout the 1960s pre-school services did not expand in a similar manner to other educational sectors (Blackstone, T. 1971). This policy was justified by the widely held belief that nurseries were harmful to young children, especially when under three, since it was thought they would lead to 'maternal deprivation'. This theory was forwarded by Bowlby who argued that it was essential that young children should experience intimate and continuous relationships with their mothers or mother substitutes.

However, throughout the 1960s and 1970s a number of social trends have had an important impact in the pre-school sphere. Women are marrying younger, having smaller families and are spreading their childbearing over a much shorter period. At the same time their life expectancy has increased so that the proportion of their lives devoted to bring up children is much smaller than it used to be (Garland and White, 1980). Consequently, an increasing number of women have taken up paid employment, many of them with young children. In 1971 700,000 under-fives had mothers in employment but by 1977 this figure had risen to an estimated 900,000. Most of these mothers worked part-time in the service sector of the economy. In 1977 22 per cent of married

mothers whose youngest child was under five worked part-time and 5 per cent worked full time. Coupled with this trend was a rapid increase in the number of one-parent families. According to the latest estimates there were in 1980 at least 920,000 one-parent households in Britain with 1½ million children. In recent years the proportion of single mothers with young children who are working has increased considerably to 14 per cent full-time and 18 per cent part-time.

Continuing high levels of inflation, the lowest level of child allowances in Europe (Lister, 1980), and a taxation policy which discriminates against children, have all contributed towards the economic pressures upon women to take up employment. However, increased workforce participation rates must also be seen as related to an increased desire amongst women to enjoy the independence, status and companionship which work can provide and which motherhood can frequently undermine.

The concept of maternal deprivation has also been exposed to enormous criticism in recent years. Bowlbys' theories were derived from studies of children who were totally separated from their mothers and had grown up in poor quality residential institutions, and were not derived from experience of day nurseries and day schools.

These developments have been accompanied by a decline in the possibilities of support for mothers from friends or relatives in the immediate neighbourhood. Increased residential mobility and household formation rates mean that families and friends are now much more likely to be separated geographically. Rehousing schemes have also served to increase the dislocation of familial support and the growth of flats has increased the social isolation of many mothers. There has also been growing evidence in recent years that the experiences of motherhood fall far short of the idealised state portrayed in advertising. Women with young children suffer from particularly high rates of depression (Brown and Harris, 1978) and the accident rate amongst children with depressed mothers is considerably increased.

In the absence of state provision through local authorities these pressures for pre-school provision led to expansion in the voluntary and private sectors. The voluntary playgroup movement began in 1966 with the initiative of a single mother who organised neighbours with other young children into a group which met regularly in each others homes, sharing the task of child care. By 1970 this had developed into the Pre-School Playgroups Association - the largest coordinating body (Crowe, 1973).

In the private sector there was also a considerable expansion of nurseries but most important - and most controversial - was the rapid growth of childminding. Since 1948 childminders have been obliged to register with their local authority social services department if they mind children for profit but many minders are not registered. This is the sector of pre-school provision where there is least information but is known to be the area where standards are most variable. The extent of this illegal childminding is almost impossible to estimate. Detailed investigations of small inner areas of British cities (involving following the travels of young children to minders at 5.30 in the morning) have indicated that there are far more unregistered than registered minders (Jackson and Jackson, 1979). The Jacksons claimed that the ratio of unregistered to registered minders was 10:1 in certain areas of British cities. Recent estimates have put the ratio at a much lower level between 2:1 to 6:1 but no one can be sure of the precise figure and this is likely to vary considerably between different areas (Bryant, Harris and Newton, 1980). There has certainly been an enormous increase in the number of registered childminders in recent years and although this coincides with an increased rate of participation by women in the workforce, it is difficult to assess the extent to which this reflects a genuine increase in childminding or an increased rate of registration by social services departments. There are considerable variations between local authority areas in the numbers of registered childminders which seem difficult to relate to the number of working women. The assumption must be therefore that these figures reflect the extent to which the local authority is prepared to publicise the need for registration. Many childminders are ignorant of the need to register but the registration procedure is typically cumbersome, lengthy and negative in character and of relatively little benefit to the childminder. An inspection is made before registration with the local authority to ensure that basic standards of safety, health and space are provided for. However, these standards may vary between authorities and it is claimed that some authorities may be reluctant to refuse registration as this may be the only way to keep a check on the minders (Bryant, Harris and Newton, 1980; Jackson and Jackson, 1979).

Nevertheless many recent developments including the television programme Other Peoples Children and the formation of the National Childminding Association, would seem to indicate a change of attitude towards minding and a lessening of the stigma associated with this form of care. The crucial point however, is that official forms of day care in nurseries, playgroups

and schools are, in numerical terms, little more than the 'tip of the iceberg'. The enormous gulf in pre-school care has been filled by various forms of minding, especially in working class areas where women are under the greatest financial pressures to return to work while their children are still young. The Jackson's fieldwork unearthed a complex self-help network of friends, relatives and minders (both registered and unregistered) attempting to combat the shortfall in official forms of pre-school care.

PROBLEMS WITH PRE-SCHOOL SERVICES

The net effect of this historical development is a pattern of provision which is unsatisfactory for both parents and children. Parents vary enormously in their needs for pre-school services and ideally a wide range of types of service should confer flexibility and choice. In reality, however, the enormous diversity of pre-school services in Britain is bewildering to many parents and is likely to impede their access to the most suitable forms of provision.

More important in preventing parents having any realistic choice in the field of pre-school provision is the low overall level of places available. In 1977 the estimated total pre-school population of England and Wales was 3.4 million and studies suggest that some form of alternative care is wanted for two thirds of all children (Bone, 1977). However, local authority day nurseries, playgroups, nursery classes and nursery schools amounted to only 162,000 places. In 1977 for example, the national waiting list for local authority day nursery places was some 12,000 and the vast majority of these children have little or no hope of obtaining a place (Jackson and Jackson, 1979). In an inner-city borough like Lambeth the provision of maintained day nursery places exceeded the D.H.S.S. guidelines by 4 fold yet borough could still provide for only half of its priority children (Bruner, 1980). This restricted state provision has led to a proliferation of facilities in the private and voluntary sectors through private nurseries playgroups and childminders. In 1977 these amounted to 495,000 places - about three times the number of places provided by the state - but there are still only enough places for just over half the parents who want them.

Many have argued that it is the fragmentation of the services which impedes their development. Local authority social services departments are responsible for the 'caring' services. These include local day nurseries which operate on a highly selective basis catering for those children 'who cannot be adequately catered for at home'. (They are also responsible for

ensuring that all private nurseries, playgroups and childminders in an area provide adequate standards of care). Local education authorities, in contrast, provide the educational facilities in nursery schools and classes on a non-selective basis. The absence of any single department in charge of pre-school services leads to a vaccuum of responsibility. Those attempting to obtain increased levels of service in an area may therefore be passed between the two departments each denying responsibility for further extension of facilities.

It would also seem that the structure of the present system is such that those in greatest need do not obtain the most suitable form of pre-school provision. Some council day nurseries take priority cases from frequently long waiting lists, this results in many disadvantaged children in one type of institution with all the stigma this entails. Nursery education, in contrast, is available on a non-selective-basis but is offered only in school term time and for short sessions. This is of little use to the mother working full-time and favours the middle class mother who is more likely working part-time than her working class counterpart. The most widely used service - playgroups - are also only available for short sessions and again have a disproportionately high number of middle class children. The children least likely to obtain nursery education are those who might benefit from it most - the children of the low-paid, immigrants and single-parent families whose mothers are more likely to be in full-time employment and who are therefore more likely to be cared for by childminders, or local authority day nurseries if they are priority cases. However, it is attitudes towards the widespread phenomenon of childminding which are most controversial. The bulk of the available evidence indicates that parents are largely forced to used childminding and that the majority who do so would prefer some other communal form of pre-school care, usually in a nursery (Bone, 1974). The D.H.S.S., in contrast, see childminding as the inexpensive and practical way in which to meet the enormous demand for pre-school care and has been concerned at what it sees as parental prejudice against minders. Others have argued that childminders are cheap and flexible compared with nurseries and since they are a 'fact of life' local authorities should become more positive in their attitudes to childminding providing real benefits at registration by linking minders with playgroups and offering access to training schemes, toy libraries and free milk (Jackson and Jackson, 1979). Critics assert that while childminding is cheap compared with other forms of care, this only appears to be the case because most of the hidden capital costs are born by the minders themselves (who in many cases appear to wrok for a net loss). A number of studies have also highlighted the

low levels of physical, emotional and intellectual care provided by some childminders (Mayall and Petrie, 1977; Bryant, Harris and Newton, 1980) and it seems clear that is is the privacy and isolation of this form of care which many parents dislike (Hannon, 1978).

A summary of basic information relating to services for the under fives is presented in Table 1.

INTER AUTHORITY PATTERNS OF PRE-SCHOOL PROVISION

This section examines the inter-authority patterns of pre-school provision in England. Local authorities are under no statutory obligation to provide pre-school services and, as with other discretionary services, considerable variations in provision levels can be expected between different areas. Some local authorities have attached considerable importance to the development of pre-school facilities while others have sought to rely upon the voluntary and private sectors. A number of writers have drawn attention to the extremes in provision levels (Blackstone, 1971) but there has been little or no systematic examination of inequalities throughout the country in recent years. Fig. 1 shows the key to the areas used in the analysis.

Before examining the results it is important to highlight the limitations inherent within the data for there can be few fields in which official statistics are as unreliable as in the realm of pre-school services. This is of course hardly surprising given the enormously fragmented and illogical pattern of pre-school facilities which exists in Britain. There are enormous differences in the quantity and quality of care (hours of availability, cost, number of facilities etc.) both within and between services, which are not revealed by official statistics. The data are most reliable in the case of those services such as the day nurseries and nursery classes that are directly provided by the local authority, although these are not without problems of interpretation. The reliability of data is rather more questionable in the realm of private and voluntary forms of care since there are inevitably problems involved in coordinating information from such a wide range of informal organisations, even with coordinating bodies such as the Pre-School Playgroups Association. In the field of childminding of course, the data will reflect the extent of registration rather than the total amount of minding in an area. It must also be appreciated that, from the consumers viewpoint, many of these services are not separate. Many children, and especially those aged three and four, are passed between a complex network of nursery classes, playgroups and minders so that an element of 'double-counting' inevitably exists in the offical statistics.

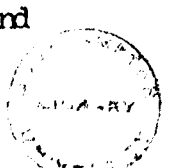


Table 1 Provision for the Under Fives

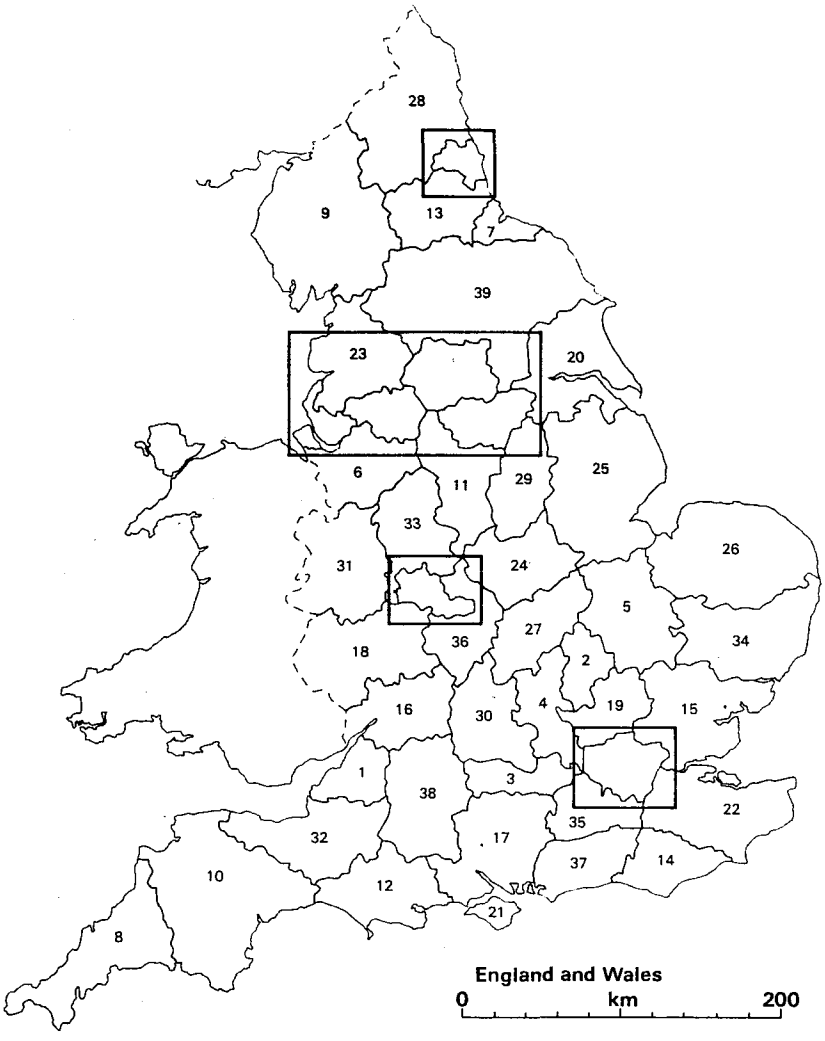
Type of Provision	Registering Agency	Funding and Organisation	Location	Number of Children Per Session	Ages of Children (Yrs)	Staff Ratio	Staff Composition	Session Time	Cost to Consumer
Day nursery	Social services	State provided and funded	Purpose built or adapted premises	20/35/20 Units	0-4	1:3¾	Nursery nurses and assistants	Up to 6 hrs x 2 or 3 sessions per week	Means tested fee
Registered childminder	Social services	Privately funded and organised	Minders home	1-3	0-4	1:3 Including their own children only 1 child under 8 months	No training necessary but attendance at courses encouraged	Up to 8 hrs x 5 sessions per week	Fees vary £12 average for one week
Nursery school	Education	State provided and funded	Purpose built or adapted premises	25	3-4	1:10	Nursery teachers, nursery nurse, nursery assistant	2½ hrs x 5 sessions per week	Free
Nursery class/unit	Education	State funded and provided	Converted hut class room or purpose built unit attached to 1st school	20/30/40	3-4	1:10	As above	2½ hrs x 5 sessions per week	Free
Extended pre entry class	Education	State funded and provided	Converted hut or classroom on school premises	10-15	4½	1:10	Teacher or nursery nurse under supervision of teacher		

Table 1 (continued)

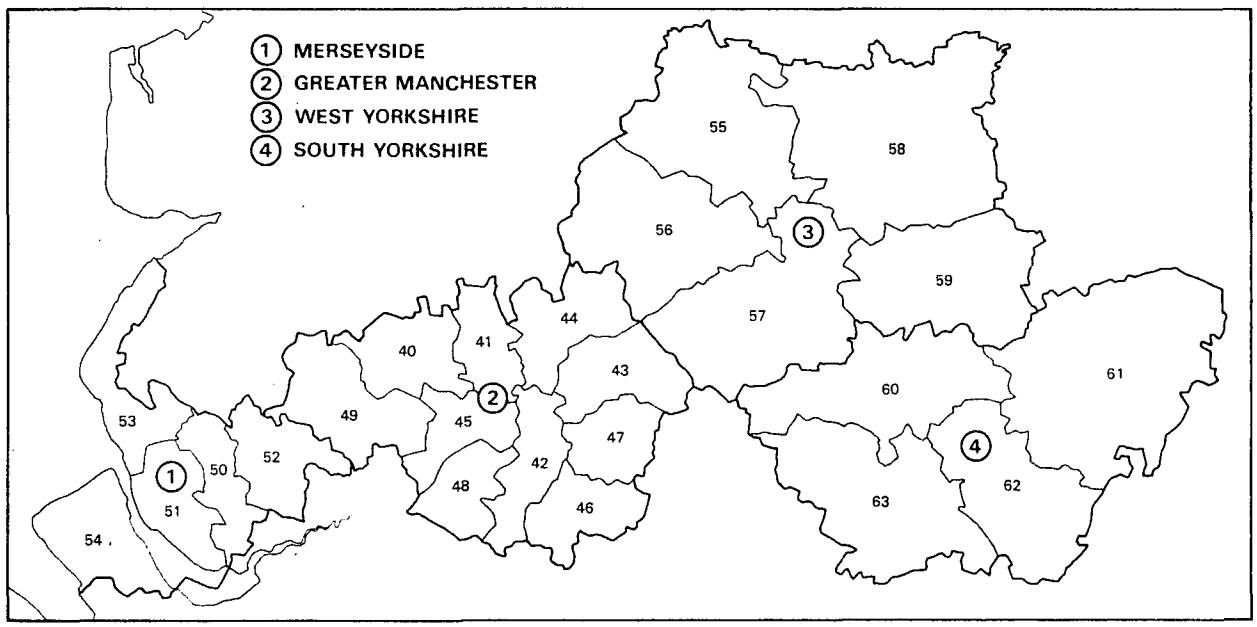
Type of Provision	Registering Agency	Funding and Organisation	Location	Number of Children Per Session	Ages of Children (Yrs)	Staff Ratio	Staff Composition	Session Time	Cost to Consumer
Handicapped class in school	Education	State funded and provided	Converted hut or classroom on school premises	According to need	0-5	1:5	Advisory teacher for deaf 1 qualified teacher for deaf 1 qualified teacher part time	2½ hrs x 1-10 sessions per week	Free
Special schools	Education	State provided and funded	Purpose built premises	According to need	0-5	1:3	Staff from health and education	2½ hrs x 4 to 10	Free
Nursery class in private school	If 5 or more over 5 years D.E.S. If more under 5 than over 5 D.E.S. & D.H.S.S.	Privately funded and organised	Purpose built or adapted premises	According to accommodation	2½-5		Teachers	2½ x 5-10 sessions per week	Fee paying
Private day nursery	Social services	Privately funded and organised	Usually adapted house	Up to between 10 and 20 according to accommodation	2½-4	1:6 plus supervisor	May be ex nursery nurse or teacher	Varies according to parents needs	Fee paying
Playgroup	Social services	Volunteers fund and organise	Hall hut or house	Up to 24 in hall up to 15 in house	3-4	1:8	Supervisors and helpers may attend playgroup courses	2½ hrs x 2-5 sessions per week	Fee paying on average 50p per session

Table 1 (continued)

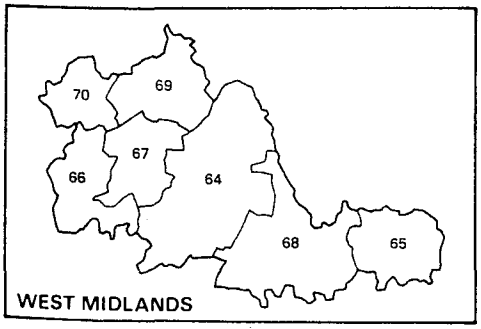
Type of Provision	Registering Agency	Funding and Organisation	Location	Number of Children Per Session	Ages of Children (Yrs)	Staff Ratio	Staff Composition	Session Time	Cost to Consumer
Opportunity playgroup	Social services	Volunteers fund and organise	Hall or converted school premises	Up to 24 in one group	Handi-capped children 0-3 yrs Brothers & sisters 0-4 years	1:8 plus super-visor & 1 helper for each handi-capped child	Supervisors & helpers may attend play-group courses	2½ x 1 session per week	Fee paying as above
Hospital playgroup	Hospital authority	Organised & funded by save the children fund	Special play area and within wards	Number varies according to hospital inpatients	0-16	No ratio 2 play-leaders funded & trained by save the children fund		Flexible	Free
Mother/ toddler group	Not needed	Volunteers fund and organise	Clinic, hall or whatever is locally available	Varies according to demand	0-4	No staff each mother is respon-sible for her own child		1-2 hrs per week	Nominal fee to cover rent and tea

