

Primrose Hill

**PRIMROSE HILL, AN URBAN VILLAGE EXAMINED:
WITH LESSONS DRAWN FOR BROWN-FIELD DEVELOPMENTS
BY ALISTAIR BARR**

INTRODUCTION

There has been much discussion about Urban Villages in recent years, culminating in the construction of the Millennium Village at Greenwich Peninsular, east London. I believe that the urban designers of these villages or quarters can learn from successful Urban Villages of the 19th Century. This paper catalogues some of these lessons in both an academic and personal way. I am a practising Architect who has also taught part time at the University of Greenwich for nine years.

My study is of an Urban Village that I have lived in for those nine years but it is also a study some of the design and evaluation techniques that are available to late 20th Century Urban Designers. These particular ones are the methods commonly by the Urban Design staff and research students at the University of Greenwich. Nine current techniques are applied to the study area to evaluate both my pre-conceptions and the methodology. From these examinations lessons are drawn which are applicable to many brownfield sites.

URBAN VILLAGES

In the western world all great cities have neighbourhoods, quarters or villages. Some were existing villages which were swallowed up as the city expanded and others have developed in response to physical or socio-economic stimulus. These self defined areas are real to the inhabitants but also 20th century theorists from Clarence Parry through Leon Krier to Richard Rogers regard them as important and good urban design. The consensus is that what is needed is a density which encourages non housing activities, a variety of uses for work and leisure alongside residential and a sense of place.

New Urban Villages are now being designed and built, especially on brownfield land, in many major cities. The current British Government is supporting this and Richard Rogers is leading their Urban Task Force. In recent years Greenwich thesis students have tackled brownfield sites in Greenwich, Deptford, Chatham, Frankfurt, Stuttgart, Ingolstadt, Friedrichshafen and Krakow.

PRIMROSE HILL, LONDON NW1, NW3.

Greater London is divided into a number of Boroughs with their own administration and Town Halls. Within a Borough many neighbourhoods exist. In the case of Camden to the north west there are the neighbourhoods of Bloomsbury, Kings Cross, Somers Town, Camden Town, Primrose Hill, Hampstead and Highgate.

I live in Primrose Hill and in my daily experience it has many attributes of a successful Urban Village. Many books on London agree that Primrose Hill is a good example of one of the many London villages. However no studies have investigated the reasons for this success and none have tested current thinking against a 200 year old village. There are many successful Urban Villages in Britain and Europe that could be studied in depth.

This paper firstly describes the area and its historical development. Secondly nine urban design methods are examined where they help the understanding of this Urban Village. As a result of this search lessons are drawn which both expand and criticise the current thinking.

LOCATION AND HISTORY

Primrose Hill lies one and a half miles north of Central London just adjacent to the ancient road that leads to Hampstead and the north. (Figure One). The village area is 35 hectares and the population is 7,500. The fortunes of the area are of the first 30 years as a desirable location followed by 120 years of decay and squalor. The last 30 years have seen the village become a sought after place to live and work once again.

Regent's Park

The three major elements which have shaped the area are the Park, the Canal and the Railway. These are examined in turn. Before 1811 the area was defined by one tavern surrounded by fields as the following advertisement shows:

'Chalk Farm is situated near that well known and delightful spot, Primrose Hill, one mile and a half from Tottenham Court Turnpike..... A good road for a coach and off the Hampstead Road, and very pleasant walks from most parts of the Town over the fields' (1).

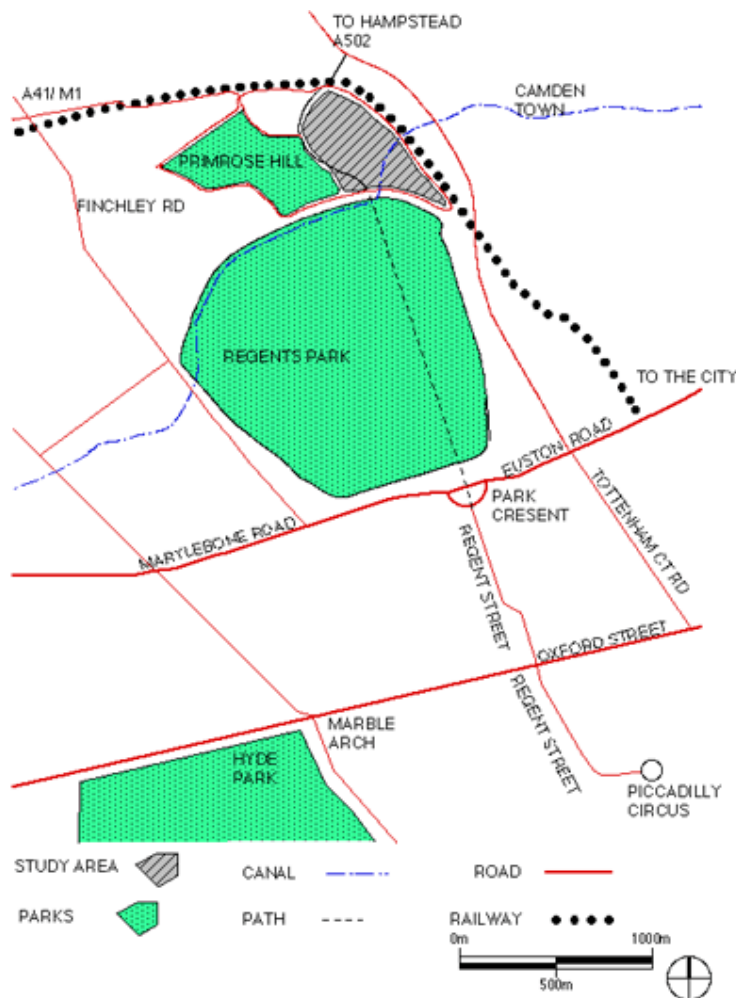


FIGURE ONE : CENTRAL & NORTH WEST LONDON WITH STUDY AREA SHOWN

fig. 1 Central and North West London with study area shown.

John Nash and the Prince Regent developed Regents Park which provided a reason for developers to venture the one and a half miles north of the Town. Once the developers had reached the southern edge of Primrose Hill alongside Regents Park the pressure to build over it was enormous. From 1837 to 1839 owners tried to exclude the public but this was stopped by lawyers. A Bill of Parliament to convert the whole area into a cemetery was narrowly prevented from becoming an Act of Parliament. Mother Shipton was also worried and stated:

'When London surrounds Primrose Hill, the streets of the Metropolis will run with blood'(2).

William Blake in the preface to Chapter II of Jerusalem in 1804-1818 wrote:

'The fields of Islington and Marybone.

To Primrose Hill and Saint John's Wood.

Were builded over with pillars of gold.

And there Jerusalem's pillars stood'(3).

This alludes to the use of the Hill by Druids, which has continued to the present day. Peter Ackroyd also comments that Blake was working in South Molton Street at the time and he was watching the construction of Regent Street and Park Crescent to the north. This led to this, which is 'his own vision of the apocalypse', (4) as the building gangs moved northwards.

The Park both threatened and enlivened this area. The Canal and Railway also divide and join Chalk Farm to the rest of London.

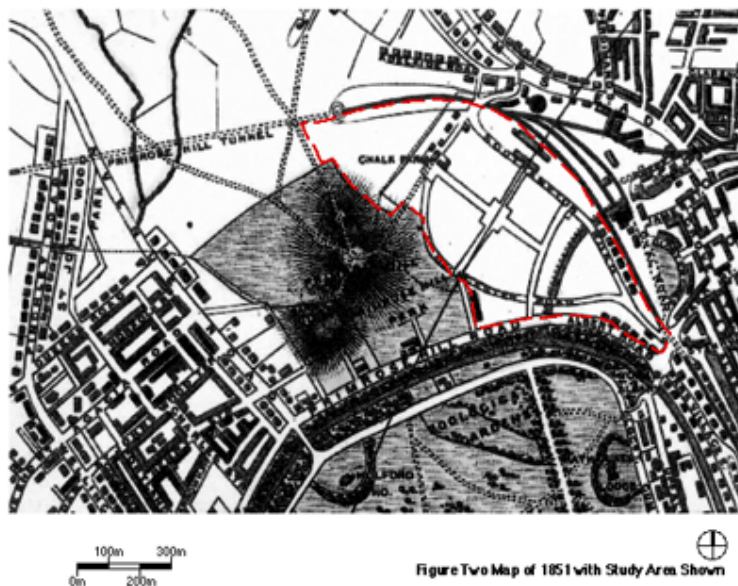


fig. 2 A Map of 1851 of Primrose Hill with the study area marked over.

The Canal

The Canal was built by Nash at the same time as the Park on its northern boundary. It cuts abruptly north to Camden Town at Cumberland Basin, which gives a strong path that links

Primrose Hill to Camden Town. The eventual canal route was dogged by controversy and commercial arguments. The Grand Junction Canal at Paddington Basin needed a link to the Eastern Docks and Nash wanted the canal to go centrally through the Park, but the Crown refused access to the Tyburn water.

A Q.C., Mr Agar, prevented the access of the workmen by a barricade of his gardeners. There were fights, arrests and court cases between 1813 and 1832, which resulted in higher compensation to the landowner for the canal at the bottom of his garden and a circuitous route through Camden. John Richardson states:

'Nowadays, of course, a canal going past his garden would increase the value of his house, but Agar considered differently'(5).

Overall Nash welcomed the canal as a way to give a picturesque boundary to his Regents Park with the sails of the barges behind the trees as a decorative feature. The sails have gone but the canal remains an attraction of the area especially with the tow path improvements after 1967.

The Railway

The Railway also had a mixed response in its early years. Before 1837 the Primrose Hill area was bounded by Regents Park to the south, canal to the southeast a primrose covered hill and fields beyond. A map of 1851 (Figure Two) shows the roads creeping up the Hampstead Road to form the western grid of streets of Camden Town. The railway route is plotted as a single-track cutting through a rural landscape. The building of the present day village was poised to commence with plans already laid for Adelaide Road and the Chalcots Estate.

In 1837 there were three trains a day going north from Euston pulled by small and slow locomotives. The need to go under the canal and then climb to Euston had produced a slope too steep to be climbed by contemporary trains so a winding engine was built at the junction of the railway and the canal. The two chimneys of the winding engine became a tourist attraction. Richardson says that the railway 'must have seemed rather quaint and jolly'(6) at this time. This explains why big villas were built between 1833 and 1860 in a semi-rural area sufficiently out of town to be attractive but close enough to do business in it. Later as the railway grew in size, the noise and pollution meant that no one wanted to build big houses near it.

The railway became a violent slash in the evolving urban fabric. As the London to Birmingham line became more and more profitable it demanded more land. The dramatic and aggressive impact on NW1 is described by Dickens:

'The first shock of a great earthquake had, just at that period, rent the whole neighbourhood to its centre. Traces of its course were visible on every side. Houses were knocked down; streets broken through and stopped; deep pits and trenches dug in the ground; enormous heaps of earth and clay thrown up; buildings that were undermined and shaking, propped by great beams of wood'(7)

The intrusion of a noisy and dirty railway destroyed the pleasant nature of the area. The railway has proved to have benefits for the imaginability and morphology of the area but these abstract urban concepts were smothered for 120 years by pollution. The railway was responsible for all the urban and social decay in Primrose Hill and adjacent Camden Town.