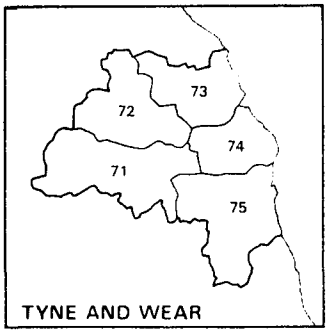


1 Avon
2 Bedfordshire
3 Berkshire
4 Buckinghamshire
5 Cambridgeshire
6 Cheshire
7 Cleveland
8 Cornwall
9 Cumbria
10 Devon
11 Derbyshire
12 Dorset
13 Durham
14 East Sussex
15 Essex
16 Gloucestershire
17 Hampshire
18 Hereford and Worcester
19 Hertfordshire
20 Humberside
21 Isle of Wight
22 Kent
23 Lancashire
24 Leicestershire
25 Lincolnshire
26 Norfolk
27 Northamptonshire
28 Northumberland
29 Nottinghamshire
30 Oxfordshire
31 Salop
32 Somerset
33 Staffordshire
34 Suffolk
35 Surrey
36 Warwickshire
37 West Sussex
38 Wiltshire
39 Yorkshire
40 Bolton
41 Bury
42 Manchester
43 Oldham
44 Rochdale
45 Salford
46 Stockport
47 Tameside
48 Trafford
49 Wigan
50 Knowsley
51 Liverpool
52 St. Helens
53 Sefton
54 Wirral
55 Bradford
56 Calderdale
57 Kirklees
58 Leeds
59 Wakefield
60 Barnsley
61 Doncaster
62 Rotherham
63 Sheffield
64 Birmingham
65 Coventry
66 Dudley
67 Sandwell
68 Solihull
69 Walsall
70 Wolverhampton
71 Gateshead
72 Newcastle upon Tyne
73 North Tyneside
74 South Tyneside
75 Sunderland
76 Barking
77 Barnet
78 Bexley
79 Brent
80 Bromley
81 Croydon
82 Ealing
83 Enfield
84 Haringey
85 Harrow
86 Havering
87 Hillingdon
88 Hounslow
89 Kingston upon Thames
90 Merton
91 Newham
92 Redbridge
93 Richmond upon Thames
94 Sutton
95 Waltham Forest
96 Camden
97 Greenwich
98 Hackney
99 Hammersmith
100 Islington
101 Kensington
102 Lambeth
103 Lewisham
104 Southwark
105 Tower Hamlets
106 Wandsworth
107 Westminster



Metropolitan Counties
0 km 40





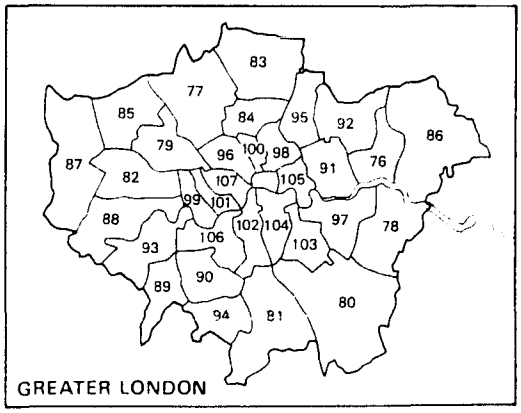


Fig 1

TOTAL PROVISION

Table 2 shows the rankings of total pre-school provision in the English local authorities in 1976 per 1000 of the population under five. The data include the number of places in all forms of local authority nursery schools, nursery classes, reception classes and day nurseries together with all forms of registered private and voluntary playgroups, nurseries and childminders. The range of variation is considerable but the basic pattern is fairly clear. With a few exceptions (notably Hertfordshire, Isle of Wight, Northamptonshire, Warwickshire and Cambridgeshire) the top half of the list of rankings is dominated by the London boroughs and metropolitan districts. Richmond, Brent, Redbridge, Kingston, Bromley and Merton emerge amongst the highest ranks together with the cities of Manchester, Liverpool and Newcastle. Conversely the bottom half of the rankings is dominated by the non-metropolitan counties, notable exceptions being Bradford, Wigan, Barnsley, Trafford, Wakefield, Rotherham, Wolverhampton, Kirclees, Knowsley and Dudley. As figure 2 makes clear, it is the major conurbations which have the largest amounts of pre-school services, even when standardised for population size.

NURSERY SCHOOLS AND NURSERY CLASSES

This total pre-school provision is of course composed of the enormous variety of services described above. These services may each have their own distinctive patterns and it is therefore necessary to disaggregate the data and examine the various forms of pre-school care separately.

One of the most important local authority services are the nursery schools and nursery classes. Blackstone (1971) has provided an excellent historical review of the evolution of these educational services in the latter half of the twentieth century. She points out that, whereas the private forms of care in nurseries and kindergartens purchased by the middle classes in the late nineteenth century were influenced by the philosophies of educational pioneers such as Froebel and Montessori, the origins of state nursery education were rather different. The various Factory Acts passed in the victorian era led to a greater awareness of the plight of young children in poor working class homes. Education was seen as a way of removing young children from these harmful environments. Eventually the 1908 Report of the Consultative Committee of the Branch of Education argued that, although the best training for children was at home when conditions were satisfactory, the state should intervene where this is not the case. It was argued that the amount of nursery education for the under 5s should vary from area to area depending on " the industrial

RANK			RANK		
1	Richmond	437	48.5	N. Tyneside	287
2	Brent	385	50	Hampshire	285
3	Manchester	375	51	Wirral	284
4	Redbridge	367	52.5	Cornwall	283
5	Kingston	365	52.5	Sunderland	283
6	Bromley	348	54	Bury	281
8	ILEA	345	55	Cleveland	279
8	Liverpool	345	56.5	Avon	278
8	Merton	345	56.5	Birmingham	278
10	Newcastle	343	58.5	Lancashire	277
11	Hounslow	342	58.5	N. Yorkshire	277
12	Calderdale	341	60.5	Sandwell	276
13	Hillingdon	332	60.5	Tameside	276
14	Coventry	328	62	Walsall	275
15	Salford	327	63	Gloucestershire	274
17	Bolton	326	64	Bedfordshire	271
17	Ealing	326	65.5	Staffordshire	269
17	Oldham	326	65.5	Sutton	269
19	Solihull	325	67.5	Dorset	268
20	Stockport	320	67.5	W. Sussex	268
21	Barnet	318	69.5	Bradford	265
22	Harrow	316	69.5	Buckinghamshire	265
23	Hertfordshire	314	71	Sheffield	262
24.5	Cumbria	313	72	Norfolk	261
24.5	Isle of Wight	313	73	Leicestershire	258
26	Rochdale	311	74.5	Essex	249
27	Sefton	310	75.5	Hereford and Worc.	249
29	Northamptonshire	309	76.5	Devon	248
29	S. Tyneside	309	76.5	Wigan	248
29	Warwickshire	309	78	Derbyshire	247
31	Croydon	307	79.5	Kent	246
32	Enfield	305	79.5	Salop	246
33	Haringey	300	81	Barnsley	244
34.5	Cambridgeshire	298	82.5	Cheshire	242
34.5	Waltham Forest	298	82.5	Suffolk	242
36	Barking	297	84	Trafford	241
37	Northumberland	296	85	Oxfordshire	240
39.5	Bexley	292	86	Wakefield	239
39.5	Havering	292	87	Berkshire	236
39.5	Leeds	292	88.5	Rotherham	232
39.5	Lincolnshire	292	88.5	Wolverhampton	232
42	Gateshead	291	90	Wiltshire	231
43	Surrey	290	91	Nottinghamshire	230
44	Durham	289	92	Humberside	229
46	Doncaster	288	93	Kirclees	228
46	Somerset	288	94	Dudley	178
46	St. Helens	288	95	Knowsley	166
48.5	E. Sussex	287	96	Newham	?

Table 2 Rankings of total number of pre-school places in the English local authorities per 1000 population under 5.

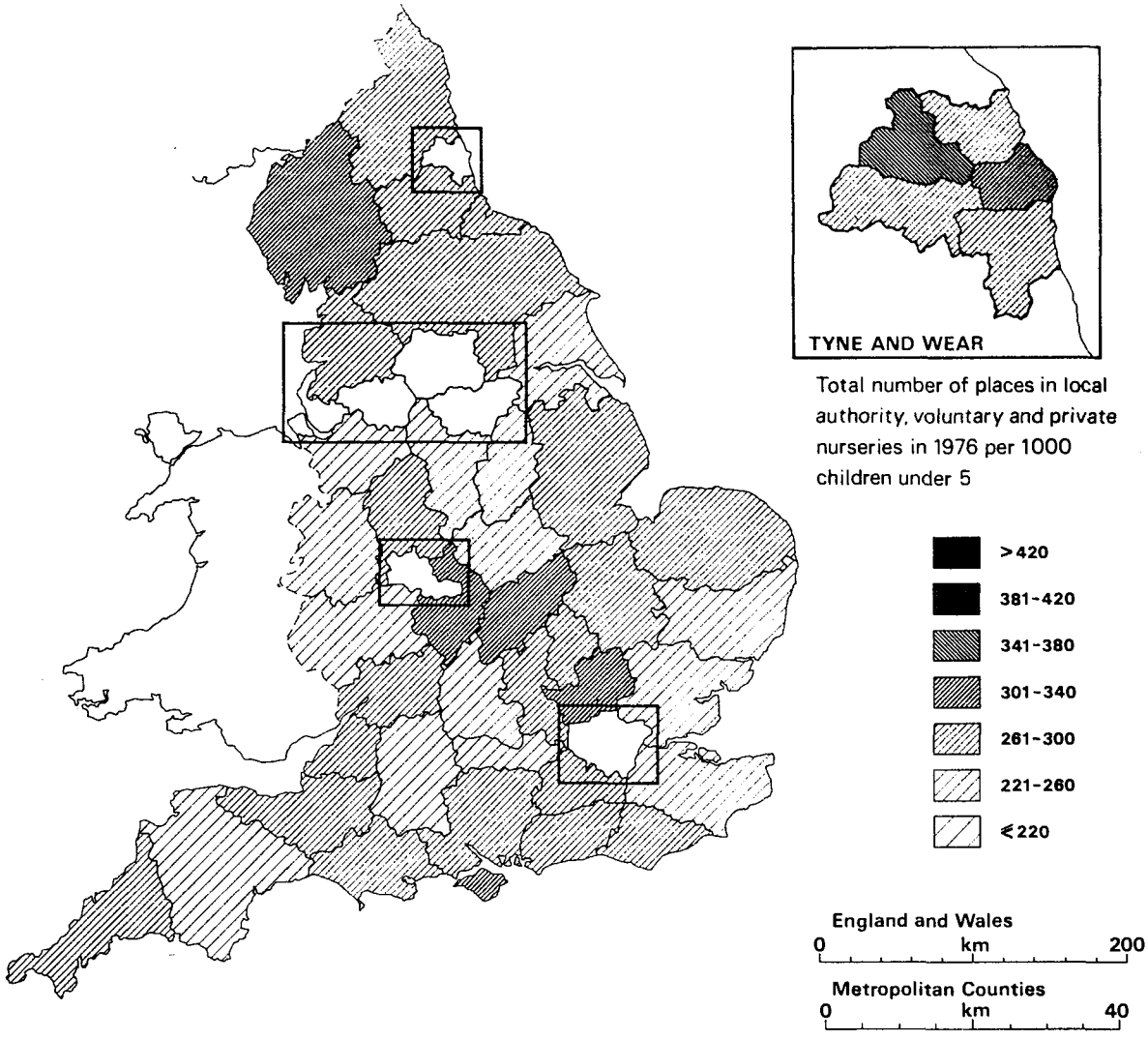

TYNE AND WEAR
Total number of places in local authority, voluntary and private nurseries in 1976 per 1000 children under 5
>420
381-420
341-380
301-340
261-300
221-260
⩽220
England and Wales
0 km 200
Metropolitan Counties
0 km 40
1 MERSEYSIDE
2 GREATER MANCHESTER
3 WEST YORKSHIRE
4 SOUTH YORKSHIRE
WEST MIDLANDS
GREATER LONDON

Fig 2

and social conditions of the area, and the proportion of children under five years in conditions of whose homes are unsatisfactory" (Consultative Committee page 48 quoted in Blackstone 1971, 31). As Blackstone notes, this concept of local discretion has been of crucial importance.

> "It has dominated policy directives in the field of pre-school education from its initial introduction in 1908 to the 1950s and has been an important factor in the patchy development of nursery schools, in that it allows those in power at local levels wide powers of interpretation as to what the needs of the area involve" (Blackstone, 1971, 31).

The Consultative Committee stressed that in urban areas the majority of children aged between 3 and 5 years should be regarded as eligible but the number of nursery places provided indicates that his has neven been accepted. The 1944 Education Act led many to believe that an era of univeral nursery education was about to begin for this stated:

> "a local education authority shall in particular, have regard ... to the need for securing that provision is made for pupils who have not attained the age of five years by the provision of nursery schools or, where the authority consider the provision of such schools to be inexpedient, by the provision of nursery classes in other schools" (Section 8 (2) G).

However, essentially there was a return to the pre-war situation in which the expansion of nursery education was slow or halted completely by Ministry circulars.

Blackstone examined the resulting distribution of nursery education in the old local government system using data derived for 1965. The basic pattern was one of high provision in London and the urbanised areas of Yorkshire, Staffordshire and Lancashire with smaller amounts of provision in the rural counties.

Table 3 shows the rankings of provision a decade later in 1976. Despite the reform of the local government system there is considerable continuity in the patterns although inevitably some of the contrasts between the old county boroughs and counties has been averaged out in the new non metropolitan counties (as in the case of Leicestershire). The overall pattern is broadly similar to that for total provision with the London boroughs and metropolitan districts dominating the above average providers and the non-metropolitan

RANK			RANK		
1	Manchester	175	49	Cumbria	37
2	Salford	84	49	Gateshead	37
3	ILEA	79	51.5	Avon	34
4	Barnsley	78	51.5	Kirclees	34
5.5	Bolton	77	53	Leeds	33
5.5	Newham	77	55	Cheshire	32
7	Rotherham	75	55	Solihull	32
8	Walsall	74	55	Wirral	32
9	Liverpool	73	57	Lancashire	30
10	Newcastle	72	58.5	N. Yorkshire	29
11	Calderdale	70	58.5	St. Helens	29
12	Wolverhampton	68	61	Oxfordshire	28
13.5	Birmingham	65	61	Warwickshire	28
13.5	Doncaster	65	61	Wigan	28
15.5	Haringey	64	63.5	Harrow	26
15.5	Wakefield	64	63.5	Stockport	26
17.5	Kingston	63	65.5	Cambridgeshire	25
17.5	Merton	63	65.5	Enfield	25
19	Bradford	61	67.5	Bury	23
20	S. Tyneside	60	67.5	Northumberland	23
21	Sandwell	59	70.5	Buckinghamshire	22
22	Cleveland	58	70.5	Knowesley	22
23	Sheffield	56	70.5	Richmond	22
24.5	Hertfordshire	55	70.5	Surrey	22
24.5	Nottinghamshire	55	73	Redbridge	21
27	Leicestershire	54	75	Bexley	20
27	N. Tyneside	54	75	Cornwall	20
27	Staffordshire	54	75	Trafford	20
30	Durham	51	77.5	Northamptonshire	18
30	Oldham	51	77.5	Salop	18
30	Rochdale	51	79.5	Croydon	16
33	Barking	50	79.5	Suffolk	16
33	Dudley	50	81	Lincolnshire	14
33	Hillingdon	50	82	Devon	13
35	Hounslow	48	83	E. Sussex	12
36.5	Bedfordshire	46	84.5	Essex	10
36.5	Sefton	46	84.5	Isle of Wight	10
38	Sunderland	44	87	Dorset	9
39.5	Barnet	43	87	Norfolk	9
39.5	Derbyshire	43	87	Havering	9
42	Berkshire	42	89.5	Hampshire	8
42	Brent	42	89.5	Kent	8
42	Sutton	42	92	Hereford and Worc.	7
44	Tameside	41	92	Somerset	7
45	W. Forest	40	92	W. Sussex	7
46.5	Ealing	39	94	Bromley	4
46.5	Humberside	39	95	Wiltshire	1
49	Coventry	37	96	Gloucestershire	-

Table 3 Rankings of nursery school and nursery class provision in the English local authorities per 1000 population under five.

counties dominating the below average providers. However, in this instance the range of provision is much greater than for total provision, ranging from nothing in Gloucestershire to 175 in Manchester. Furthermore, the pattern of ranks and the distinction between metropolitan districts and non-metropolitan counties is less clear than in the case of total provision. Nevertheless, groups of local authorities with similar characteristics can be discerned. First, there are the metropolitan districts from the north and midlands which have the highest rates of provision. These include Manchester, Salford, Barnsley, Bolton, Rotherham, Walsall, Liverpool and Newcastle. This serves to emphasise a major factor affecting patterns of pre-school provision - the influence of historical factors and past decisions affecting current distributions.

The demand for pre-school care was inevitably greater in the northern textile towns with large proportions of women in the paid workforce. The emphasis placed upon social conditions by the Board of Education meant that the early progress in nursery education was made in these northern industrial cities. This early progress developed an ethos favouring provision while other authorities have sought to do little. Bradford, for example, was one of the first local authorities to stress the educational value of nursery schools maintaining that they should be a universal experience. The rate of provision of nursery schools and nursery classes in Manchester is worthy of particular note for it is over twice the extent of the second highest provider (which is neighbouring Salford). There is a long history of interest in nursery education in Manchester which may be traced back to the middle of the nineteenth century. Following the European uprisings of 1848, a relatively large colony of wealthy German immigrants settled in Manchester and they provided a fertile seedbed for the new kindergarten movement. This movement in turn influenced some of the more liberal minded of the upper middle class merchants in the city (and especially from the Jewish community) to sponsor nursery education schemes (Blackstone, 1971). Over the years the local authority has done much to sponsor nursery education and did much to foster nursery classes in the 1930s while other authorities dragged their feet.

A second set of authorities which may be clearly distinguished are the London boroughs encompassed within the Inner London Education Authority together with the outer boroughs of Haringey, Kingston, Merton, Barking, Hillingdon, Hounslow, Barnet, Brent, Waltham Forest and Ealing. These vary considerably in provision levels (from 79 in the case of LEA to 39 in the case of Ealing) but they can be distinguished from the remaining outer London boroughs -

Harrow, Enfield, Richmond, Bexley, Croydon, Havering and Bromley which have much lower levels of provision. Like Manchester, London has been a centre of innovation and development in the field of nursery education and has maintained this tradition to the present day. Most of this provision is concentrated in the poorer inner areas within the LEA and, with a few exceptions, in the lower status outer suburbs. Those outer London boroughs which provide relatively low levels of nursery schools and nursery classes are entirely composed of higher status authorities.