DECLINE AND SOOT.

The railway company then decided that this area was ideal for all the other activities that needed to happen one mile out of the Euston Terminus. In 1844 a large part of Chalk Farm

was claimed by the railways for maintenance and handling. The new depot meant that the railway drivers had to discharge smoke and steam continuously as they shunted.

The smoke reduced the desirability of the houses and they were rapidly subdivided to provide as many lodging rooms as possible for the mainly Irish railway workforce. These previously desirable houses began to spiral downwards in value as the railways grew.

From 1860 onwards the streets of Camden Town and Chalk Farm became a byword in depravity and prostitution. The proximity of the park and the cheap lodging houses combined with the presence of a male workforce away from home made this an inevitability. The Victorians believed that north of Euston Road was corrupt and degrading as this extract from a contemporary novel shows:

'When the cab had crossed the junction of the Euston Road and Tottenham Court Road, unknown London with all its sly and labyrinthine romance lured his fancy onwards..... At a bridge in Camden Town the hansom clattered through the murk beneath, past dim people huddled upon the pavement, past a wheelbarrow and the obscene skeletons and outlines of humanity chalked upon the outlines of the sweating brick..... He caught sight of a slop-shop where old clothes smothered the entrance with their mucid heaps and, just beyond, of three houses from whose surface the stucco was peeling in great scabs and scrawls of verdigris' (8).

There is documented police evidence of brothels in St. Mark's Crescent, Gloucester Avenue and Park Village East, amongst other roads. Today, these three streets probably represent some of the most sought after homes in the study area.

Three reports amongst many mention urban life in 1950's Primrose Hill as dirty and depressing. They also mention the relief when the railway line was electrified in 1960. This electrification was done solely for the convenience and efficiency of British Rail. However this action helped begin the renaissance of the area.

David Thompson in his book 'In Camden Town' says:

'The whole street bathed in smoke for much of the day; indoors was the grime of the corrosive dust that spread from the sidings and the main line. Sue Gentleman asked us why we called it the 'Smoke School'..... Anyone too young to have know it in the steam train days would hardly believe that the children used to run around the pavement and sit through lessons at the sulphurous mouth of Hell. The Primrose Hill Primary and Infants School was built near the coaling station where dozens of engines waited their turn night and day, pouring smoke from their funnels into the acrid air above them'. (9).

H G Wells lived at No. 46 Fitzroy Road from 1889 to 1891. The Martian invaders in his War of the Worlds (1898) set up camp on Primrose Hill and Christopher Rolfe is convinced that the 'Martian fighting machines, described by one witness as boilers on stilts were inspired by those engines belching fire and sooty smoke which ran in and out of Euston Station past Well's house all day' (10). The Martians use a heat-ray and a poisonous black gas which left a thick sooty layer behind to kill the inhabitants of Chalk Farm. Wells had complained of the soot and noise when he lived here.

Another resident, Caroline Ramsden notes:

'Camden Shed, outside which the locomotives stood to blow off their surplus steam and smoke at the end of a run, was situated at the east end of Fitzroy Road. As a result the atmosphere in the vicinity was often worse to that on a main line station platform, and the dirt which collected everywhere had to be encountered to be believed. The change was most welcomed when the line was electrified in 1960' (11).

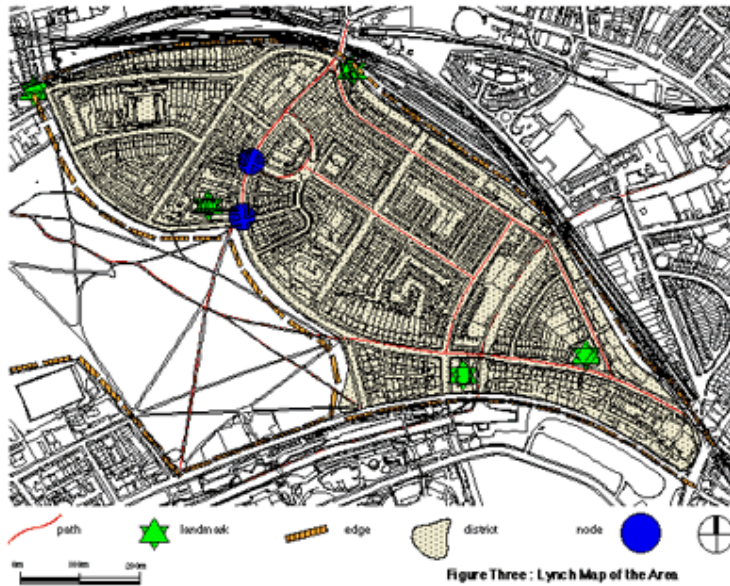


fig. 3 Map of the study area showing it according to the Lynch's notation for 'Path, Edge, District and Landmark'.

The electrification of the railways provided a fertile ground for the changes that the 1960's brought to high density urban areas.

THE IMAGINABILITY OF PRIMROSE HILL

Kevin Lynch says that:

'By the intensity of its life and the close packing of its disparate people the great city is a romantic place, rich in symbolic detail. It is both splendid and terrifying, the landscape of our confusions as Flanagan calls it. Were it legible, truly visible, then fear and confusion might be replaced with delight in the richness and power of the scene' (12).