A third set of authorities which can be distinguished are the relatively high provision non-metropolitan authorities. These include (in rank order) Hertfordshire, Nottinghamshire, Leicestershire, Staffordshire, Bedfordshire, Derbyshire, Berkshire, Humberside, Cumbria, Avon, Cheshire, Lancashire, Oxfordshire, Warwickshire and Northumberland. The high provision in Hertfordshire was observed by Blackstone and followed up in a case study. Before the Second World War there was no nursery provision in Hertfordshire but to cope with evacuation forty two wartime nurseries were established. After the war these were either closed or taken over by the education department and used as nursery schools. Blackstone attributes this shift to the relative power of officials.

> "The powerful chief education officer at the time was convinced of the vlaue of nursery provision and believed that it belonged to the province of the education department rather than to that of the health department. He also presumably believed that his own department could organise the service more effectively than the existing health department. The medical officer of health was considerably less powerful in the hierarchy of chief officers and consequently his own department's bid to take over the war-time nurseries was quashed early on without a prolonged fight, although it did succeed in wresting three of them from the education department's grasp, which subsequently became health department day nurseries. The sharing out of war nurseries merely shows that the power wielded by the officials concerned can affect the nature and extent of provision in a demonstratable way" (Blackstone, 1971).

The following years saw little expansion of nursery education in the wake of central pressure to reduce expenditure. In this context officials in Hertfordshire appear to have shown considerable resourcefulness and ingenuity in discovering loopholes in legislation which have enabled them to replace

inadequate accommodation and maintain the existing stock of nursery schools and classes. Indeed, only one nursery school was closed in the period until 1965. The remaining high provision non-metropolitan counties are either in the north or have large urban centres within their boundaries where nursery education has been concentrated. Indeed, Leicester (in Leicestershire) Stoke on Trent (in Staffordshire), Oxford (in Oxfordshire), Reading (in Berkshire) and Bristol (in Avon) all emerge in the top ten of highest providers of nursery education when they were county boroughs primarily responsible for this service in the pre-1974 local government system (Blackstone, 1971). The reasons for the relatively high provision in this context are essentially the same as for the metropolitan districts. The patterns are simply obscured by the new local government boundaries. Thus relatively high provision in the cities and usually lower levels of provision in rural areas mean that these non-metropolitan authorities average out with intermediate levels of resource provision.

A fourth group of local authorities which may be distinguished within the rankings are the non-metropolitan counties with relatively low levels of nursery schools and classes. These are Surrey, Cornwall, Northamptonshire, Salop, Suffolk, Lincolnshire, Devon, East Sussex, Essex, Isle of Wight, Doreset, Hampshire, Kent, Hereford and Worcester, Somerset, West Sussex, Wiltshire and Gloucestershire. These may be easily typified as being predominantly in the south of the country, of relatively high socio-economic status and often with dispersed agricultural communities. They are clearly outside the older high density industrialised centres where nursery education has developed to the greatest extent.

A fifth group of authorities are the metropolitan districts with relatively low levels of nursery school and nursery class provision. Since there are no sudden breaks in the rankings finding the cut-off point which distinguishes this group is difficult and it should be appreciated that many provide considerably greater numbers of places than some of the low provision non-metropolitan counties. Nevertheless, these authorities include Trafford, Knowesley, Bury, Stockport, Wigan, St. Helens, Wirral, Solihull, Leeds and Kirclees which have somewhat lower levels of provision than the remaining metropolitan districts. These authorities are somewhat diverse in character. Trafford, Stockport and Solihull stand out as districts of above average socio-economic status with small proportions of women with young children working full time and below average proportions of single-parent families. The geographical pattern of provision is shown in Fig. 3.

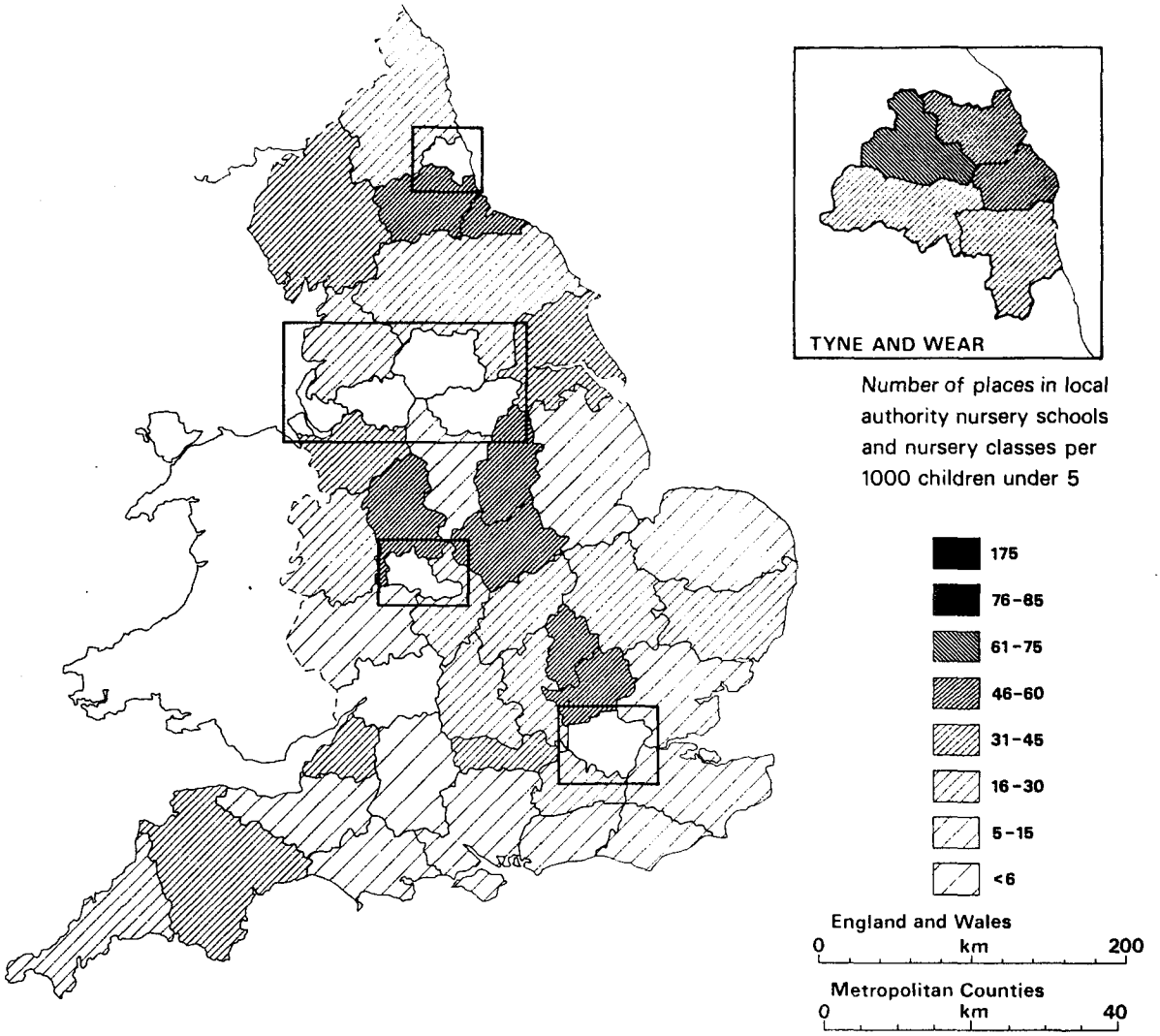

TYNE AND WEAR
Number of places in local authority nursery schools and nursery classes per 1000 children under 5
175
76-85
61-75
46-60
31-45
16-30
5-15
<6
England and Wales
0 km 200
Metropolitan Counties
0 km 40
1 MERSEYSIDE
2 GREATER MANCHESTER
3 WEST YORKSHIRE
4 SOUTH YORKSHIRE
WEST MIDLANDS
GREATER LONDON

Fig 3

RECEPTION CLASSES

The other major aspect of 'pre-school' care for the under-fives provided by local education departments are reception classes. These are in fact not primarily intended for children under-five but an increasing number of such children have been admitted to these classes in recent years. The extent to which this is the case varies enormously between areas depending upon the policy of the local education authority. Some authorities admit relatively few numbers of the under-fives while others concentrate upon admitting children in the term before their fifth birthday (the so called 'rising-fives'). Other authorities attempt to accommodate as large a number of four year olds as possible. Nationally some 57 per cent of four year olds in reception classes were rising fives and the remaining 43 per cent were younger four year olds (Hughes et. al. 1980). Data relating to reception class size should, however, be treated with caution for the number of places available is likely to fluctuate throughout the year. Much depends upon the availability of premises in schools and the number of children in local catchment areas.

Viewed superficially, the distribution of reception classes shown in Table 4 has much in common with the distribution of local authority nursery schools and nursery classes. The highest ranking authorities are predominantly the metropolitan districts while the non-metropolitan counties generally emerge with the smallest levels of provision. However, closer inspection reveals that the individual rankings of many authorities are very different to those for nursery schools and nursery classes. For example, Manchester, the ILEA. Birmingham, Walsall, Barnsley, Rotherham and Wolverhampton rank high in terms of nursery school and nursery class provision but have lower ranks for reception classes. Conversely, Solihull, Northumberland, Gateshead and St. Helens rank high in terms of reception classes but make lower levels of nursery school and nursery class provision. There is clearly a possibility of substitution between these services in certain instances. Nevertheless, despite these exceptions and numerous changes of rank, in overall terms, it would seem that local authorities which provide high levels of nursery schools and nursery classes also provide larger numbers of places in reception classes and the reverse applies in the authorities which make much smaller levels of provision.

DAY NURSERIES

Table 5 shows the rankings for the other major aspect of local authority pre-school provision - the number of places in day nurseries provided by social services departments. In this case data is available for each of the

RANK			RANK		
1	Solihull	159	49	Cleveland	89
2	Northumberland	148	50	Bradford	86
3	Doncaster	145	51.5	Manchester	84
4	Sunderland	144	51.5	Somerset	84
5	N. Tyneside	142	54.5	Hertfordshire	83
6.5	Salford	141	54.5	Norfolk	83
6.5	S. Tyneside	141	54.5	Rotherham	83
8	Bolton	140	54.5	Sheffield	83
9	Rochdale	139	57.5	Cheshire	81
10	Gateshead	138	57.5	E. Sussex	81
11	Calderdale	137	59	Derbyshire	77
12	Durham	135	60	Barnsley	75
13	St. Helens	134	61	Hereford and Worc.	72
15	Oldham	133	62.5	Humberside	71
15	Newcastle	133	62.5	Waltham Forest	71
15	Sandwell	133	64.5	Kirclees	70
18	Coventry	132	64.5	Wiltshire	70
18	Isle of Wight	132	66.5	Avon	69
18	Stockport	132	66.5	Gloucestershire	69
20.5	Liverpool	131	68	Harrow	68
20.5	Wigan	131	70	Knowesley	66
22.5	Bury	130	70	N. Yorkshire	66
22.5	Sefton	130	70	Wolverhampton	66
24	Hounslow	128	72	Staffordshire	65
25.5	Cumbria	126	73	Birmingham	63
25.5	Tameside	126	74	Devon	58
27	Hillingdon	119	75	Suffolk	56
28.5	Lincolnshire	118	76	ILEA	55
28.5	Walsall	118	77	Bromley	52
30.5	Brent	115	78	Bexley	48
30.5	Ealing	115	79	Essex	47
32	Lancashire	114	80.5	Nottinghamshire	45
33	Wirral	112	80.5	Redbridge	45
34	Haringey	111	82	Newham	43
35	Enfield	110	83	Salop	41
36	Barking	107	84.5	Kent	36
37.5	Barnet	106	84.5	Surrey	36
37.5	Merton	106	87	Bedfordshire	35
39.5	Havering	105	87	Dorset	35
39.5	Richmond	105	87	Dudley	35
41	Warwickshire	101	90	Buckinghamshire	30
42	Croydon	98	90	Hampshire	30
43	Cambridgeshire	97	90	W. Sussex	30
44	Wakefield	95	92	Berkshire	25
45	Kingston	91	93	Trafford	21
46.5	Cornwall	90	94	Leicestershire	19
46.5	Leeds	90	95	Oxfordshire	17
48	Northampton hire	89	96	Sutton	4

Table 4 Rankings of reception class places for the under-fives in the English local authorities per 1000 population under five.

inner London boroughs and they easily dominate the ranks of highest providers. The rest of the data once again confirm the distinction between the relatively high levels of provision in the metrapolitan districts and the lower levels of provision in the non-metropolitan counties. However, the rankings are by no means identical to the ranking of nursery school and nursery class provision. As Fig. 4 emphasises the distribution of day nursery places is highly skewed in comparison with local authority nursery schools and nursery classes. The London boroughs and metropolitan districts in Manchester, Liverpool and Birmingham have very high levels of places compared with much lower levels in the rest of the authorities. Nevertheless, the distinction between the metropolitan districts and the non-metropolitan counties appears to emerge with greater clarity in the case of local authority day nurseries. The non-metropolitan counties with the highest provision of day nurseries include Lancashire, Leicestershire and Nottinghamshire - all areas with urban centres and histories of female employment in textile factories. The other major exceptions to the general trend are of course the metropolitan districts with relatively low provision levels. These include Rotherham, Dudley, Doncaster, N. Tyneside, Bexley, Sutton, St. Helens, Solihull, Sandwell, Enfield, Wolverhampton, Walsall, Gateshead, Redbridge, Croydon, Bury and Wigan.

Blackstone argued, on the basis of her analysis, that nursery schools and nursery classes and day nurseries were not generally regarded as substitutable by local authorities. There would also seem to be little evidence of substitution effects in this context for although there are numerous changes of ranks, by and large the authorities which provide relatively high levels of nursery education also provide high levels of day nurseries. In contrast, there are a large number of non-metropolitan counties and a smaller number of metropolitan districts that provide small amounts of either service. However, the relationship is by no means a simple one. First, there are a number of metropolitan districts which rank low in terms of nursery education places but highly in terms of day nursery places. These include Trafford, Knowesley and Richmond. Conversely, there are a group of metropolitan districts including Rotherham, Dudley and Doncaster with high levels of nursery education but low levels of day nurseries.

PLAYGROUPS

A much more important form of substitution may be that between the private and public sectors, for as with other forms of local service, it may be that some local authorities provide few services themselves but rely upon voluntary and

1	Camden	95
2	Islington	62
3	Westminster	60
4	Kensington	54
5	Hammersmith	50
6	Brent	42
7	Southwark	41
8	Tower Hamlets	40
10	Hackney	37
10	Lambeth	37
10	Manchester	37
13.5	Knowesley	29
13.5	Liverpool	29
13.5	Tameside	29
13.5	Wandsworth	29
16	Trafford	26
17	S. Tyneside	20
20.5	Birmingham	19
20.5	Coventry	19
20.5	Haringey	19
20.5	Waltham Forest	19
22	Ealing	18
23	Lewisham	17
25	Lancashire	16
25	Rochdale	16
25	Salford	16
28	Barking	15
28	Merton	15
28	Richmond	15
33	Bradford	14
33	Hillingdon	14
33	Hounslow	14
33	Newcastle	14
33	Newham	14
33	Oldham	14
33	Sefton	14
38	Barnet	13
38	Bolton	13
38	Greenwhich	13
41	Calderdale	12
41	Kingston	12
41	Havering	12
43.5	Cleveland	10
43.5	Wirral	10
48.5	Avon	9
48.5	Harrow	9
48.5	Kirclees	9
48.5	Leeds	9
48.5	Leicestershire	9
48.5	Nottinghamshire	9
48.5	Stockport	9
48.5	Wigan	9
54.5	Bury	8
54.5	Croydon	8
54.5	Redbridge	8
54.5	Sunderland	8
60	Bedfordshire	7
60	Cheshire	7
60	Derbyshire	7
60	Gateshead	7
60	Sheffield	7
60	Walsall	7
60	Wolverhampton	7
65	Enfield	6
65	Hertfordshire	6
65	Sandwell	6
69	Cambridgeshire	5
69	E. Sussex	5
69	Solihull	5
69	St. Helens	5
69	Sutton	5
75.5	Bexley	4
75.5	Cumbria	4
75.5	Durham	4
75.5	Hampshire	4
75.5	N. Yorkshire	4
75.5	Staffordshire	4
75.5	Surrey	4
75.5	Wakefield	4
82.5	Bromley	3
82.5	Dorset	3
82.5	Essex	3
82.5	N. Tyneside	3
82.5	Oxfordshire	3
82.5	Somerset	3
89.5	Berkshire	2
89.5	Devon	2
89.5	Gloucestershire	2
89.5	Humberside	2
89.5	Lincolnshire	2
89.5	Northamptonshire	2
89.5	Northumberland	2
89.5	Suffolk	2
95	Buckinghamshire	1
95	Hereford and Worc.	1
95	Norfolk	1
102.5	Bromley	-
102.5	Cornwall	-
102.5	Doncaster	-
102.5	Dudley	-
102.5	Isle of Wight	-
102.5	Rotherham	-
102.5	Salop	-
102.5	Warwickshire	-
102.5	W. Sussex	-
102.5	Wiltshire	-
107	Kent	*

Table 5 Rankings of local authority day nursery places in the English local authorities per 1000 children under five.

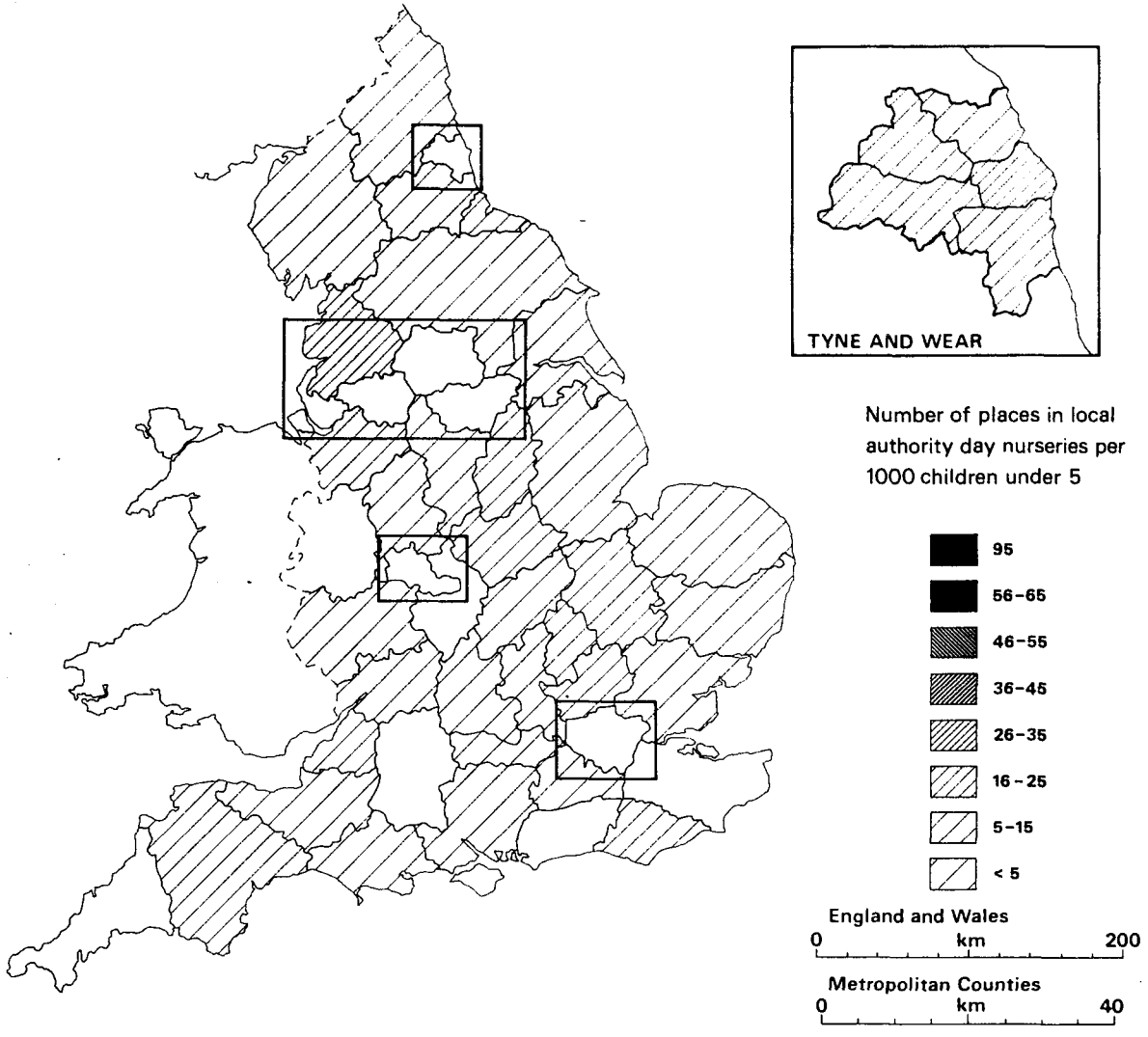

TYNE AND WEAR
Number of places in local authority day nurseries per 1000 children under 5
95
56-65
46-55
36-45
26-35
16-25
5-15
< 5
England and Wales
0 km 200
Metropolitan Counties
0 km 40
1 MERSEYSIDE
2 GREATER MANCHESTER
3 WEST YORKSHIRE
4 SOUTH YORKSHIRE
WEST MIDLANDS
GREATER LONDON

Fig 4

private forms of provision. Strong support for this expectation may be derived from the rankings of voluntary and private playgroups within the English local authorities (Table 6). The areas with high rates of playgroup provision are the suburban London boroughs such as Redbridge, Bexley, Richmond, Bromley, Harrow and Croydon together with the non-metropolitan counties such as Hampshire, Surrey, Buckinghamshire, Dorset and Cornwall. These are all relatively high status authorities which provide relatively small amounts of local authority nursery schools and nursery classes. Conversely, at the bottom of the rankings are the metropolitan districts with high levels of state provision but small playgroup provision such as Walsall, Manchester, Salford, Rotherham and Bolton. Knowsley emerges as an interesting anomaly for it has a low level of playgroup provision together with a low level of nursery class and nursery school provision, but ranks highly in terms of day nurseries. Of the non-metropolitan counties with relatively low levels of playgroup provision - Lancashire, Cleveland, Durham, Humberside, Cheshire, Nottinghamshire and Northumberland - the majority have relatively high levels of state provision. Finally, the remaining London boroughs are worthy of note for they fall into two distinct groups. The first group, including Camden, Islington, Merton, Greenwhich and Lewisham, have intermediate levels of playgroup provision and can be distinguished from a second group composed of Haringey, Hammersmith, Hackney, Westminster and Tower Hamlets. This difference in provison can be some extent be related to social class although this is by no means a complete explanation.

CHILDMINDERS

Table 7 shows the other major field of private sector provision by childminders. The extent of places available with childminders is likely to reflect a complex combination of factors. These include the extent of employment opportunities for women in an area, the extent of deprivation and the need for women to take up paid employment, the incidence of single-parent families, the extent to which women have traditionally taken up paid employment, the availability of alternative forms of pre-school care and finally, the extent to which local authorities are prepared to enforce registration. The influence of these factors is likely to vary in complex combinations in different areas and it is not therefore surprising to find that the ranking of official childminder provision are rather more complex than the other variables presented above.

The highest ranking authorities include a good many of the London boroughs and here it can be assumed that, despite an above average level of state provision in day nurseries, there is insufficient accommodation to meet the

1	Redbridge	247
2	Bromley	239
3	Richmond	214
4	Hampshire	186
5	Surrey	174
6	W. Sussex	172
7	Buckinghamshire	171
8	Bexley	170
9	Dorset	168
10	Cornwall	163
11	Gloucestershire	159
12	Devon	158
13.5	Harrow	157
13.5	Isle of Wight	157
15.5	Kensington	155
15.5	Somerset	155
17.5	Croydon	152
17.5	Oxfordshire	152
19	Essex	151
20	E. Sussex	150
21	Sutton	148
22	Havering	145
23.5	Waltham Forest	141
23.5	Hereford and Worc.	141
26	Avon	140
26	N. Yorkshire	140
26	Warwickshire	140
28.5	Kent	137
28.5	Northamptonshire	137
30.5	Cumbria	136
30.5	Norfolk	136
33	Barnet	135
33	Lincolnshire	135
33	Suffolk	135
36.5	Bedfordshire	133
36.5	Berkshire	133
36.5	Hillingdon	133
36.5	Salop	133
39.5	Enfield	130
39.5	Wiltshire	130
41	Hertfordshire	128
42.5	Camden	126
42.5	Leicestershire	126
44	Stockport	123
45	Islington	118
46	Cambridgeshire	117
48	Merton	107
48	Newcastle	107
48	Wandsworth	107
50.5	Leeds	106
50.5	Staffordshire	106
52	Calderdale	105
55	Derbyshire	104
55	Greenwhich	104
55	Lewisham	104
55	Sheffield	104
55	Southwark	104
58	St. Helens	103
60.5	Lambeth	102
60.5	Northumberland	102
60.5	Trafford	102
60.5	Wirral	102
63	Bury	101
66.5	Barking	100
66.5	Gateshead	100
66.5	Nottinghamshire	100
66.5	Solihull	100
68	Kingston	99
69	Coventry	98
70	Cheshire	97
71.5	Birmingham	95
71.5	Humberside	95
73	Brent	94
74	Durham	93
75	Kirclees	92
76	Cleveland	91
77	Ealing	89
78.5	Hounslow	88
78.5	Oldham	88
80	Sefton	87
81	Lancashire	85
82	Wolverhampton	83
83	Liverpool	81
84	Barnsley	80
85.5	Bolton	79
85.5	Sunderland	79
87.5	Dudley	74
87.5	Newham	74
89.5	N. Tyneside	73
89.5	T. Hamlets	73
91	Bradford	71
92.5	Rotherham	69
92.5	Wakefield	69
94.5	Hackney	68
94.5	Rochdale	68
96	Westminster	64
97.5	Salford	63
97.5	Wigan	63
99	Doncaster	60
100.5	Sandwell	59
100.5	Tameside	59
102	Manchester	57
103	Hammersmith	56
104	S. Tyneside	55
105	Haringey	51
106	Walsall	50
107	Knowesley	49

Table 6 Rankings of private and voluntary playgroup places in the English local authorities per 1000 population under five.

RANK		
1	Kingston	76
2	Brent	68
3	Richmond	65
4	Wandsworth	64
5	Trafford	61
6	Hackney	58
7	Lewisham	57
8	Ealing	56
9.5	Harrow	51
9.5	Salop	51
11.5	Hampshire	49
11.5	Lambeth	49
13	Kent	48
14.5	Cambridgeshire	47
14.5	Surrey	47
16	Hammersmith	46
17.5	Greenwhich	45
17.5	W. Sussex	45
20	Leicestershire	44
20	Northamptonshire	44
20	Southwark	44
22	Dorset	41
23	Bromley	40
25	Coventry	38
25	Merton	38
25	Staffordshire	38
28	Bexley	37
28	Kensington	37
28	Somerset	37
30	Buckinghamshire	36
32	Croydon	35
32	Islington	35
32	Tower Hamlets	36
34	Sutton	34
37	Bedfordshire	33
37	Gloucestershire	33
37	Haringey	33
37	Leeds	33
37	Warwickshire	33
40.5	Enfield	32
40.5	Essex	32
42	Hounslow	31
44	Hertfordshire	30
44	Oldham	30
44	Oxfordshire	30
47	Solihull	29
47	Suffolk	29
47	Westminster	29
49.5	Berkshire	28
49.5	Bradford	28
51.5	Camden	27
51.5	Redbridge	27
53.5	Lancashire	26
53.5	Norfolk	26

RANK		
56	Birmingham	25
56	Rochdale	25
56	Wirral	25
58	Barking	24
59.5	Stockport	23
59.5	Waltham Forest	23
61.5	Sefton	22
61.5	Wiltshire	22
64	Cheshire	21
64	Hereford and Worc.	21
64	Kirclees	21
66	Bury	20
67	East Sussex	19
71	Avon	18
71	Barnet	18
71	Havering	18
71	Lincolnshire	18
71	Newcastle	18
71	Walsall	18
71	Wigan	18
76	Bolton	17
76	N. Yorkshire	17
76	St. Helens	17
80	Calderdale	15
80	Doncaster	15
80	Derbyshire	15
80	Salford	15
80	Tameside	15
84	Hillingdon	14
84	Isle of Wight	14
84	Sandwell	14
86	Levon	13
88.5	Dudley	12
88.5	Humberside	12
88.5	Manchester	12
88.5	Northumberland	12
91.5	Barnsley	11
91.5	Sheffield	11
93	Nottinghamshire	10
95	Cornwall	9
95	Liverpool	9
95	Wolverhampton	9
97.5	Gateshead	8
97.5	S. Tyneside	8
99	N. Tyneside	7
100.5	Durham	6
100.5	Wakefield	6
103.5	Cleveland	5
103.5	Cumbria	5
103.5	Rotherham	5
103.5	Sunderland	5
106	Newham	?
107	Knowesley	*

Table 7 Rankings of number of places provided by registered childminders in the English local authorities per 1000 population under five.

demand for working mothers. A second group of authorities with a relatively high incidence of official childminders are the high status southern counties including Hampshire, Surrey, W. Sussex and Kent. These authorities have low levels of state provision but growing economies which have provided considerable job opportunities for women. The authorities with intermediate levels of childminders are a complex mixture of authorities of all types. However, once again there are authorities with distinctive characteristics in the lowest ranks. These are predominantly northern metropolitan districts which make relatively high levels of provision through local authority sources. Devon and Cornwall have low levels of registered childminders and here it may be assumed that there are few job opportunities for women than in the major industrial areas.

Finally Table 8 shows the rankings of places available in private day nurseries. As in the case of the local authority day nurseries,the distribution is skewed with a few relatively high status inner London boroughs dominating the ranks of highest provision. However, unlike the local authority day nurseries, the distinction between metropolitan districts and non-metropolitan counties fails to emerge. Those authorities with little or no private nursery provision tend to be low status metropolitan districts together with counties such as Cornwall, Somerset and Devon. The distribution of private nurseries is also likely to reflect a complex combination of factors including the ability of parents to pay for care, the availability of employment for women and the extent to which private institutions have evolved in the area compared with other forms of pre-school care.

Table 9 is an attempt to summarise the inter-relationships between these various types of pre-school service in the form of a correlation matrix. All the types of local authority provision are positively correlated but the coefficient is strongest in the case of nursery schools and classes and day nurseries. Thus by and large local authorities which provide relatively high levels of nursery schools and classes through their education departments also provide relatively large amounts of day nurseries through their social services departments. Reception classes have smaller correlations with the other forms of local authority provision. In contrast, voluntary and private playgroup provision is negatively correlated with all types of local authority provision. Private and voluntary day nurseries have a small positive relationship with local authority day nurseries but childminders are negatively correlated with the provision of local nursery classes and nursery schools.

RANK			RANK		
1	Westminster	55	53	Hereford and Worc.	6
2	Camden	45	53	Warwickshire	6
3	Sutton	36	59.5	Bradford	5
4	Kensington	35	59.5	Buckinghamshire	5
5	Hounslow	33	59.5	Cumbria	5
6.5	Brent	25	59.5	Newham	5
6.5	S. Tyneside	25	59.5	Norfolk	5
8	Wandsworth	24	59.5	N. Tyneside	5
9	Liverpool	22	66.5	Coventry	4
10	N. Yorkshire	21	66.5	Ealing	4
11.5	Cleveland	20	66.5	Greenwhich	4
11.5	Northamptonshire	20	66.5	Leicestershire	4
14	E. Sussex	19	66.5	Salop	4
14	Islington	19	66.5	Suffolk	4
14	Leeds	19	66.5	Waltham Forest	4
17	Hackney	18	66.5	Wirral	4
17	Kent	18	75.5	Cheshire	3
17	Redbridge	18	75.5	Devon	3
19.5	Bedfordshire	17	75.5	Doncaster	3
19.5	Lambeth	17	75.5	Havering	3
21.5	Merton	16	75.5	Hillingdon	3
21.5	Richmond	16	75.5	Lancashire	3
23	Kingston	15	75.5	Lewisham	3
24.5	Bexley	14	75.5	Lincolnshire	3
24.5	W. Sussex	14	75.5	Northumberland	3
28	Birmingham	13	75.5	Tameside	3
28	Dorset	13	85.5	Barnet	2
28	Newcastle	13	85.5	Bolton	2
28	Sefton	13	85.5	Calderdale	2
28	T. Hamlets	13	85.5	Croydon	2
31	Hertfordshire	12	85.5	Enfield	2
32.5	Nottinghamshire	11	85.5	Kirclees	2
32.5	Rochdale	11	85.5	Sandwell	2
36	Bromley	10	85.5	Somerset	2
36	Gloucestershire	10	85.5	Staffordshire	2
36	Haringy	10	85.5	Sunderland	2
36	Oxfordshire	10	91.5	Cornwall	1
36	Trafford	10	91.5	Gateshead	1
39.5	Humberside	9	100	Barking	-
39.5	Manchester	9	100	Barnsley	-
42	Avon	8	100	Bury	-
42	Cambridgeshire	8	100	Durham	-
42	Oldham	8	100	Isle of Wight	-
46.5	Hampshire	7	100	Knowesley	-
46.5	Salford	7	100	Rotherham	-
46.5	Stockport	7	100	Sheffield	-
46.5	Surrey	7	100	Solihull	-
46.5	Walsall	7	100	Southwark	-
46.5	Wiltshire	7	100	St. Helens	-
53	Berkshire	6	100	Wakefield	-
53	Dudley	6	100	Wigan	-
53	Essex	6	100	Wolverhampton	-
53	Hammersmith	6	100	Derbyshire	-
53	Harrow	6			

Table 8 Rankings of private nursery places in the English local authorities per 1000 population under five.

	1 Nursery Schools and Classes	2 Reception Classes	3 Day Nurseries	4 Total Local Authority	5 Play Groups	6 Child Minders	7 Day Nurseries	8 Total (Excluding Reception Classes)	9 Total (Including Reception Classes)
PROVIDED BY LOCAL AUTHORITY									
1. Nursery Schools and Classes	1								
2. Reception Classes	.29	1							
3. Day Nurseries	.46	.27	1						
4. Total Local Authority	.97	.32	.66	1					
PRIVATE AND VOLUNTARY SECTORS									
5. Play Groups	- .64	- .51	- .40	- .66	1				
6. Childminders	- .32	- .35	.08	- .24	.41	1			
7. Day Nurseries	.02	- .23	.22	.08	.17	.33	1		
8. Total (Excluding Reception Classes)	- .03	- .43	.16	.01	.67	.65	- .04	1	
9. Total (Including Reception Classes)	.23	.48	.40	.30	.20	32	.08	.59	1

Table 9. Inter-Relationship between Types of Pre-School Provision in the English Local Authorities

The overall pattern is thus fairly clear cut. Where there are relatively large levels of local authority provision, and in particular nursery schools and nursery classes, there are relatively low levels of private and voluntary services. Conversely, where local authority provision is deficient play-groups and to a lesser extent childminders can be expected in large numbers.

NEED AND PROVISION

This section examines the extent to which these considerable variations in levels of pre-school services in the English local authorities may be related to the likely needs of the areas for these services. In recent years researchers have stressed the ways in which all children can benefit from some form of pre-school care outside their own home, and this would suggest that pre-school places be provided simply on the basis of the numbers of the under-fives in each area. However, there is evidence to suggest that children from certain backgrounds are most able to benefit from pre-school services or have a greater need for care.

A crucial factor determining the need for care and the type of service required is whether or not the mother of an under five works full-time. In these circumstances day nurseries and or childminders are the only viable solution which provides care for a sufficient number of hours. Nursery schools, nursery classes and playgroups are usually only available in 2½ hour sessions which cannot be fitted into a full time working schedule without a group of friends or relatives willing to help.

The first variable selected as an indication of need for nursery provision was thus the number of married women working full-time (i.e. more than 30 hours per week) with at least one child under five, per 1000 married women with children under five. These data should be treated with caution because they are derived from the 10 per cent sample census. Where numbers are small in certain areas sampling error is likely to be large and the data will be unreliable, but this should not be a problem with the large local authority areas considered here. A more important problem may be the tendency for working mothers to understate their working hours or simply refuse to give information in the belief that they can avoid enquiries concerning taxation. The extent to which this is likely to vary between areas is difficult to assess but may increase in low social status areas. The data in Figure 5 show the distribution of this variable throughout the English local authorities. By far the largest proportions of working mothers occur in the London boroughs. The metropolitan districts tend to have higher rates than the counties but the pattern is by no means uniform.