After 120 years of squalor the area suddenly leapt up in 30 years and became a good quality, high density, urban village. Most of this is due to a strong legible image created by the boundaries of Park, Canal and Railway. These give a degree of segregation balanced by integration with the central London access roads. Once the railway soot disappeared the area was ready to achieve the romance, symbolic detail, delight and richness that Lynch mentions.

Figure Three shows the study area annotated using Lynch's notation for Path, Edge, Node, District and Landmark. These are based solely on field analysis and anecdotal evidence. The Park forms a strong southern Edge and the Railway a northern edge. The Park and Railway curve as convex and concave sweeps and almost meet at both extremities. This is highly unusual in that the whole District is formed mainly of two Edges. This is one of the reasons that the high perception of a defined district is reinforced. Within the Edges an area is formed which has a curved front head and tapered tail running approximately west to east. There are two entry points at the head and tail and three other points of entry to the village. To have a total of five entry points to a high density residential of 35 hectares is very low, especially within typical Victorian gridded streets. Many Urban Designers following Lynch would propose multiple entry points to open up to the periphery. However the special nature of Primrose Hill is actually reinforced by the few entry points. The later Space Syntax Analysis will show that the balance of Integration and Segregation is subtle but beneficial.

The Landmarks of the area are less powerful but it can be argued that the Edges are so dramatic as to be Landmarks themselves. All the five landmarks are at the five entry points which reinforces their dramatic nature. St. Marks Church is the central and St. Mary's is the western landmark. Two public houses, the Pembroke Castle and The Queens are the southern and northern entry points. They sit at both ends of the shopping street, Regents Park Road and are visible from a distance. The entry points are made legible and are landmarks in Lynch's terms. Unfortunately most of today's designers of Urban Villages have only housing units to manipulate into significant gateway. These often fail in terms of scale and urban grain.

The Paths are the main routes within the street pattern which is a grid with distortions at the edges. A strong cruciform shape bisects the village but analysis shows that only the east west route is a Path in Lynch's terms. The curve of the shopping street and the paths in the Park are much more significant.

The Canal is obscured on the Ordnance Survey map but is highly significant as a Path. It sits 8 metres below the road and rail line and is less of a visual feature than the Park and Railway. However the north west route under the rail line makes a direct link to Camden Town and Chalk Farm Market which is impossible by any other means. The canal path connects the quietest part of NW1 to the noisiest part of the market. The 500 metre walk joins urban vitality with the residential area.

The Node is the last typology to be examined. The Regents Park Road activity is a 250 metre run of shops and restaurants on a curving street that leads to the railway bridge. This stretch of road is perceived as the heart of Primrose Hill although it is one third in from the western edge.

The inhabitants of Primrose Hill feel strongly bounded by the two Edges, with five Landmarks marking the entry points. The Paths are logical with the canal forming an unusual and useful link against the grain of the other paths. The shopping street forms a linear Node which focuses the daily life of the inhabitants.

As a small scale, imaginable area it represents a validation of Lynch's theories and perhaps helps to explain why the area is more sought after than adjacent Camden Town or Kentish Town. Both of these benefited from the loss of railway smoke pollution and with the 1960's rush for gentrification and have changed massively. However the imaginability of Primrose Hill makes a more defined district. This has concentrated the urban improvements in a more crystallised way.

MENTAL MAPS

Gould and White wrote 'Mental Maps' in 1974, 14 years after 'The Image of the City' and they comment that:

'Lynch's concern for the information that people have about the city of Boston has been translated into practical planning terms in Birmingham... by... Brian Goody in 1971'. (13).

The Birmingham example seems to be one of the first recorded examples of Planning for Real being used as a way of understanding the environment. It involved asking many different people to quickly describe their area in terms of their perceptions. Because the response was so large the planners were able to draw up a weighted map of the population's view of their city which was then used to make proposals. These techniques were then expanded over the next 20 years to form an accepted principle for research and consultation in urban planning matters.

No one has conducted this exercise on Primrose Hill although recent council parking schemes have resulted in numerous questionnaires being sent to residents. The defined

image of the area has led to a community spirit which has influenced the urban planning process. The local pressure group has proved effective in altering parking schemes and objecting to Planning Applications. The image of the village reinforces the Mental Map and strengthens the community control in the area.

For the purpose of this paper a full scale survey was not practicable but as a test of the preceding theories the following exercise was undertaken. The 5 estate agents dealing with property in the study area were written to and asked to plot their mental boundaries of the area they could truthfully advertise as Primrose Hill. As estate agents are always suspected of expanding the edges of a desirable district it is relevant to examine if they could do it in this case.

The replies from the 3 that participated are shown on Figure Six. The high degree of correlation shows how defined the village is. It is difficult to think of other London areas that would achieve such consensus. Most of the desirable areas, Hampstead, Highgate, Chelsea, Fulham, Clapham and so on have diluted edges which enable residents to upgrade their stated location for the benefit of potential purchasers. Even the well defined villages in London tend to be bisected by major transport routes which dilute their coherence. Only the Central London areas of Mayfair and Soho are similarly legible.