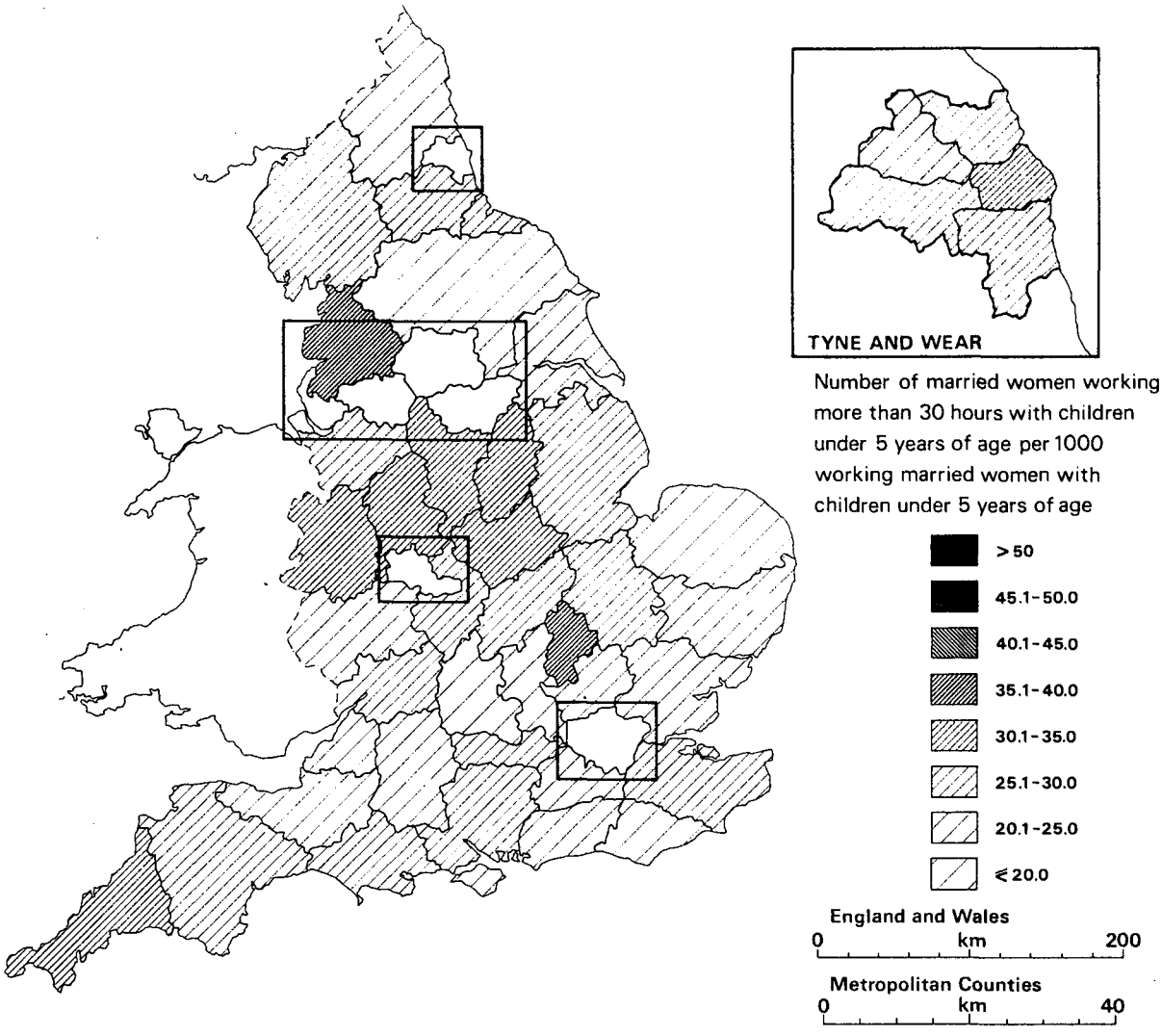

TYNE AND WEAR
Number of married women working more than 30 hours with children under 5 years of age per 1000 working married women with children under 5 years of age
> 50
45.1-50.0
40.1-45.0
35.1-40.0
30.1-35.0
25.1-30.0
20.1-25.0
⩽ 20.0
England and Wales
0 km 200
Metropolitan Counties
0 km 40
1 MERSEYSIDE
2 GREATER MANCHESTER
3 WEST YORKSHIRE
4 SOUTH YORKSHIRE
WEST MIDLANDS
GREATER LONDON

Fig 5

Another limitation of the data relating to working mothers is that they exclude the single, widowed, or divorced. This deficiency can partly be overcome with a second variable - the number of single-parent families with children, per 1000 of all families with children. Single-parent families are much more likely to have a low income, and a parent working full-time and a correspondingly greater need for pre-school care. This variable is shown in Figure 6. Once again the London boroughs have proportions that are much higher than the rest of the country.

In those situations in which mothers do not work, or only on a part-time basis, then nursery schools, nursery classes and playgroups are a much more acceptable form of provision. In these circumstances it is the child from a poorer low status family background who frequently has most to gain from the stimulation which good quality pre-school care can provide, but who sadly is often more likely to miss such an experience. The final need indicator was thus the proportion of unskilled workers in each local authority as a measure of socio-economic status.

The relationships between these three 'need' indicators and the indices of pre-school provision are shown in Table 10. The proportion of working mothers with children under five is positively related with all forms of local authority provision but especially with the local day nurseries. As might be expected, the correlations with the nursery schools and classes and reception classes are small since these are largely unsuitable for mothers working full-time. Somewhat surprising, however, are the small correlations which the number of places provided by childminders and private day nurseries. This might result from the widespread use of unregistered childminders and the inability of working mothers to afford care in private nurseries. Private and voluntary playgroups are negatively correlated with the proportion of full-time working mothers while total provision has a near zero correlation.

A broadly similar pattern of correlations is revealed by the proportion of one-parent families with children but in this case the associations with local authority provision are (with the exception of reception classes) much stronger. The young children of single-parent families are more likely to be given priority status in local day nurseries and this form of provision has a high positive correlation (0.85) with the incidence of single parent families. Nursery schools and classes also have a relatively high correlation with single parent families but this is likely to result from the tendency for authorities to provide large amounts of both day nurseries and nursery schools and classes, rather than the relevance of the latter for single parent families. In most areas there is enormous demand for places in local authority day nurseries and it is of note that private day nurseries are also positively correlated with the incidence of single parent families. Private playgroups are once again negatively correlated with the need variable while childminders have only a small positive association.

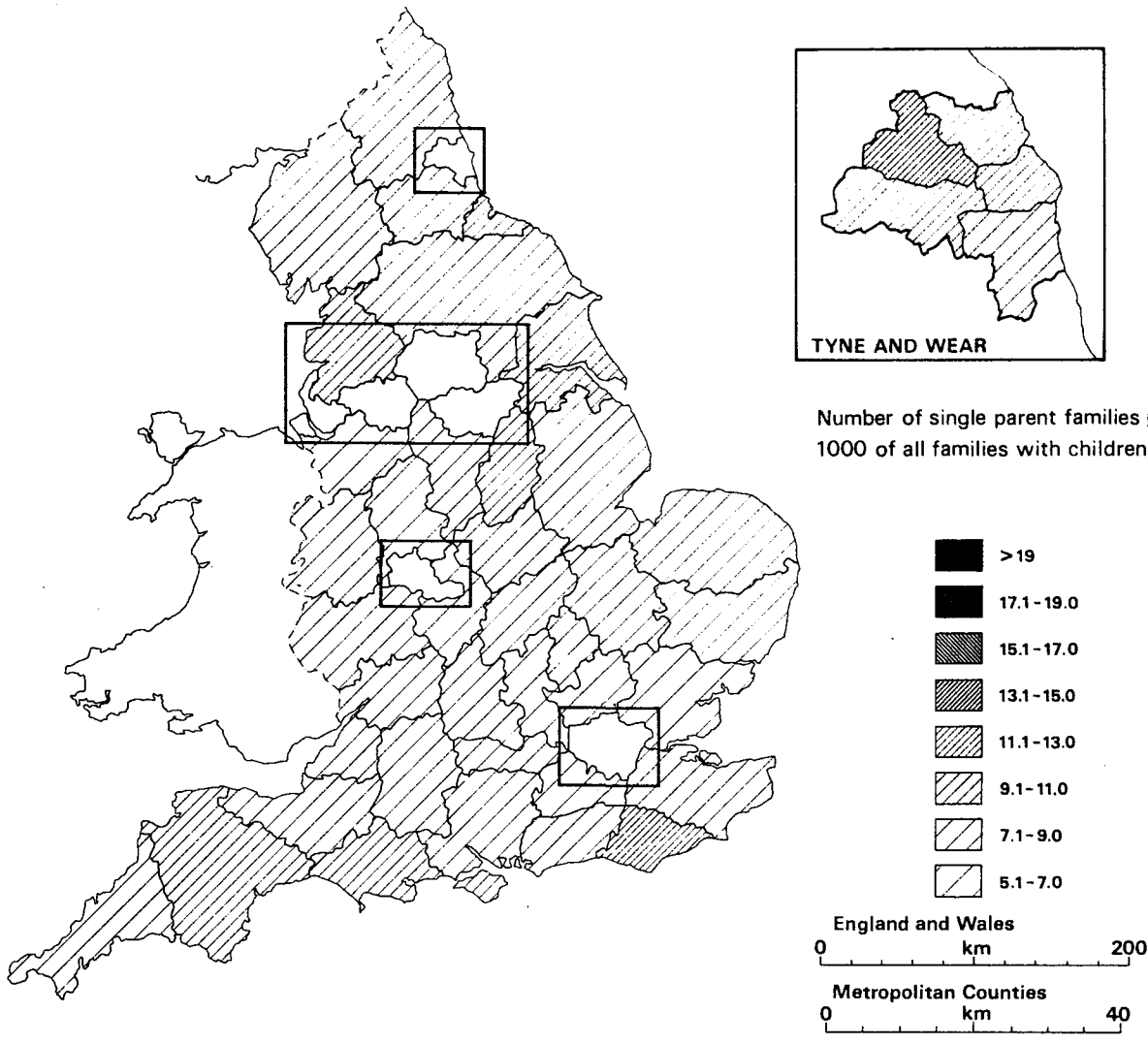

TYNE AND WEAR
Number of single parent families per 1000 of all families with children
>19
17.1-19.0
15.1-17.0
13.1-15.0
11.1-13.0
9.1-11.0
7.1-9.0
5.1-7.0
England and Wales
0 km 200
Metropolitan Counties
0 km 40
1 MERSEYSIDE
2 GREATER MANCHESTER
3 WEST YORKSHIRE
4 SOUTH YORKSHIRE
WEST MIDLANDS
GREATER LONDON

Fig 6

	% Married Women with Children under 5 Working more than 30 hours	% Single Parent Families with Children	% Unskilled Workers
PROVIDED BY LOCAL AUTHORITY			
1. Nursery Schools and Classes	.26	.51	.44
2. Reception Classes	.37	.28	.28
3. Day Nurseries	.59	.85	.26
4. Total Local Authority	.37	.63	.45
PRIVATE AND VOLUNTARY SECTORS			
5. Playgroups	- .32	- .28	- .61
6. Childminders	.27	.21	- .39
7. Day Nurseries	.24	.50	.13
8. Total (Excluding Reception Classes)	.06	.17	- .56
9. Total (Including Reception Classes)	.29	.41	- .22

Table10: Correlations between indices of need and pre-school provision in the English local authorities

The scatter diagrams revealed that London has an important influence upon the results. Here large proportions of single parent families are associated with large rates of nursery provision but limited numbers of playgroups and childminders.

The correlations between pre-school provision and socio-economic status are amongst the most interesting because both the "underclass" hypothesis (Lineberry; 1977) and the so called "inverse-care law" (Hart, 197) would suggest that poorer groups in society are least likely to receive services. The evidence derived from a wide range of services is rather inconsistent and contradictory but in the pre-school field the aggregate correlations derived for local authorities would support the assertion that lower status families are relatively disadvantaged. The association of nursery schools and classes with low status areas arises of course because of their historical evolution in the major conurbations as described above. What is surprising in this context therefore is that the association is not stronger. The extent of a linear relationship is diminished by a number of authorities that provide relatively small numbers of places in nursery schools and classes in relation to their socio-economic structure (Humberside, Knowesley, St. Helens and Gateshead) and a number of authorities that provide relatively high numbers in relation to their need (Merton, Hertfordshire, Barnet, Kingston and Sutton). Day nursery provision has an extremely small positive correlation with the percentage of unskilled workers. Inner London boroughs,including Tower Hamlets, Southwark and Newham,have less day nursery provision than might be expected given their socio-economic structures but in general there is wide variation in the extent of day nursery provision which has little connection with social class. Indeed, when the London boroughs are removed, any relationship with socio-economic status disappears almost completely. Playgroup provision is negatively correlated with socio-economic status, these being relatively small amounts of playgroup provision in the major conurbations and a similar pattern applies in the case of childminders. This might reflect a greater use of unregistered childminders or friends and relatives in low status areas. Private day nurseries have only a weak association with unskilled workers while total provision (excluding reception classes) has a strong negative association.

These results should be interpreted carefully because they refer to relative rather than absolute variations in levels of pre-school provision. Some areas have large amounts of provision compared with others but still have an overall shortfall. There is evidence from these results that in areas where there are large proportions of working mothers and single-parent families local authority forms of care and in particular local day nurseries have developed on a scale larger than elsewhere (even if there is still insufficient supply to meet demand). Nevertheless, the overwhelming impression left by these results is one of generally weak correlations between provision and needs indices. This is

especially true in the case of private and voluntary forms of provision upon which many mothers are dependant. To a large degree then these results from an aggregate level confirm those derived from individual studies. The crucial point is that many of the decision making processes responsible for these patterns are made at the local authority level and these provide an appropriate and useful starting point through which explanation of these patterns may be sought. Furthermore the problem is not simply one of an overall shortfall in pre-school provision but also one of enormous inequalities in provision levels between different areas.

INTRA AUTHORITY PATTERNS OF PRE-SCHOOL PROVISION

Problems of data collection mean that, as with many other types of service, our knowledge of relationships being need and provision in the pre-school field is least at the intra-authority level. The section attempts to remedy this shortcoming by examining geographical variations in pre-school services in the city of Southampton.

Southampton is a district within the county of Hampshire - a local authority whose pre-school policies are similar to other Conservative controlled southern non-metropolitan counties. In relation to other non-metropolitan counties Hampshire ranks high in terms of total pre-school provision. However, the county is amongst the lowest ranks in terms of both local authority nursery schools and nursery classes and day nurseries. The vast bulk of the places are to be found in playgroups amongst which Hampshire ranks high,as might be expected given the limited state provision. It also ranks high in the ranks of registered child-minders but has an intermediate position in terms of private nursery places.

In many respects Hampshire therefore represents an extreme case of an authority which is essentially concerned to promote pre-school provision through the private and voluntary means with minimum levels of intervention from the public sector. This is reflected in a recent policy document on service provision for the under fives (Hampshire County Council, 1978). The report contains numerous comments which recognise in general terms the dimensions of the problem.

> "Most of the ... services reach only a small proportion of ... children, typically those from the higher socio-economic families .... To a certain extent the geographic distribution of resources is uneven ... The families that do not make use of the services are often found to be the same families that experience problems of low income, poor housing conditions and chronic child illness or handicap" (Hampshire County Council, 1978).

However, it is quite clear that the major theme running through the report is the need to minimise expenditure. The report contains many interesting and useful

suggestions related to increased coordination between fieldworkers and the need for greater parental education and involvement in pre-school services. Nevertheless, there is a careful avoidance of any policies which would raise expenditure or any explicit consideration of whether the types of measures outlined above are adequate to meet the scale of the problems.

The priority objective of the report is stated as:

> "To help those parents with children under five years of age to fulfil and enjoy their parental role to the maximum" (Hampshire County Council, 1978, 2).

The prime emphasis of services is seen as developing the involvement of parents with their children in the "family setting". The major implication of this stance is that little or nothing will be done to encourage mothers with children under five to return to work. Emphasis is placed upon the encouragement of private and voluntary forms of provision through playgroups and mother and toddler groups. In those cases in which the mother wishes to return to work the document endorses the policy of central government which is to promote 'low cost' care through childminders rather than in day nurseries. The role of the latter is seen very much as a residual one in those cases in which 'parental care is no longer available, or is judged to be highly prejudicial to the child's safety and development'.

A second objective of the report is:

> "To help every child to realise to the full his or ther development potential".

Again however, there is no explicit consideration of the value of the favoured voluntary services in meeting this role in comparison with alternative forms of provision. The report acknowledges that "In Hampshire the County Council has not in recent years allocated resources to allow any significant expansion of nursery education". It is also acknowledged that in view of the central policy that nursery education be expaned for 3 and 4 year olds that ... "it will be necessary in the years ahead - when hopefully financial constraints are a little easier than they are at present - to extend nursery education to meet government policy guidelines". However, this requirement is expressed in rather negative terms and no great enthusiasm or commitment to the policy is expressed.

Table 11 shows the distribution of pre-school services within the major urban centres of Hampshire. Southampton provides rather more day nursery and nursery schools than other areas (although its level of provision is far behind Portsmouth) but provides lower levels of childminders and playgroups. Southampton and Portsmouth also have the largest concentrations of poor social conditions in the county and are under-represented in terms of the higher income groups. The inequalities in pre-school provision at the inter-authority level would therefore seem to be replicated at the intra-authority scale with playgroups and other forms of voluntary provision positively related with higher socio-economic status.

Table11: Variations in Pre-School Provision within Hampshire

LOCATION		PLACES IN DAY NURSERIES		PLACES IN NURSERY SCHOOL		PLAYGROUPS		CHILDMINDERS	
	POPULATION* (1000s)	TOTAL	RATE PER 1000 POP	TOTAL	RATE PER 1000 POP	TOTAL	RATE PER 1000 POP	TOTAL	RATE PER 1000 POP
SOUTHAMPTON	221.7	90	0.40	367	1.73	1827	8.24	444	2.00
PORTSMOUTH	191.2	215	1.12	566	2.91	1524	7.97	644	3.37
BASINGSTOKE	127	30	0.24	58	0.38	2384	18.77	655	5.15
ANDOVER	93.6	-	-	52	0.28	1529	16.33	387	4.13
WINCHESTER	91.4	-	-	37	0.13	1512	16.54	175	1.91

(*Source Hampshire County Council)

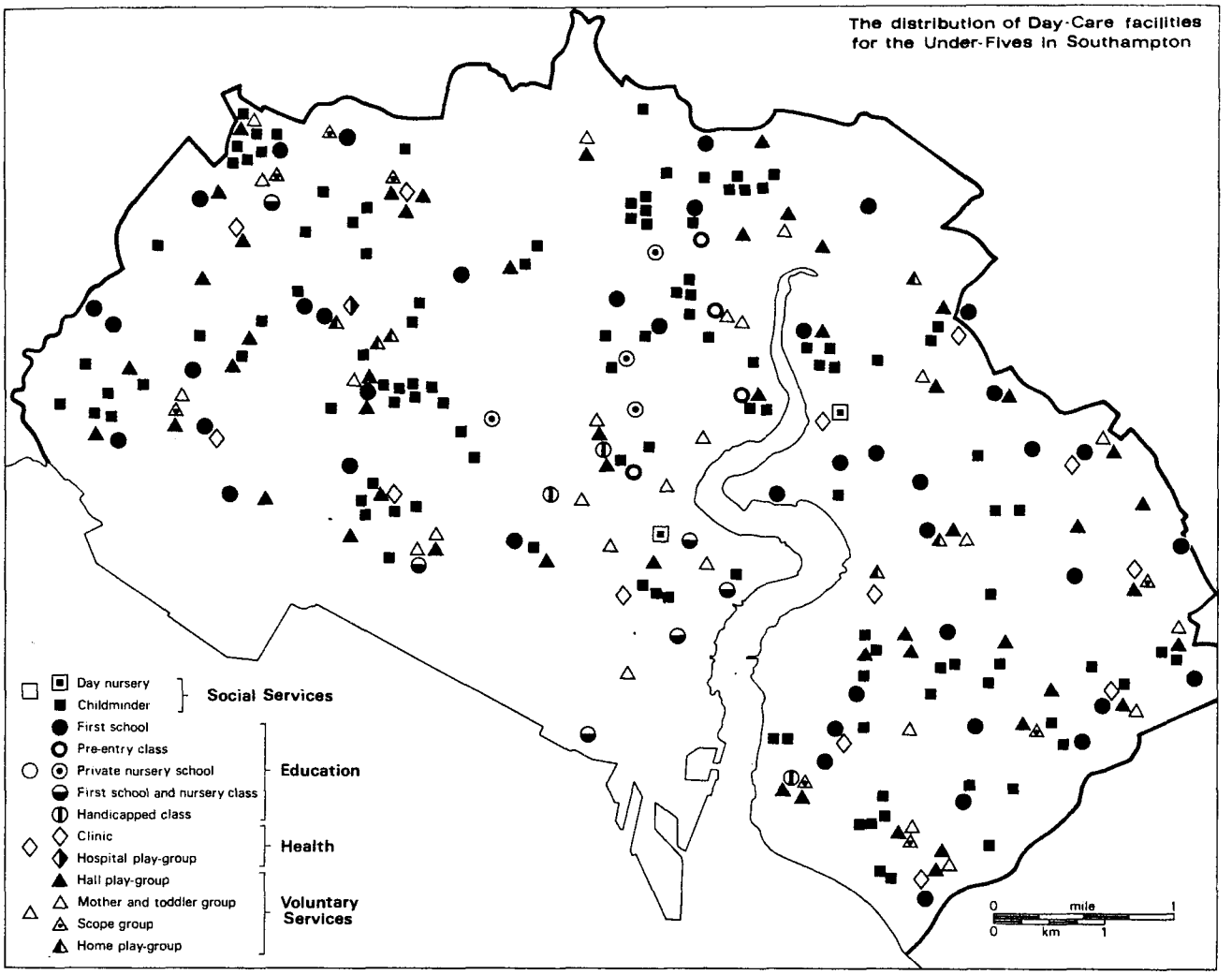
PATTERNS OF PROVISION WITHIN SOUTHAMPTON

Figure 7 shows the geographical distribution of pre-school facilities within the district of Southampton. The key to this map serves to emphasise the enormous diversity of services, and to appreciate the differences in location of facilities it is necessary to consider the various types separately.

Figure 8 shows the distribution of officially registered childminders within the city. This must be regarded as only a 'snapshot' of the distribution at one particular point in time, since the number and location of registered minders fluctuates considerably in a short period. This reflects the desire of many minders to undertake the job for a short period (possibly while their own children are young) but also many short-term variations in the demand for minders in different areas. Nevertheless, the overall pattern at any period is likely to replicate the most notable feature of Figure 8 - the high degree of clustering. It is known that many minders are prompted into this type of work by demand from someone in the immediate vicinity (Bruner, 1980) and there would clearly seem to be some kind of 'neighbourhood effect' in operation here. It may also be that knowledge of the requirement to register with the local authority is unevenly distributed. The largest numbers of minders are to be found on the peripheral local authority estates. Anecdotal evidence suggests that these are the areas with large numbers of single-parent families and thus a high local demand for care, but they are also areas where there are women (many with young children) who find that minding is one of the few ways they can supplement their income. However, not all the children, and in many cases not the majority, come of the immediate locality of council estates. Interviews with local authority organisers and minders suggests that many minders cater for the children of working professional parents. Some of these live outside the Southampton district and travel some distance each day to receive day care. In this instance it is also interesting to note that many of these local authority housing areas are in peripheral locations close to higher status estates. The spread of minders around the University is generally accepted as related to the large proportion of working women with small children employed on the campus. Conversely, near the city centre there is a distinct absence of registered childminders. This is also the area which has the largest concentration of immigrant groups, young children and a tradition of mothers taking up paid employment. There is a concentration of state-funded day nurseries and nursery classes in this area (Figure 9) but it is probable that the use of unregistered childminders is also greatest in this district. It is also possible that there is a greater degree of care by local relatives.

Finally, Figure 10 shows that the distribution of voluntary playgroups is clustered, but generally well distributed throughout the city. This reflects to a large degree the vigour and enthusiasm of the Pre-Schools Playgroups

Fig 7


The distribution of Day-Care facilities for the Under-Fives in Southampton
Day nursery
Childminder
Social Services
First school
Pre-entry class
Private nursery school
First school and nursery class
Handicapped class
Education
Clinic
Hospital play-group
Health
Hall play-group
Mother and toddler group
Scope group
Home play-group
Voluntary Services
0 mile 1
0 km 1

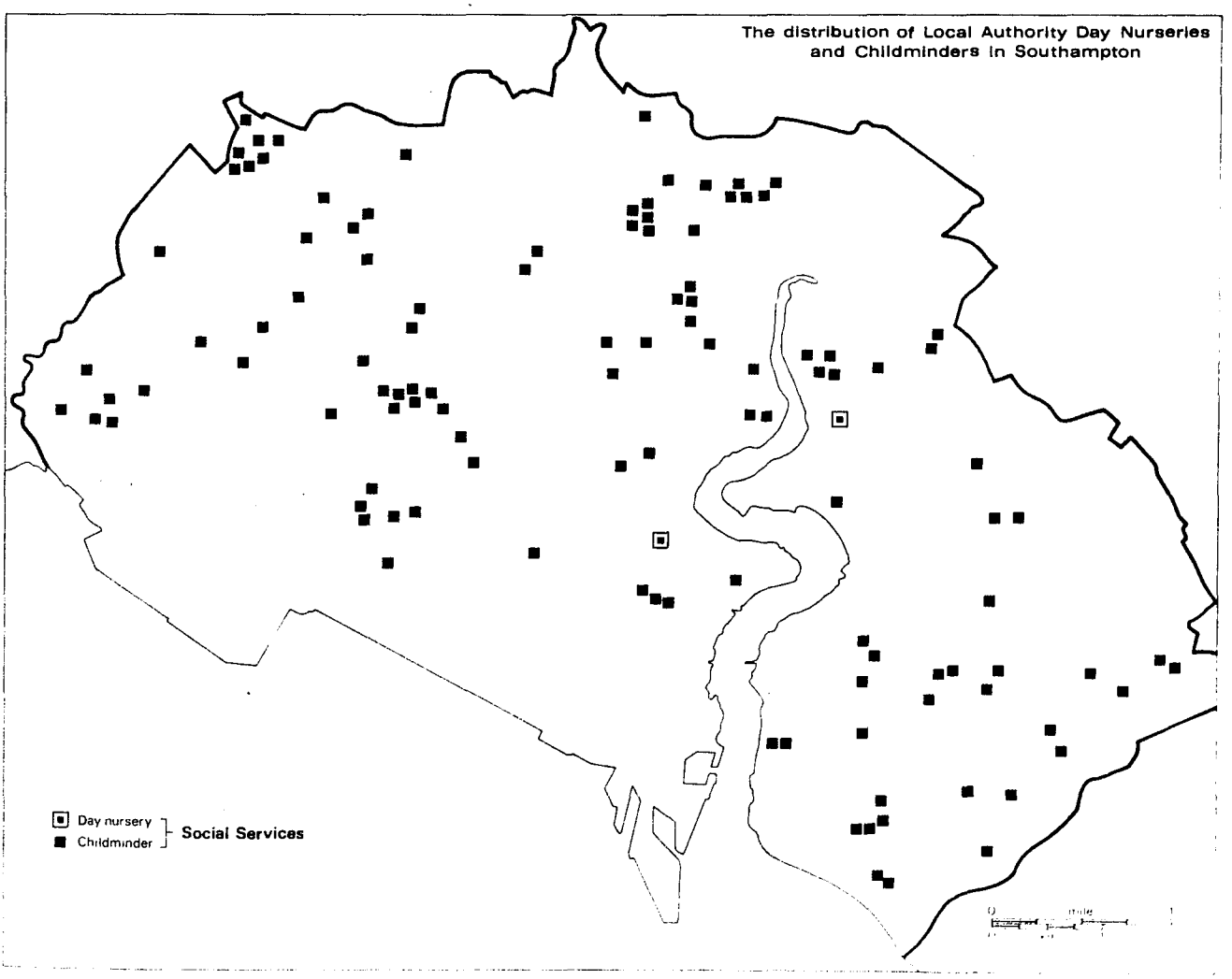
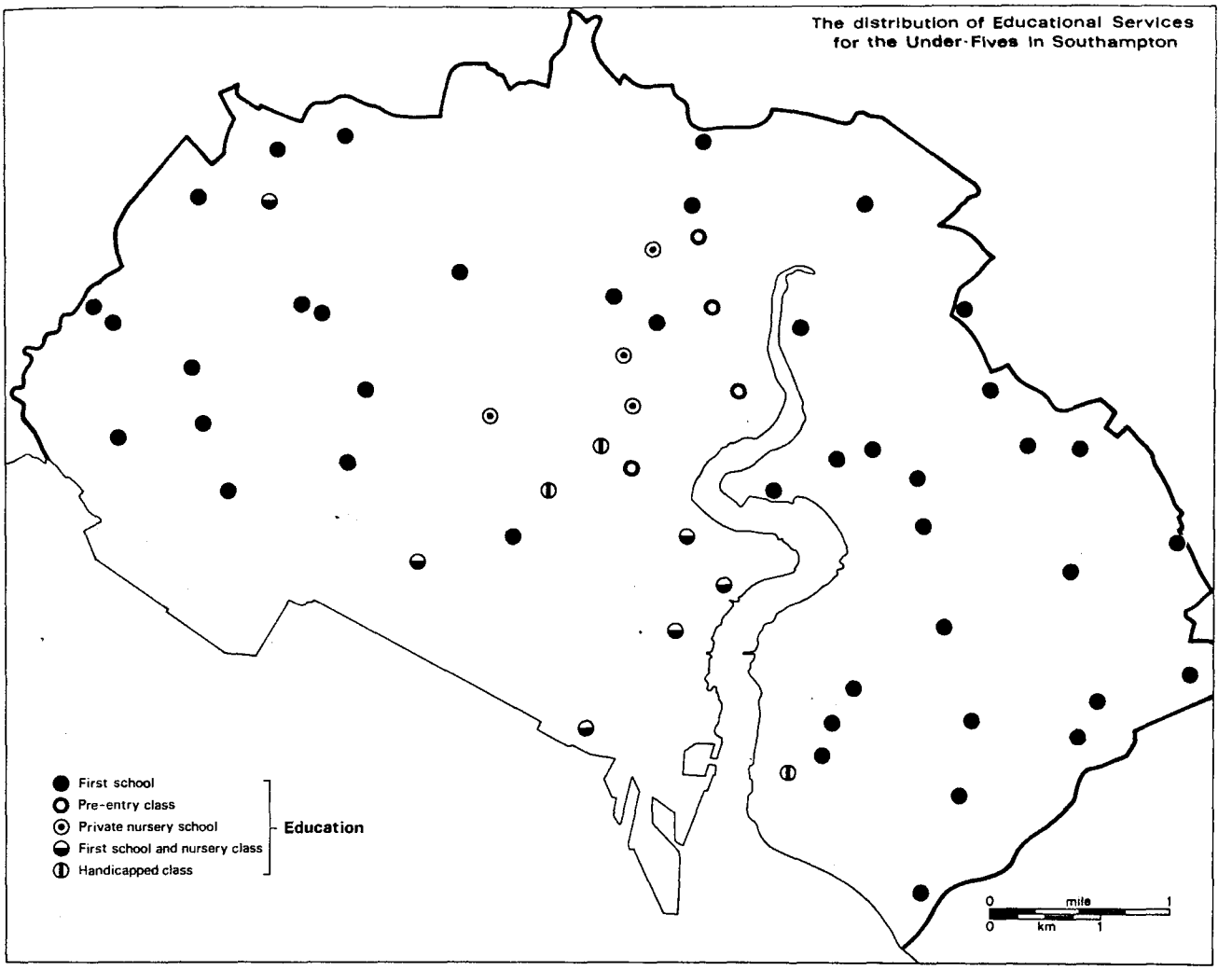

The distribution of Local Authority Day Nurseries and Childminders in Southampton
Day nursery
Childminder
Social Services

Fig 8

Fig 9


The distribution of Educational Services for the Under-Fives in Southampton
First school
Pre-entry class
Private nursery school
First school and nursery class
Handicapped class
Education
0 mile 1
0 km 1

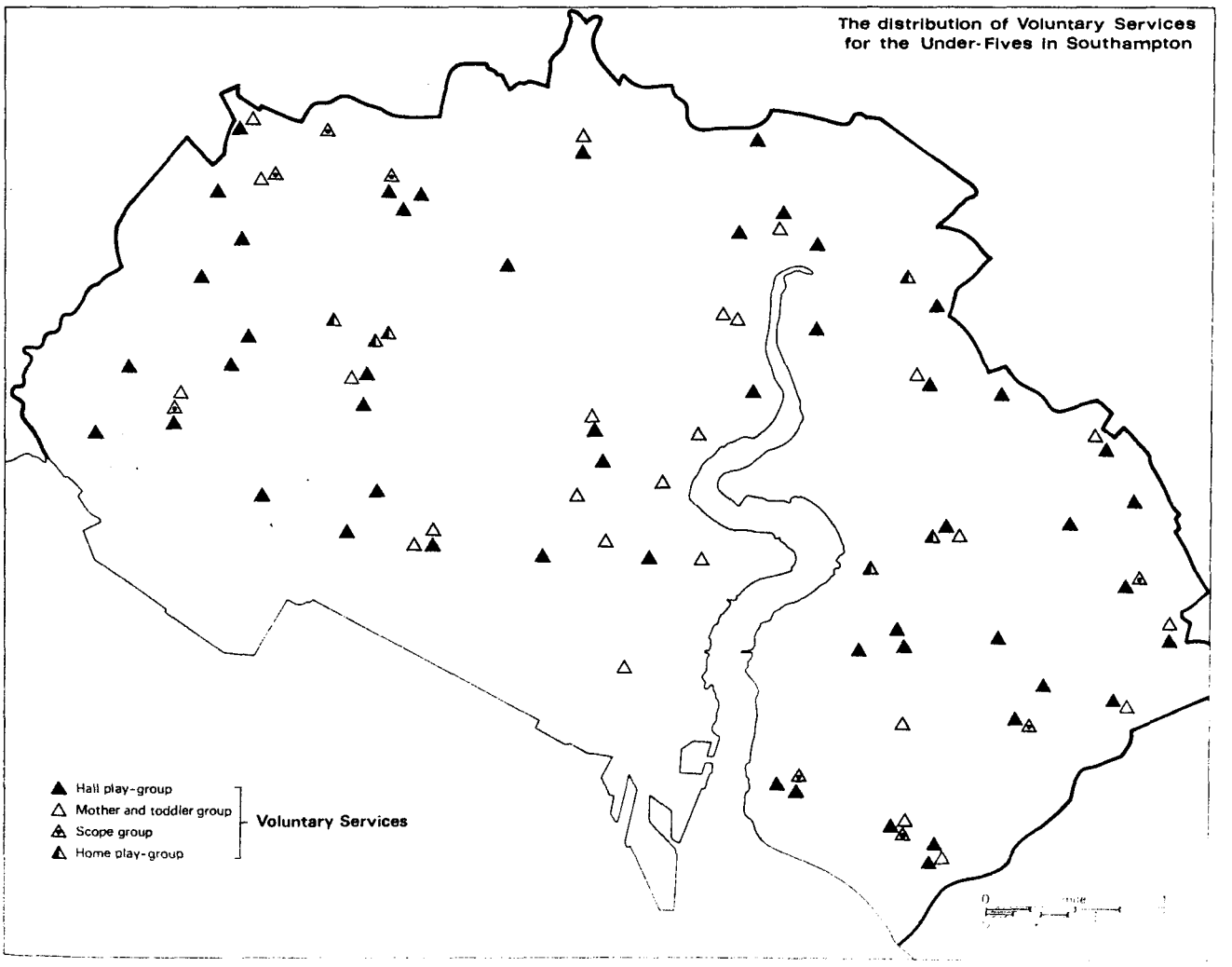

The distribution of Voluntary Services for the Under-Fives in Southampton
Hall play-group
Mother and toddler group
Scope group
Home play-group
Voluntary Services

Fig 10

Association in attempting to ensure an even geographical spread of facilities. Interviews with playgroup organisers indicates that the availability of suitable premises was a crucial factor. Virtually all the playgroups are located in church halls and community centres. Playgroup organisers suggested that the areas where it is often most difficult to provide playgroups are the new peripheral estates in the private sector which have a high birth rate and high demand for care, but frequently lack suitable premises.

Quantitative support for these inferences is provided by Table 12 which shows the simple correlations between indices of pre-school provision and corresponding measures of need for these services, at a ward level in Southampton. Early results from the 1981 Census made it possible to select measures of married women and single-parent families working either full-time or part-time with at least one child aged between 0 to 4 years. At the time of writing, results were not available for the socio-economic status of areas but indices of housing structure and for car ownership provided an alternative yardstick of social composition.

These results should be treated carefully since many of the facilities were on the border of wards and these are in any case large and relatively hetereogeneous spatial units. However, such was the complexity of service centres with complex overlapping catchment areas that re-calculation of alternative catchment areas on the basis of enumeration districts was not considered to be an efficient or desirable research strategy. The simple ward-based correlations should therefore provide a broad measure of the correspondence between overall service levels and the social structure of the city.

The concentration of nursery units in the inner city areas means that the number of session places in both playgroups and nurseries combined are strongly associated with married women working full-time with children aged 0-4, the proportion of immigaants from the New Commonwealth, private renting, households lacking amenities and the absence of a car. This replicates the broad pattern observed previously at the inter-authority and inter county level. However, these nursery and playgroup facilities are better suited to mothers working part-time rather than full-time and it is noticeable that married women and single parents working part-time have negative associations with this "total provision" variable. Furthermore, when the total number of children rather than session places are considered,these negative correlations increase in magnitude. The number of childminders is positively associated with both married women and single parent families working full time with at least one child aged between 0-4,but the coefficients are, as with most of the remaining variable, rather small.