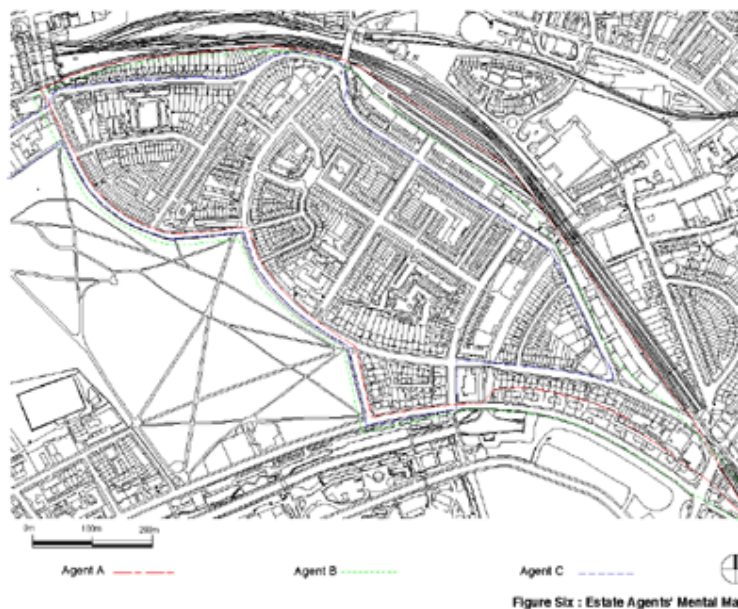


fig. 6 Mental map of Primrose Hill according to three different estate agents.

This human instinct for belonging and community could be used to add the extra richness to urban design schemes by providing the village legibility. Traditional masterplanning has tended to use economic zoning or transport models as strategic starting points. The socially generated views of a Mental Map would be less diagrammatic and more subtle than a purely economic analysis. To ask the designer to draw the mental map of the future inhabitants may act as a graphic Mission Statement of how the sense of place would be achieved.

LEON KRIER

Leon Krier first made explicit definitions of Urban Quarters in the late 1970's as follows:

'Each quarter must have its own centre, periphery and limit..... the Quarter must integrate all urban life (dwelling, working, leisure) within a territory dimensioned on the basis of the comfort of the walking man; 25 - 35 hectares in surface and 10,000 to 20,000 inhabitants' (14).

The Primrose Hill village is 35 hectares with a population of 7,500. Figure Four shows the distance covered in 5 and 10 minutes from the shopping street. Leon Krier, Richard Rogers and many theorists state that a ten minute walk time scale means a 800 metre journey which gives a comfortable walking distance to all amenities. In this situation almost all areas are accessible in half the time. This shows that the catchment area of the shop is greater than the study area which accounts for their success. Although the area is 35 hectares the population does not reach Kriers aspirations of density. However the Urban Villages Forum believes the 5 minute walk is more appropriate and this seems to suit the study area better. Leon Krier confesses a flexibility in his real life projects, for example in his 1981 project for a Stockholm suburb his manifesto is altered to read 4 to 10 minutes walk. Alternatively Alexander proposes 20 minutes which is too large to show on this diagram. This highlights the differing perceptions of density between Europe and America.

Figure Five shows the areas of employment. Most Londoners perceive Primrose Hill as a residential area but the development of the Victorian Mews and factories into offices and studios gives a wide range of employment types combined with the shops and restaurants. The only non correlation with Kriers theories is that the working population comes from many other districts all over London. Shopping, working and leisure (in the form of the Hill) are all within walking distance and this makes the area sustainable and representative of urban life.

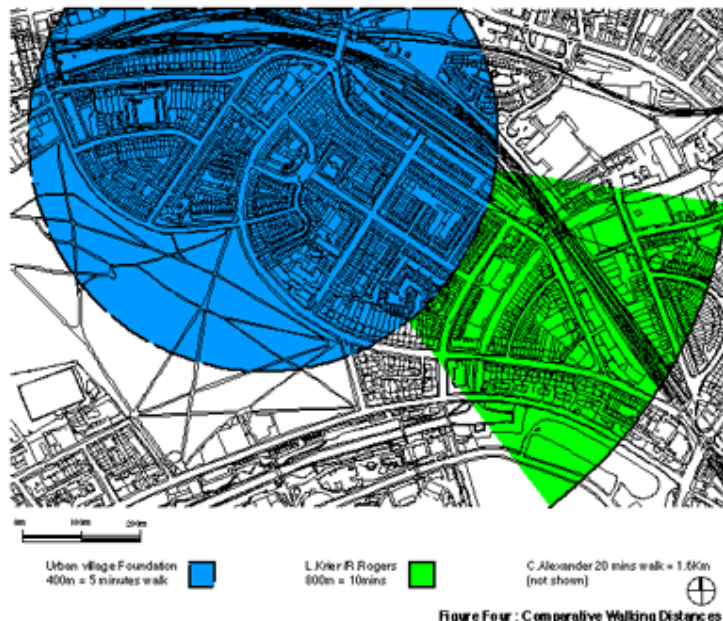


fig. 4 The study area showing comparative walking distances.

CHRISTOPHER ALEXANDER

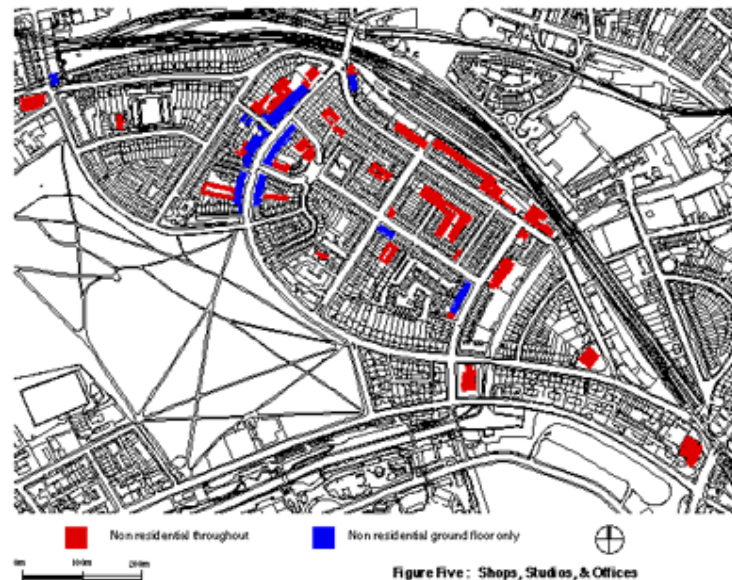
It is useful to test some of Christopher Alexander's 'Pattern Language' assertions against the two hundred year old reality. The characteristics on the village which are relevant to Alexander can be summarised as follows: There are 900 houses of which 190 are in multiple occupation. There are 750 flats which were purpose built in the 1960's and 1970's. This gives an estimated population of 7,500 people on 35 hectares (8.5 acres).

Christopher Alexander's has made many pronouncements upon what makes a successful town. The first 94 statements in Alexander's 'A Pattern Language' (15) have been examined and the strongest correlations between Alexander's aspirations and what exists in Primrose Hill are noted briefly.

9. 'Scattered Work' is described as 'Every home is within 20 minutes of workplaces'. This doubles Krier's rule probably because of the difference between California and Luxembourg densities. The backland developments give these scattered and accessible workplaces although not many locals use them.

10. 'Local Transport Areas' promote a Ring Road approach around local transport areas of 1 to 2 miles across with local paths and roads which discourage car and truck use. The strong boundaries and the disconnection of the eastward links make Primrose Hill a traffic island. Recent introductions of one way systems have reinforced this, giving an almost perfect example of this Alexander dictum, especially in the cross routes of the canal.

11. 'The Community of 7,000' requires that geographic and historical boundaries mark the community. This happens here with the population of 7,500. Alexander's aspiration of a decentralised city government is not a reality in 1990's London but the local action groups have undoubtedly influenced planning, development, parking and transport policies over the



years.

fig. 5 Distribution of shops, studios and offices in Primrose Hill.

14. 'Identifiable Neighbourhood' and '15, Neighbourhood Boundary' has been demonstrated earlier in the Lynch analysis. The 300 yards distance that Alexander are mentioned compares with 320 yards in the study area. About ten zones are defined by the road pattern giving neighbourhoods of 700 people to Alexander's goal of 500.

16. 'The Four Story Limit' is mainly present even in the 1960's and 1970's rebuilding.

22. 'Nine Percent Parking'. There are no garages in the Victorian buildings and all the mews have become studios and offices. There are perhaps 40 garages in the whole area. The road parking has recently been restricted to residents and local business as a massive improvement in the parking situation. This provides 18,000 m sq. of parking in a 350,000 m sq. area which is 5%.

23. 'Parallel Roads' run east west and actively discourage the cross traffic that Alexander maintains causes congestion and fragmentation.

24. The 'Sacred Sites' proposed here identify Alexander as a child of the 70's in California. However Primrose Hill itself has always been admired, celebrated and discussed as a significant place from Blake onwards.

25. The 'Life Cycle' aims to balance all ages in a community. Figure Seven shows the multiple dwellings and the single family homes which give a diverse range of accommodation. This is the urban memory of the lodging houses which existed here before. The flats serve a transient population of single people in their first or second jobs in London who are attracted by the area's proximity to Camden, and the West End. The single occupant houses are occupied by families who are appreciative of the Hill, the playgrounds and the space. The older population tends to move away with the exception of the 100 people in the old peoples flats facing the Park.

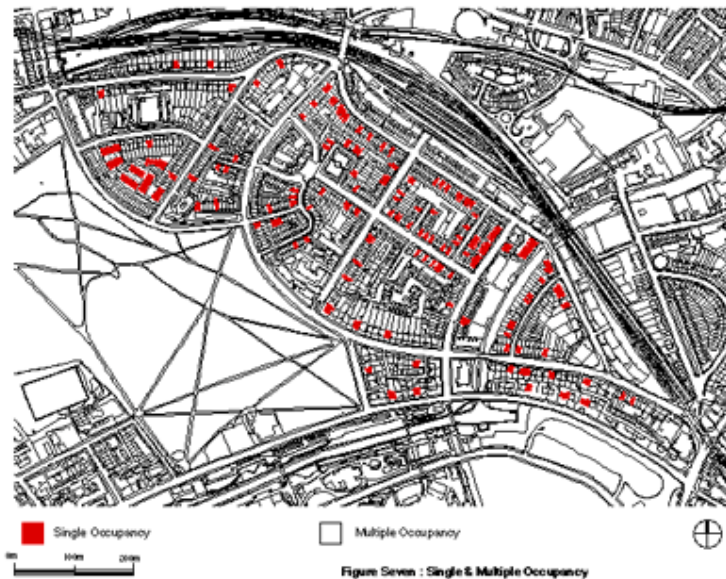


fig. 7 Distribution of single and multiple occupancy.

28. The 'Eccentric Nucleus' describes how the centre of a neighbourhood should bulge to accommodate the activity. This is the case as the main shopping area is at the western wider edge of the village. Alexander says that the eccentric centre means that adjacent neighbourhoods can use the services and add to the activity. Adjacent Swiss Cottage and Belsize Park residents use the Primrose Hill shops and restaurants which are within the 10 minutes walk. Also the many businesses here add to the usage of restaurants and shops.

30. 'Activity Nodes' is similar to the Lynch analysis.

31. 'The Promenade' is a central part of the activity of the shops in Regents Park Road. The road opens to the Park at one end and the Railway Bridge to the other which gives a purpose to the walking.