	Number of session places in nursery classes and play-groups per 1000 pop. 0-4.	Number of children attending nursery classes and play-groups per 1000 pop. 0-4.	Number of child-minders per 1000 pop. 0-4.
Married women working full-time with at least one child aged between 0-4.	.59	.20	.30
Married women working part-time with at least one child aged between 0-4.	-.22	.19	
Single-parents with at least one child aged between 0-4.	-.16	-.37	-.26
Single parents working full-time with at least one child aged between 0-4.	-.00	-.46	.13
Single parents working part-time with at least one child aged between 0-4.	-.09	-.22	
Proportion of population New Commonwealth immigrants	0.81	.00	-.14
Proportion of private households			
owner occupied	-.24	-.03	.37
rented from council	-.34	-.09	-.25
privately rented (furnished and unfurnished)	.78	.19	.02
lacking bath and inside W.C.	.55	.87	.42
without the use of a car	.63	.10	-.37

Table 12 Correlations between indices of need and provision for pre-school services in Southampton wards (N=15)

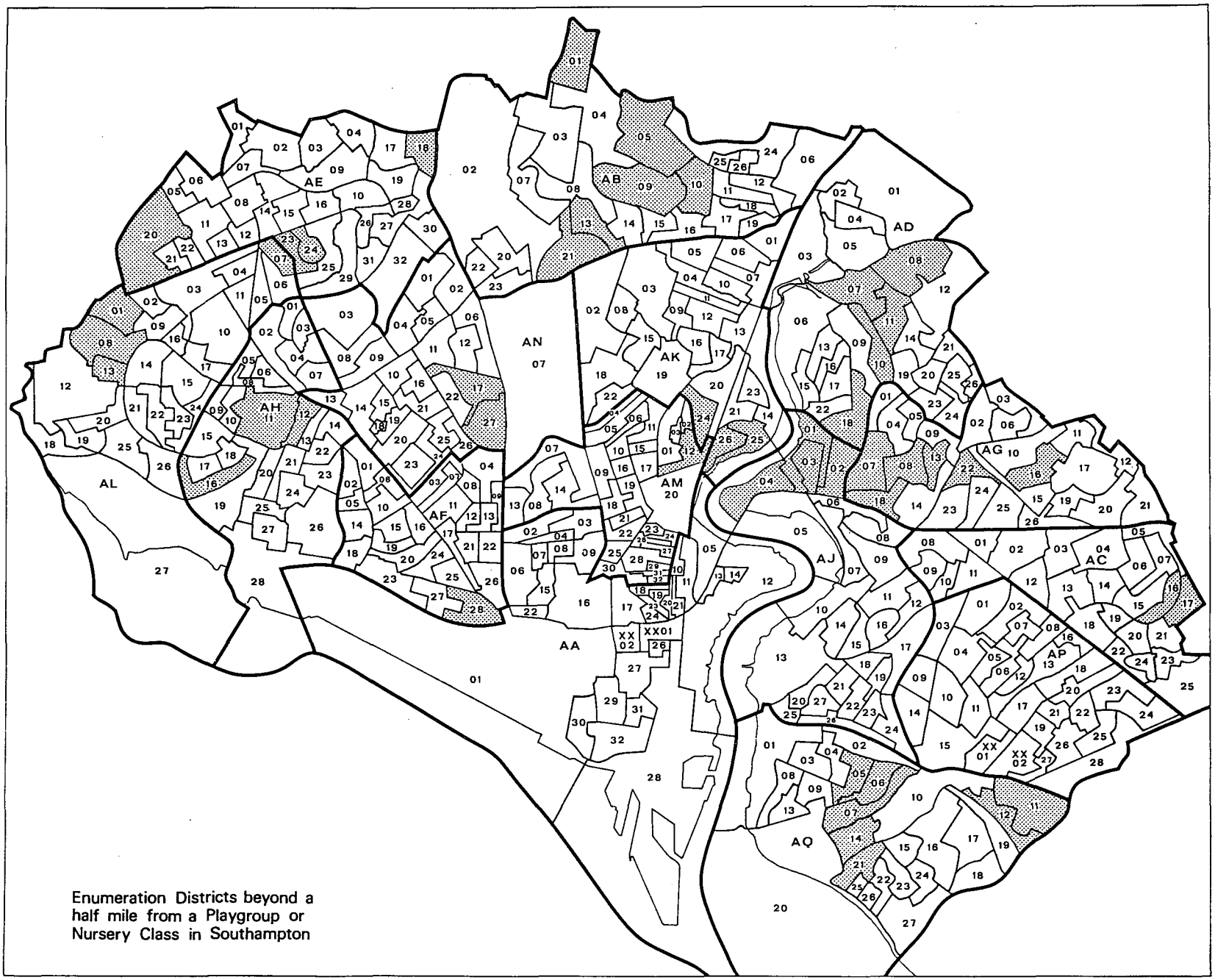
In the case of playgroups there are differing results depending upon the measure of provision used (Table 13). For example, although the total number of children attending playgroup facilities is negatively related with ethnic status, the number of session places available is positively related (albeit mildly) with this variable. Overall playgroups are negatively associated with areas with large proportions of local authority housing and over-represented in the inner wards with larger proportions of privately rented accommodation lacking amenities. Although, in absolute terms, the peripheral estate areas often have considerable places, these are relatively small in relation to the large numbers of children below five. Other variables relating to single-parent families, car ownership, and owner occupied housing have small and inconsistent associations.

Another method employed to gauge equality of access to pre-school facilities was to examine the location of all enumeration districts whose centroid was more than half a mile from either a playgroup or a nursery class (see Figure 11). Various threshold distances were considered including 1 kilometre, but although many parents walk considerable distances to visit the playgroup of their choice, a half mile was consideredto be the maximum desirable limit on a cold and wet winters day before lunch. Such is the spread of pre-school facilities in Southampton that only 49 of the 450 enumeration districts lie outside the half mile threshold. There is some tendency for these enumeration districts to predominate in peripheral wards while the inner areas are relatively accessible to facilities. However, given the tendency for playgroups to concentrate in centres with suitable premises, the least accessible areas just happen to be in the 'watersheds' between these clusters of playgroups and nursery classes. It is hardly surprising therefore that these districts have little in common in terms of their housing and social composition. Taken as a whole they have slightly less children below five, fewer owner occupiers, commonwealth immigrants and car owning households than the Southampton average, but the differences are not important. Indeed, a detailed comparison of the enumeration districts in each ward in comparison with the ward average revealed considerable variations which would undermine the view that certain areas are systematically disadvantaged in terms of obtaining access to pre-school facilities.

At this finest scale of analysis much of the regularity previously observed in the geographical distribution of facilities at the inter-urban scale tends to break down. Superficially there is some correspondence of state nursery provision in the poorest inner-city areas but, as elsewhere, the whole system is dominated by the private and voluntary sectors. Here the efforts of the Pre-School Playgroups Association have ensured that there is no gross inequality in provision levels between areas which would support any "underclass" hypothesis. The most suitable type of explanation in this context might be termed 'ecological' or

	Number of session places in playgroups per 1000 population 0-4.	Number of children attending playgroups per 1000 population 0-4.
Married women working part-time with at least one child aged between 0-4.	.08	.25
Single parents working part-time with at least one child aged between 0-4.	.03	-.25
Proportion of population New Commonwealth immigrants	.30	-.28
Proportion of private households:		
owner occupied	.06	-.18
rented from council	-.51	-.16
privately rented (furnished and unfurnished)	.65	.10
lacking bath or inside W.C.	.51	.82
without the use of a car	.06	-.21

Table 13 Correlations between indices of need and playgroup provision in Southampton wards (N=15)



Enumeration Districts beyond a half mile from a Playgroup or Nursery Class in Southampton

Fig 11

related to the physical and spatial structure of areas. As in the case of certain health care facilities, it is the peripheral estates which lack facilities, largely because of the absence of suitable premises. They also tend to be somewhat further from the older centres, with their abundance of church halls, where facilities tend to cluster. Conversely, the demographic structure of peripheral estates results in a large proportion of children requiring pre-school services. This may however, be a time lag effect as service provision adjusts to a more decentralised city form. In Southampton there has been a considerable improvement in pre-school service provision in certain peripheral areas as community centres and schools have caught up with the initial wave of residential construction.

What is clear from interviews with various individuals however, is that the system of pre-school care is complex, inter-dependent and to a large degree vulnerable and fragile. The structure is dependent upon a great deal of cooperation, hard work and often make-shift organization which can easily be threatened by relatively small events such as loss of particularly enthusiastic organisers, a sudden drop in local demand, or difficulties in obtaining local premises. These factors create a close inter-dependence between various forms of service at the micro-level. However, documentation of such processes, together with details of need, demand and supply, are virtually impossible throughout a large area such as Southampton without an enormous research team which would have to engage in almost clandestine research methods (Jackson and Jackson, 1980).

EXPLANATORY FRAMEWORKS

The crucial issue facing urban analysts is how to explain such variations in service provision. This is a daunting task not only because of the numerous scales or levels at which inequalities may be identified but also because of the numerous theoretical perspectives available. Nevertheless, in Britain there has been a growing recognition of three broad positions - the 'pluralist', 'managerialist' and 'structuralist', to which in the case of pre-school services must also be added the 'feminist' perspective. What then do these approaches have to offer as explanations of pre-school services?

PLURALISM

The pluralist view is based upon an analogy with private markets. Local politics is envisaged as a political marketplace in which politicians respond to the wishes of the public. Pluralists argue these responses will not reflect any overall class bias for the local state is a neutral arbiter between competing interests. This diversity of interest groups is seen as a guarantor of broad equality of outcomes, for individuals will find themselves in very different and non-overlapping groups according to different issues. Coupled to this are the ever present periodic elections through which politicians may be brought to account.

This perspective has been subject to enormous criticism in the past for reasons which are by now well known, although recently there has been a restatement of pluralist positions in somewhat revised form. Saunders (1979) for example, makes a distinction between the corporate and non-corporate (or pluralist) sectors of state policy making. The corporate sector is concerned with production and involves the state taking a directive role in conjunction with big business and organised labour. The 'pluralist' sector is mainly concerned with social consumption and involves the state responding to pressures from the locality for housing, social services and the like.

As shown above, local authority services for the under-fives have developed to the greatest extent in the cities with the greatest need for these services and this might suggest that the authorities have responded in some measure to 'demands' from the local environment. Prominent amongst the high providers are metropolitan districts in the North and Midlands including Manchester, Salford, Barnsley, Bolton, Rotherham, Walsall, Liverpool and Newcastle. This pattern serves to emphasise historical factors and past decisions affecting current distributions. The demand for care was inevitably greater in the northern textile towns with large proportions of women at work in the factories. The pattern is also replicated to some degree within Hampshire and within Southampton.

Saunders (1979) cites as the best example of a successful campaign by a pressure group the campaign for a day nursery in an area of Croydon. This authority has an extremely low level of local authority provision but the protesters managed to obtain a new day-care centre. Saunders notes how, despite demonstrations, the campaign organisers managed a careful balance between conciliation and coercion. They were careful not to use any tactic which could have been defined by the local authority as irresponsible or illegitimate.

Nevertheless in general terms it is difficult to find much evidence for the effectiveness of pressure groups affecting the level of pre-school services in Britain. Indeed, the evidence presented early in the introduction indicated a wide disparity between the wishes of mothers and the attitudes of policy makers. It must therefore be concluded that despite considerable strength of feeling in favour of more pre-school provision, mothers lack sufficient 'purchasing power' of both an economic and political kind to achieve their objectives. In the private sector, with the exception of a small minority, most parents are unable to command incomes sufficient to pay the cost of full-time nursery care so that such facilities are limited in Britain. Within the political sphere mothers lack sufficient organisation to mobilise for a widespread system of pre-school services. Looking after young children is typically a time consuming, exhausting and isolated activity and as such tends to inhibit collective organisation for political ends. Although many women's groups have been formed in the last decade these are typified by a concern with a diverse set of aims, including 'consciousness raising',

which are not always overtly concerned with government policy. Many groups have purposely distanced themselves from conventional policies and have tended to build their own alternatives (Crote and Hewitt, 1980). This is not to argue that women are not involved in local campaigns for nurserys, playgroups and the like. Indeed these are the campaigns they are most likely to be found in, although as Hamner (1977) points out, paradoxically this serves to confirm their primary definition as child minders.

Saunders (1979) notes that the successful day nursery campaign in Croydon was largely organised and supported by middle class residents who could invest the considerable time, money and effort necessary to influence the local council. He also observes that in overall terms the new day nursery was relatively insignificant; the overall low level of nursery provision in the borough was unaffected. Indeed, it could be argued that this campaign was successful at the expense of others in more needy but politically disorganised areas.

Generally speaking, however, even the middle classes have been unable to reap significant rewards from the political system in terms of pre-school provision. In Southampton the widespread growth of the voluntary playgroup movement was largely a response to the lack of nursery education. Thus playgroups were initially seen as some form of interim arrangement until extensive nursery education could be developed. The playgroup movement was not an aggressive campaign for well developed facilities but rather a patient wait until a state initiative emerged. Thus many of the members readily accepted the reasons forwarded by the local authorities why extensive State provision was not possible. Since then many of those involved in the playgroup movement have accepted that the Pre-School playgroups movement - with its emphasis upon parental involvement - has advantages that the State system cannot provide. Indeed, the movement is now actively encouraged by local authorities through the provision of paid organisers and the provision of premises. Many would undoubtedly still like a system of state nursery education with purpose-built premises and trained staff but there is a widespread recognition that this would be 'expensive' and that the 'country cannot afford it'. Participation in the voluntary sector has therefore served to reinforce the existing lack of provision, legitimising the existing system without securing any major concessions. In this context it should be noted that the Nursery Schools Association founded in 1923 has gradually become less visionary in its aspirations as it has been incorporated into policy making.

It is therefore hardly surprising that Saunders qualifies his 'pluralist' sector (in which the state responds to pressures from the locality) with the observation that these pressures are mediated by bureaucratic definitions of what is possible and the financial constraints imposed by both the local reserve base and central control.

MANAGERIALISM

It has not been the purpose of this paper to systematically evaluate the managerialist thesis but there is enough evidence to suggest that this has more to offer than pluralism as an explanation of spatial variations in pre-school services. Pahl's original (1970) version of managerialism has of course been subject to considerable criticism and some amendment over the years. Managers are no longer seen as 'independent variables' but 'key agents' mediating between the private and public sectors with resources whose overall scale is determined by the corporatist tendencies of central government (Pahl, 1977). Nevertheless, the importance given to local discretion in the relevant pre-school legislation suggests that this is a field where key officials have been crucial in determining levels of resource allocation.

One of the most important criticisms of the early managerialist approach was that it ignored the issue of the relative importance of paid officials and local councillors. Certainly the ideologies of the two major political parties which have come to dominate local politics cannot be discourted when considering pre school services. Generally speaking, the Labour Party, with its ideology of state provision, has been in favour of local authority day nurseries and nursery schools. It was this tradition of 'municipal socialism' and public provision which did much to facilitate the response in the northern industrial towns as documented previously. In contrast, as demonstrated by Hampshire, Conservative councillors have generally been against state provision of pre-school services on the grounds that it will require unnecessary public expenditure. The argument is often used that nothing should be done to encourage women with young children to return to work, although this is a stand also taken by many labour councillors.

Whatever the influence of local politicians there are still grounds (and some evidence) for believing that local managers do have considerable influence upon both the overall level of pre-school services in an authority and the distribution of facilities to specific neighbourhoods within the authority. Many would today assert that the majority of local politicians and junior officials have a relatively little evidence upon policy making whereas the activities of chief officers and the chairman of sub-committees is crucial. Certainly Blackstone's (1971) evidence noted previously regarding the influence of the chief education officer upon nursery school provision in Hertfordshire must be one of the best documented examples of local managerial influences in operation. In this context it is also interesting to note that Cusden (1937) in a much earlier study attributed the variations in levels of nursery education to:

> "..... the vision of an enlightened director here, the driving power of an enthusiastic local organiser there, and the tireless devotion of a group of teachers elsewhere ....." (Cusden, 1937, 25).

She also indicates that the early rapid progress made in Bradford and Manchester was largely the result of their active Directors of Education.

The influence of intermediate and lower level personnel upon service outcomes is likely but much more difficult to demonstrate. The extent to which departmental rules and conventions provide guidelines and give discretion to lower level officers is likely to vary between local authorities and between departments within local authorities. Webster (1977) notes that the nature of service organisation and the way in which this is delivered to areas may affect the nature of provision. It may be that different practices are employed in different social services divisions and that the provision of services is shaped by professional and personal attitudes and values rather than the needs and preferences of neighbourhoods. A good deal of the local authority work in this context is regulatory, inspecting standards of childminders and nurseries. There is a good deal of anecdotal evidence concerning the attitude of such fieldworkers to facilities but systemmatic analysis of their impact awaits further study.

Today most researchers who point to the influence of local agents upon resource allocations would also accept that the activities of there persons must be incorporated into some broader framework of political economy (Williams, 1982). In so attempting to explain the position of pre-school services in advanced capitalist economies one is faced with two basic types of explanation - the neo-marxist, and the feminist approaches - with various sub-divisions, hybrids and combinations of radical, liberal and socialist feminist theory.

NEO-MARXIST EXPLANATIONS

Contemporary neo-marxist theories stress the role of the state and its local representatives in supporting the capitalist mode of production. One of the most widely cited examples is O'Connors (1973) distinction between 'social investment', 'social consumption' and 'social expenses'. Social investment (such as roads) and social consumption consumption (such as housing) are seen as forms of expenditure by the state which are necessary to maintain the rate of profit in the private sector. In contrast, social expenses (such as education) do not directly affect capital accummulation but are envisaged as necessary to maintain social cohesion and to legitimise the existing social order by offsetting problems which would threaten its ideological stability.

Clearly, these functions need not be exclusive to particular types of expenditure or service. Thus pre-school services might be envisaged as a part of social consumption lowering the costs of class reproduction; but like social expenses might perform a legitimising role of 'buying off' popular discontent and inculcating values to the very young. Nevertheless, this does not invalidate the core of O'Connor's argument which is that conflicts and tensions arise because of

the need to satisfy these differing functions. In particular, welfare policies designed to create popular support for the system may undermine social investment which is directly necessary to maintain profitability in the private sector.

As Saunders (1979) points out, one does not have to be a Marxist to accept this type of taxonomy or to see the numerous conflicts of interest which emerge in the modern state - indeed, such problems are a major concern of liberal and conservative perspectives. The crucial issue is whether one envisages these functions as inevitably tied to the interests of capital or some notion of the 'collective national interest'. What makes pre-school services so interesting in this context is that their form and extent varies so enormously between different capitalist economies. Many western European societies with their extensive services stand in marked contrast to the lack of provision in Britain and the United States. Sweden has especially well developed facilities and Adams and Winston (1980) argue that the system there has more in common with China than N. America. In Britain pre-school services have been particularly vulnerable to expenditure cuts aimed at diverting resources away from consumption and into investment.

The Marxist response to such variations in provision between capitalist economies is, in essence, to argue that the class struggle can take various forms in different places at different times. The contradictions between the need for social consumption and social investment necessary for profitable production are claimed to produce lacunae in vast areas of consumption. Offe (1972) argues that:

> "This seems to be symptomatic of a phase of capitalist development in which areas of crisis peripheral to the central group of problems however, segregated and insignificant they may be within the institutional system, are hindered from generating further disturbances to the system ..... This would mean that the pauperism of the early capitalist proletariat has given way to the modern pauperism of depressed areas: the areas of education, transportation, housing and health which affect the entire population are obvious cases in point. Institutions that are marginal to the mainstream of life, such as the pre-school socializing phase, unemployment, old age after retirement, mentally ill and criminals are further examples ..... (emphasis added, Offe, 1972, 102).

It follows therefore that within capitalist economies, low levels of pre-school provision, the ease with which plans for expansion may be reduced or abandoned, and the vulnerability of existing services to closure, is made possible because these services are not directly responsible or necessary for maintaining profit

accumulation in the same manner as roads or public utilities. In communist societies with a strong need for female labour to support the productive infrastructure a widespread system of nurseries is more often provided. In capitalist economies however, widespread female employment has only been necessary to ensure national survival in times of war. Female participation in the paid workforce is of course important in capitalist economies in times of peace but, although the state has intervened to provide accommodation for those in most need, and is ostensibly concerned to provide certain minimum standards, there is an avoidance of responsibility for the working mother.

Thus Offe argues

> "The capacity for conflict refers to the capacity of an organisation or the corresponding functional group, to collectively refuse to perform, or to present a plausible threat of such a refusal to the system in a relevant way. A collection of status groups and functional groups is indeed organizable but not capable of conflict ..... Groups consisting of housewives, secondary school pupils, college students, the unemployed, the mentally ill, and ethnic minorities may be cited as examples. The capacity of these groups to bring their influence successfully to bear is small in as much as their functional utility is minimal" (emphasis added, Offe 1976, 87).