33. 'Night Life' is proposed as a way of encouraging diversity and interest in an area. Although many older residents complain about the growth of restaurants and pubs here it is certain that their presence gives the 'well lit, safe and lively places' that the book applauds.

35. 'Household mix' has been shown by the mix of tenures which have evolved.

67. 'Common Land' is evident here as the Hill itself it occupies 180,000 m sq which is 34% and exceeds Alexander's rule of 25% of the land as common. This gives the 'Connected Play' of 68 by its playground and the 'Local Sports' of 72. The Hill also achieves the 'Public Outdoor Room' (69) along with Chalcot Square. The main shopping area provides many 'Individually Owned Shops' (87), 'Street Cafes' (88) and 'Corner Grocery' (89)

These 20 examples can be expanded but are sufficient to demonstrate that Alexander's beliefs contribute to a vibrant urban environment, in Primrose Hill. The only differences are that his densities are lower than current thinking and that he wants inhabitants to work in the area. The rich mix between inhabitants and visitors, in my opinion, strengthens the urban life.

The Urban Village Forum

The group was set up in 1992 from an initiative by the Prince of Wales and is now working alongside developers, English Partnerships and other property professionals on many schemes including the Millennium Village at Greenwich Peninsular. It is interesting to compare their 1990's aspirations with the 1970's desires of Christopher Alexander. Mostly the principles are the same but expressed differently and are here quoted from their publicity material (16) and applied to Primrose Hill.

'The variety of uses, such as shopping, leisure and community facilities alongside housing' all exist within the study area.

'A choice of tenures, both residential and commercial' is available.

'A density of development which can help encourage non housing activities' is present because three and four story terraces dominate the area with many flats giving a density of around 220 dwellings per acre.

'A strong sense of place with basic amenities within easy walking distance of all residents' is achieved here.

The 'high level of involvement by local residents in the planning and onward management of the new development' is actually achieved by residents attrition not by Local Government support.

'Making Mixed Use happen' is the forum's rallying call. I believe it can learn directly from the evolution of the backland spaces in Primrose Hill which are into a thriving series of offices and studios including world famous architects, designers, clothing companies, record companies and recording studios. The Urban Village Forum's prototype neighbourhood echoes many of Alexander's and Kriers points and proves their present day relevance.

'The Planning system needs to do more to encourage walkable neighbourhood units, which ideally bring together different uses and activities within a quarter mile radius from centre to edge (25-35 hectares in size)' (17).

The fact that different commentators have a consensus about the neighbourhood size strengthens the need to examine existing settlements which match their theories. However the varying theories of the optimum walking distances vary greatly as Figure Four shows. This evaluation of Primrose Hill shows that the lessons inherent in the area can be expanded to new developments of brownfill sites which the Urban Village Forum is promoting. Many of the brownfield sites are segregated from the city as a result of their previous industrial use. Primrose Hill shows how only a few key links to the city can successfully integrate the urban Village to its context.

THE SOCIAL LOGIC OF SPACE - BILL HILLIER AND JULIAN HANSON

The pioneering work by Bill Hillier and Julian Hanson, published in 1984 as *The Social Logic of Space* described a theory resulting from field work. This postulated that the social use of space can be determined by a factor described as configuration. This can be objectively and mathematically defined which makes it possible to produce a theory with a scientific measure of configuration. This can be compared to a measure of actual use of space in the field.

Investigations into large urban areas need extensive computing power to describe the results. The result of this 20 years of research has produced the sophisticated evolution of the Space Syntax software called Axman. This methodology analyses the axial lines of an area and renders the complex calculation as a graphic format which is a summary of the relative Integration and Segregation of the routes.

Integration is the term which refers to well connected space and segregation refers to disaggregated space. This is a modern view that originated with Jane Jacob's, *Life and Death of the American City*, 1961. Previously the concept of Planning involved economic models, transport models or zoning. The *Social Logic of Space* redresses this balance by noting that the social issues are more important and complex. Life in cities depends on a dense interaction between visitors and inhabitants. In crude terms a segregated space discourages this interaction and will not have urban life or successful public and shopping uses. In the worst cases it has been proven that crime is more prevalent in highly segregated areas. A fully integrated street, however will tend to have evolved as a successful High Street which encourages people, activities and vibrancy.

The theories are more complex than this as the book; '*Space is the Machine*', explains (18) but architects as diverse as Foster, Farrell, Rogers and Grimshaw have used the Space Syntax Laboratory to refine their urban proposals.

Figure Eight shows the Study areas in two ways. Radius = 1 shows the more global structure with Regents Park Road as an integrated shopping street. Radius = 3 highlights the more localised structure and shows how the Park Paths and the Canal are significant in these terms. The lighter lines represent more integrated routes and the darker lines the segregated.

Overall the analysis is confirmed by the real life situation but several points from the analysis are relevant to my understanding of the place and the analysis of the programme. The main route across the Hill is very prominent. On the ground they are definitely not axial views because it rises 300 metres to the top of the hill and beyond. Nevertheless it is the most popular route across the hill. The canal is similar as it is hardly visible because it is below the road level but is a crucial integrator.