The major problem with such explanations based on the 'needs of capital' is that in one sense they explain 'everything and nothing' for there is little or no specific indication of why pre-school services should vary so considerably between societies. Indeed, there would seem to be no reason why capitalism should be associated with any particular level of pre-school provision. Humphries (1977) argues that it is possible to envisage a system of state childrearing agencies which would benefit from economies of scale and which could provide the 'docile' workforce in a similar manner to that currently provided by the family. Although undeniably expensive, the centralisation of support involved in the substitution of state for family services would give capital greater control over the administration of resources which could be streamlined in the interests of capital production. Barrett (1980) claims it has yet to be demonstrated that capitalism could not survive without the present system of domestic labour and childrearing, and that explanations based around the smooth reproduction of capitalist social relations run the risk of ignoring conflict and political struggle.

Furthermore, Saunders (1979) argues that these theories face the same problems as functionalist sociology in explaining causes in terms of effects. Low levels of pre-school provision in Britain may be compatible with class interests but there

is little evidence that the policy was deliberately created with these interests in mind. Concern was expressed at the time of the Boer War about the poor quality of British conscripts and inadequate nutrition and poor childrearing standards in the working class were blamed (Lewis, 1980). Thus emerged the campaign to "glorify, dignify and purify motherhood" which included infant welfare clinics, health visitors and hospital facilities for women and infants. These policies were based upon the underlying assumption that needs were due to individual moral failure than broader social conditions - hence the emphasis upon education. This focus upon motherhood strengthened the role of women in the home and helped to undermine the needs for pre-school provision. Hall (1979) argues that the ideology of domesticity was strongly advocated by the evangelical movement and initially adopted by the new bourgeoisie during the rapid industrialisation of Britain between 1780 and 1830. This ideology was not primarily developed to subordinate women in the home but was subsequently moulded by economic forces to achieve this end when disseminated amongst the working classes.

In a similar vein Barrett notes that although industrial capitalism brought about sweeping changes in the position of women many changes related to the increased possibilities of divorce and the rise of notions of romantic love are less plausibly related to specifically capitalist modes of production (Barrett, 1980). Other developments such as protective legislation for working women and the limited growth of pre-school services are not explicable strictly within the logic of capitalist development. The initial state involvement in nursery education also arose from a concern with health needs but there is little indication that this policy was primarily motivated with the interests of business in mind. Indeed, following in the wake of the Factory Acts the early legislation introducing educational provision threatened the profitability of the private sector by removing a cheap source of labour. The introduction of the relatively early starting age of 5 meant that education would be accomplished quickly and children of ten would be able to enter the workforce (Blackstone, 1971). Although nursery education may have contributed to the creation of a healthier workforce the initial impetus came from the zeal of the early social reformers - teachers, social workers and Medical Officers of Health. Similarly,in the 1960s when the value of pre-school experience was rediscovered,the primary movers were not industrialists concerned to create a workforce more compatible with the needs of industry but educationalists, psychologists and social reformers attempting to create greater equality of opportunity.

FEMINIST APPROACHES

The factor conspicuously absent from these Neo-Marxist theories of the state is the role of women in society and it is therefore to feminist approaches that one must turn for further elaboration of the role of pre-school services. Such approaches suggest that pre-school services are vulnerable and limited in scope

because the role of women in modern industrialised societies is primarily identified with looking after children in the home (Oakley, 1972). This 'female' role within the family is not biologically linked with motherhood but is a culturally ascribed 'gender-role'. Thus

> "Far from being womans "natural" role, the allocation of the responsibility for the full-time care of pre-school children to the biological mother alone is a pehnomenon peculiar to twentieth century industrial society" (Ginsberg, 1977, 75).

In pre-industrial Britain the family was the main unit of production and women undertook a wide range of functions to support their families (Oakley, 1974). Industrial capitalism called for the concentration of economically productive effort into large organisations outside the family and this led to the distinction between the private world of economically non-productive work and the public world of wage earning work. Thus, as described previously, the role of women became focused upon childrearing during the course of the nineteenth century. In recent years increasing numbers of women, many with young children, have taken up paid employment outside the home. Nevertheless, for a variety of reasons, including inadequate child-care facilities, a generally unequal division of labour in the home, socialisation into conventional gender roles and discrimination against women by employers and trade unions, women are severely constrained in the forms of employment they can obtain, typically being restricted to low paid semi- or unskilled occupations, frequently on a part-time basis with little security of employment.

A radical feminist perspective suggests that at the root of this oppressed position is the system of patriarchy. This is generally defined as a system of male supremacy which pre-dates capitalism having existed in many diverse forms for thousands of years. It is maintained by sexist ideology, this being defined as situations where differences between men and women are consistently emphasised to the detriment of women (Allen and Barker, 1976).

The case for the influence of patriarchy as a determinant of pre-school services is put forcefully by Hughes and Associates

> "..... those who hold political and economic power are predominantly men with little understanding of the realities of motherhood and no day-to-day responsibilities themselves for pre-school children. Imagine the reaction of government and employers to a situation where all civil servants, managers and professional men with pre-school children suddenly found themselves actually responsible for the daily care of their children. Would they be left to make their own arrangements as best they could? Or be given

> an outdated list of childminders and be told to find a vacancy as best they could? Or be told to chose between a family and a career? Or would nursery schools and employment measures suddenly become a major item on the political and economic agenda, an essential feature of the industrial strategy, while company nurseries and child care allowances joined the company car and BUPA membership and help with school fees as a standard fringe benefit?" (Hughes et al 1980).

This emphasis upon patriarchal forms of power relationships suggests a more general form of explanation which is applicable to pre-school services than the 'needs of capitalism' arguments. Given that gender divisions preceded the rise of capitalism,these divisions (and the position of pre-school services) would not necessarily be altered by a transformation of capitalist modes of production. In the case of the system of patriarchy, however, any radical transformation must inevitably have a crucial impact upon pre-school facilities.

Of course, pre-school services are only one aspect of the oppression of women. The women's liberation movement has a wide range of other concerns including equal pay and opportunities, abortion on demand, adequate birth control facilities and the stereotyped representation of women in advertising. It is therefore possible to have extensive pre-school services but considerable dimensions of inequality between men and women on other spheres. For example, in many communist societies despite widespread nursery provision,there is typically a highly unequal division of labour between men and women both in the home and in the formal economy. A similar situation exists in capitalist economies in which extensive nurseries have been provided. In Sweden there is evidence that the expansion of services for working mothers may have served to reinforce occupational segregation and sexual stereotypes between men and women. The development of nurseries, home-helps and other welfare services has created a strata of relatively low paid public sector jobs primarily undertaken by women performing the tasks they have traditionally undertaken on an unpaid basis in the home - cooking, cleaning and child care (Adams and Winston, 1980). Nevertheless, the importance of adequate child care is crucial, for while alone not sufficient, it is a necessary condition for greater sexual equality. As Adams and Winston (1980) note, women are currently caught in a viscious circle. Husbands and policy makers see womens role as secondary, and economically this is the case. In this situation women will continue to identify themselves primarily with domestic responsibilities. A rearrangement of household roles will not therefore emerge until both husband and wife identify themselves as both breadwinner and homemaker,but women cannot expect to obtain more than relatively marginal jobs until they receive help with these domestic responsibilities. The logical conclusion from this situation must be

that womens participation in the workforce cannot await a massive change of attitudes to household responsibilities (such a policy would in any case not help the growing numbers of single parent families). It will only come about when women have more than marginal jobs and this is critically dependent upon adequate child care.

There is enormous controversy at present as to how this may be achieved. The crucial issue is the extent to which the oppression of women is independent of the material economic factors or grounded in ideology. Liberal feminists have emphasised the ideological basis of women's oppression and believe that social equality can be achieved within democratic capitalist societies without a class revolution. Socialist feminists have tended to stress a material analysis in which the struggle of women is part of the broader struggle against the dominant mode of production. This controversy has led to many attempts at a fusion between the perspectives of gender and class. There is now a growing recognition that although patriarchy existed prior to the rise of industrial capitalism, this in turn shaped patriarchal relations in crucial ways. There was not a complete break with the past for there had always been a degree of separation between work and family before the Industrial Revolution - not all work was done in or near the home and women did a great deal of work concerned with the care of children. Indeed, the beginning of the Industrial Revolution prompted a rise in home working as the newly mechanised industries required increased capacity in other unmechanised sectors. Nevertheless, what distinguished the rise of capitalism was the privatisation of domestic labour by women in the home and their exclusion from the world of social labour.

Many would therefore assert that society can only be adequately understood in terms of both capitalist and patriarchal relations. The capital accumulation process has accommodated itself to patriarchal structures and at the same time helps to perpetuate them. This does not mean, as many have asserted, that capitalism and patriarchy are one and the same thing, but that although conceptually distinct they are in reality highly inter-dependent

This is still far from satisfactory for it leaves many questions unanswered. As Barrett (1980) notes, the crucial task for the future is how to conceptualise the role of women in a way that is not either completely autonomous from, or totally determined by, the economic relations of the capitalist mode of production. What is clear however, is that pre-school services are but one aspect of the constraints upon women, and that extensive pre-school services need not be incompatible with the interests of capitalism. It is true that in Sweden pre-school facilities served an economic function, allowing women to satisfy a need for labour in the economy which, in other capitalist economies, has been satisfied by immigrants. Nevertheless, the crucial factor which has permitted

the Swedes to adopt this solution has been differing attitudes to the role of motherhood which have been translated into political processes. This contrasts with Britain and the United States where,at the level of government,motherhood and full-time employment are generally considered to be fundamentally incompatible. It is therefore difficult to escape the conclusion that, when considering pre-school services (rather than the position of women in society as a whole),the ideology of femininity has been a crucial determinant affecting the overall scope of provision.

CONCLUSIONS

There are three basic reasons for a geographical perspective upon the distribution of services. The first reason is because of jurisdictional partitioning - the need for nations to be divided into local governmental or administrative units which, for many complex reasons, provide widely differing service levels. The second reason is because of 'tapering' - the decline in the use of facilities within these local areas through increasing distance from these facilities. Third, there are the problems of positive and negative externalities imposed upon neighbourhoods by the desirable or undesirable aspects of service infrastructure. The third issue is clearly not relevant to pre-school services - nurseries and playgroups cannot be regarded as noxious facilities in the same league as urban motorways, refuge tips or heavy industries, while the possession of pre-school facilities is not likely to radically increase housevalues in an area in the same manner as good primary or secondary schools.

Of the two remaining issues it would seem that jurisdictional partitioning is the more important reason, for there appears to be greater inequality of pre-school provision levels between local governments than within their boundaries. This concluiion is of course derived from one case study, and Southampton may be an exception by virtue of its diverse social structure and vigorous playgroups movement. Patterns of intra-city provision might be different in a larger northern conurbation with greater social deprivation. Nevertheless, there seems little doubt that decisions made at the local government level are important and require further study. The relative immobility of mothers with young children means that 'tapering' effects are also important, although experience in Southampton indicates that considerable ingenuity and determination displayed by those transporting their children considerable distances to partake in the desired form of pre-school experience. At this level it is therefore more difficult to match the correspondence between needs of areas and provision. Measuring the degree of 'territorial justice' in the allocation of services is most appropriate in situations (such as the personal social services) where inequalities between areas are large in relation to the overall shortfall in provision. Large though the areal-inequalities may be in the pre-school field, it should always be remembered that the crucial source of deprivation is the

absolute shortage of such facilities in the nation as a whole. With increasing female unemployment the demand for full-time day care is diminishing in certain areas. In Southampton for example, some registered childminders have been unable to obtain children to care for because of insufficient demand. (This may of course arisen because they are being 'undercut' by unregistered minders offering services at cheaper rates). But whatever the explanation some makeshift form of solution will emerge to both full-time and part-time day care. The important point is that this is not the type of solution which many parents appear to want or what is most desirable in the interests of young children.

Drawing together the evidence presented above it is also possible to make some speculations about the link between these scales of inequality and the various modes of explanations. Saunders (1979) has made a vertical division of explanatory modes depending upon the type of service with 'pluralist' influences most pertinent to housing and social services. However, within a particular set of services such as pre-school facilities it is possible to envisage a geographical division of explanatory influences. As suggested above, pluralist bargaining-type explanations seem inappropriate in the pre-school context but their influence is most likely to be found in particular areas within local governments affecting an isolated nursery here or playgroup there. The most plausible explanation of spatial variations at the intra-authority, however, can be labelled 'ecological' depending upon the availability of premises, demographic structure and physical location of estates. In contrast, 'managerial' influences, in the broad sense of the term, are most likely to be useful in understanding the overall level of service allocations made by the authority and the administrative milieu in which the diverse voluntary and private organisations have to operate. Finally, aggregate social theories can help to specify some of the constraints within which local agents operate and the total amount of resources allocated at the national level.

From the policy perspective a spatial analysis can help to illuminate at various scale the areas of relative deprivation where local campaigns can be directed for further service provision. However, the more important absolute level of deprivation will only be countered with a radical shift in the position of women in British society which in turn depends upon greater provision of pre-school facilities - a situation somewhat reminiscent of catch 22.

REFERENCES

ADAMS, C.T. and WINSTON, K.T. (1980) Mothers at Work: Public Policies in the United States, Sweden and China. Longmans, New York.

ALLEN, S. and BARKER, D.L. (1976) Sexual Divisions and Society. Tavistock, London.

BARRETT, M. (1980) Women's Oppression Today. Verso Press, London.

BLACKSTONE, T. (1971) A Fair Start. Allen Lane, London.

BONE, M. (1974) Preschool children and the need for day care. Office of Population Censuses and Surveys, London.

BROWN, G. and HARRIS, T.O. (1978) Social Origins of Depression. Tavistock, London.

BRUNER, J. (1980) Under Five in Britain. Grant McIntyre, London.

CHALLIS, L. (1980) The Great Under Fives Muddle. Bath Social Policy Papers, University of Bath.

COOTE, A. and HEWITT, P. (1980) The stance of Britain's major political parties and interest groups. In Moss, P. and Fonda, N. Work and the Family. Temple Smith, London.

CROWE, B. (1973) The Playgroup Movement. Allen and Unwin, London.

CUSDEN, P.E. (1937) The English Nursery School. Routledge and Kegan Paul, London.

FREESTONE, B. (1977) Provision of child care facilities in Sydney. The Australian Geographer 13, 318-325.

GARLAND, C. and WHITE, S. (1980) Children and Day Nurseries. Grant McIntyre, London.

GINSBERG, S. (1977) Women, work and conflict. In Fonda, N. and Moss, P. (eds.) Mothers in Employment. Brunel University, Uxbridge.

HALL, C. (1979) The early formation of Victorian domestic ideology. In Burman, S. (ed.) Fit Work for Women. Croom Helm, London. 15-32.

HANMER, J. (1977) Community action, women's aid and the women's liberation movement. In Mayo, M. (ed) Women in the Community. Routledge and Kegan Paul.

HART, J.T. (1971) The inverse-care law. The Lancet, February 405-411.

HAMPSHIRE COUNTY COUNCIL (1978) Provision for the Under-Fives The Castle Winchester.

HOLMES, J., WILLIAMS, F. and BROWN, L.A. (1972) Facility location under a maximum travel restriction. Geographical Analysis 4, 258-266.

H.M.S.O. (1972) Education: a Framework for Expansion. Department of Education and Science.

HUGHES, M., MAYALL, B., MOSS, P., PERRY, J., PETRIE, P. and PINKERTON, G. (1980) Nurseries Now. Penguin, Harmondsworth.

HUMPHRIES, J. (1977) The class struggle and the persistance of the working class family. Cambridge Journal of Economics 1, 241-258. Reprinted in Amsden, A.H. (ed.) 1980 The Economics of Women and Work. Penguin, Harmondsworth.

LEWIS, J. (1980) The Politics of Motherhood. Croom Helm, London.

JACKSON, B. and JACKSON, S. (1979) Childminder. Routledge and Kegan Paul.

LINEBERRY, R.L. (1977) Equality, public policy and public services : the underclass hypothesis and the limits to equality. Policy and Politics 4, 67-84.

LISTER, R. (1980) Family policy. In Bosanquet, N. and Townsend, P. (eds.) Labour and Equality. Heinemann, London.

MAYALL, B. and PETRIE, P. (1971) Minder, Mother and Child. Institute of Education, London.

MONCK, J. and HANSON, S. (1982) On not excluding half of the human in human geography. Professional Geographer 34(1) 11-23.

OAKLEY, A. (1972) Sex, Gender and Society. Temple Smith, London.

OAKLEY, A. (1974) The Sociology of Housework. Martin Robertson, London.

O'CONNOR, J. (1973) The Fiscal Crisis of the State. St James Press, London.

OFFE, C. (1972) Advanced capitalism and the welfare state. Politics and Society 2, 479-488.

PAHL, R.E. (1970) Whose City? Longmans, London.

PAHL, R.E. (1977) Managers, technical experts and the state. In Harloe, M. (ed.) Captive Cities. John Wiley and Sons, Chichester.

SAUNDERS, P. (1979) Urban Politics, Hutchinson, London.

SYLVA, K.D., ROY and PAINTER, M. (1980) Childwatching at Playgroup and Nursery School. Grant McIntyre, London.

SCOTT, J.W. and TILLEY, A.W. (1975) Women's work and the family in nineteenth century Europe. Comparative Studies in Society and History 17, 1, 36-84.

TIVERS, J. (1977) Constraints on spatial activity patterns: women with young children. Kings College London Department of Geography Occasional Papers No. 6.

TIZARD, J., MOSS, P. and PERRY, J. (1976) All Our Children. London, Temple Smith.

WEBSTER, B. (1977) The distributional effects of local government services mimeo.

WILLIAMS, P. (1982) Restructuring urban managerialism: towards a political economy of urban allocation. Environment and Planning A, 14, (1) 95-105.

University of Southampton — Department of Geography

DISCUSSION PAPER SERIES

1	The elimination of under-estimation in nearest neighbour analysis	D A Pinder	1978
2	Percentages, ratios and inbuilt relationships in geographical research: an over-view and bibliography	K Jones	1978
3	An evaluation of bed material sampling techniques for use in mixed sand and gravel-bed streams	B Gomez	1979
4	Industrial promotion by local and regional authorities: the effectiveness of advertising material	C M Mason	1979
5	Planning for remote rural areas: the Swiss experience	D Grafton	1980
6	A consideration of the use of newspapers as a source of data for geographical research	R Williams	1980
7	Foreign-owned plants and regional policy in the United Kingdom: some evidence from South Hampshire	C M Mason	1980
8	Territorial justice and the allocation of suburban leisure services: a case study of Havant, Hampshire	G M Moon	1981
9	The spatial variation of rainfall and its importance in urban hydrology: a case study of three small urban catchments	J M Buttle	1981
10	A general theory of development	E Biagini	1981
11	Channelization in England and Wales	A Brookes	1982
12	The management of industrial change: structural policies in West Germany	M S Husain	1982
13	New manufacturing firms in South Hampshire: survey results	C M Mason	1982
14	On using social geography concepts and approaches in the study of industrial location	B Chalkley & M Perry	1982
15	The Southampton area in the 1980s: recession, stagnation or growth?	C M Mason & M E Witherick	1982

Discussion Papers 1 to 12 inclusive are priced at £0.50 and nos 13, 14 and 15 at £0.75. Copies can be obtained from:

The Librarian
Geography Department
The University
Southampton SO9 5NH

Copies of Dimensions of Change in a Growth Area: Southampton since 1960, edited by C M Mason and M E Witherick (1981), are also available at £5.00 (or £6.50 including postage and packing).