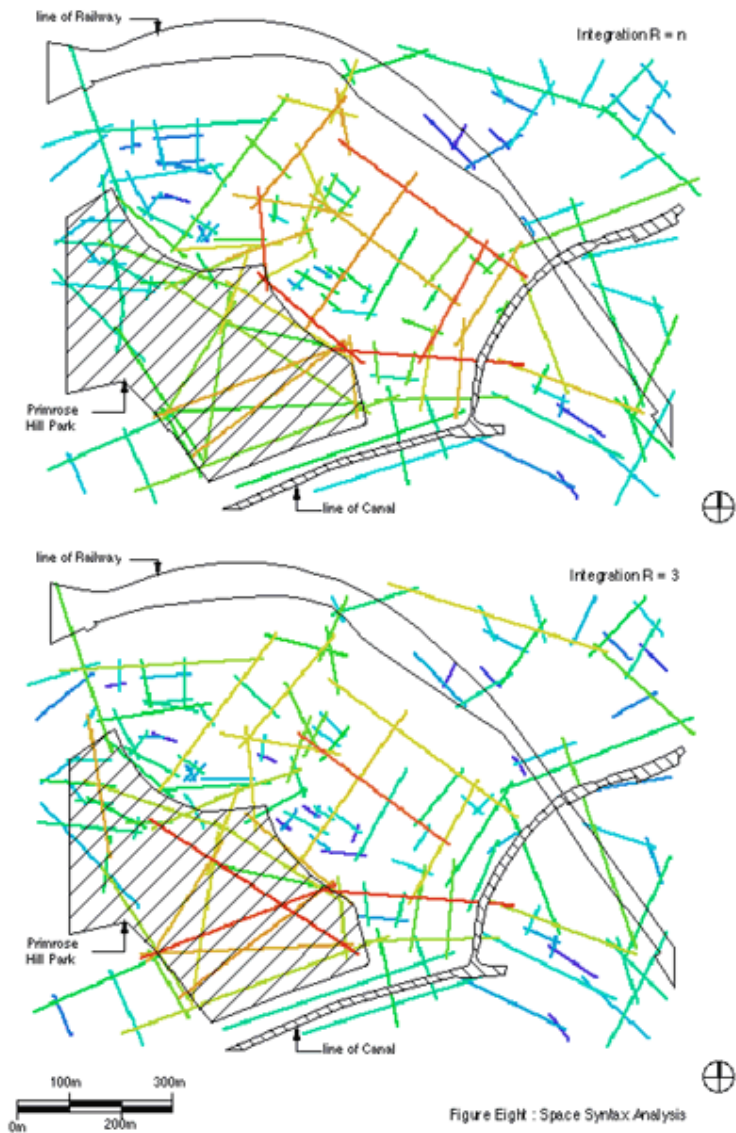


Figure Eight : Space Syntax Analysis

fig. 8 Spaces syntax analysis, diagrams showing the results of the radius 3 exercise as a preliminary study of a small area. The spaces with the darker colours represent integration, and the lighter colours show segregation.

The other most integrated route is Regents Park Road, which is the Linear Node in Lynch's terms and has all the major shops and the restaurants. The other two streets with shops have a lower measure of integration and it is true they have the more borderline shops and the restaurants most likely to fail in less than a year.

The four most popular public houses all lie at the junction of two integrated routes. The segregated routes tend to be the dead ends leading to the backyard offices and studios but most of them are only one axial step to an integrated route.

The same applies to the whole area. Although the bridge over the railway is not highly integrated it is the only crossing point to the north and is only two axial steps from the Hampstead Road which is a major London Integrator. To the west one axial step takes you to the route that links direct to Marble Arch. To the South Regents Park's Boardwalk takes the pedestrian direct to Portland Place, Regent Street and Piccadilly.

This brief and superficial overview shows clearly that Primrose Hill is a contained unit which is closely connected to major axial routes. However these routes skirt the perimeter of the area and confer all the benefits of urban connectivity without the disadvantages of a major road in the middle of a village. Many of the present brownfield sites being examined in Europe are highly segregated from their cities. Hillier's methodology demonstrates a technique which can be used to reconnect them to the city in a beneficial and scientifically predictable manner.

However the computer analysis does not take into account topographical variations such as the hills and sunken canals here. A degree of field research is always needed to check the mathematical assertion against the reality to make this a fully applicable tool. On the other hand the scientific analysis reveals the deep structure of the space which is not readily apparent. The cruciform roads that divide the space jump out as strong lines graphically but they are not well integrated and do not form significant routes. This shows that Space Syntax analysis gives a more objective view of the deep structure of the space than a visual inspection.

PARTY WALL WIDTHS

Figure Nine shows the widths of Party Walls across the study area. It is well known that Victorian London speculative builders used pattern books to build their terraces. Their choice of plan width determined every other part of the house including length, ceiling heights, quality of stair and style of mouldings. Figure Ten shows the plans of the smallest and biggest terraced houses in Primrose Hill to the same scale. The width had a direct relationship to the expenditure required to build the dwelling. The quality and size of the finished product then determined selling price and profit.

If the house was not big enough for the quality of an area the potential profit was lost. However if the house was too grand for its surroundings, difficult sales led to bankruptcies. There are breaks in the terraces that local historians have proven are the result of one builders bankruptcy and another restarting several years later. The speculators mainly got it right and their delicate balancing between desirability and size of houses creates this mapping of value across the study area. Value increases as distance from the railway increases. The exception is some of the Gloucester Crescent and King Henry's Road houses that were built before extension of the railway lines. When they were built they were 100 metres from moderately quiet tracks and seemed a good proposition. Twenty years later the railways had caught up with them.

'It may seem odd that such grand villas were built along the railway. however, one must remember that in 1840 there were only four tracks, much farther from the houses, and the trains were rope-hauled past here for the next few years' (9).

The Railway is a magnet repelling value but the Park attracts it. The push and pull effect distorts the disposition of value to reach the peak of attractiveness around Chalcot Crescent, Chalcot Square and St George's Terrace.

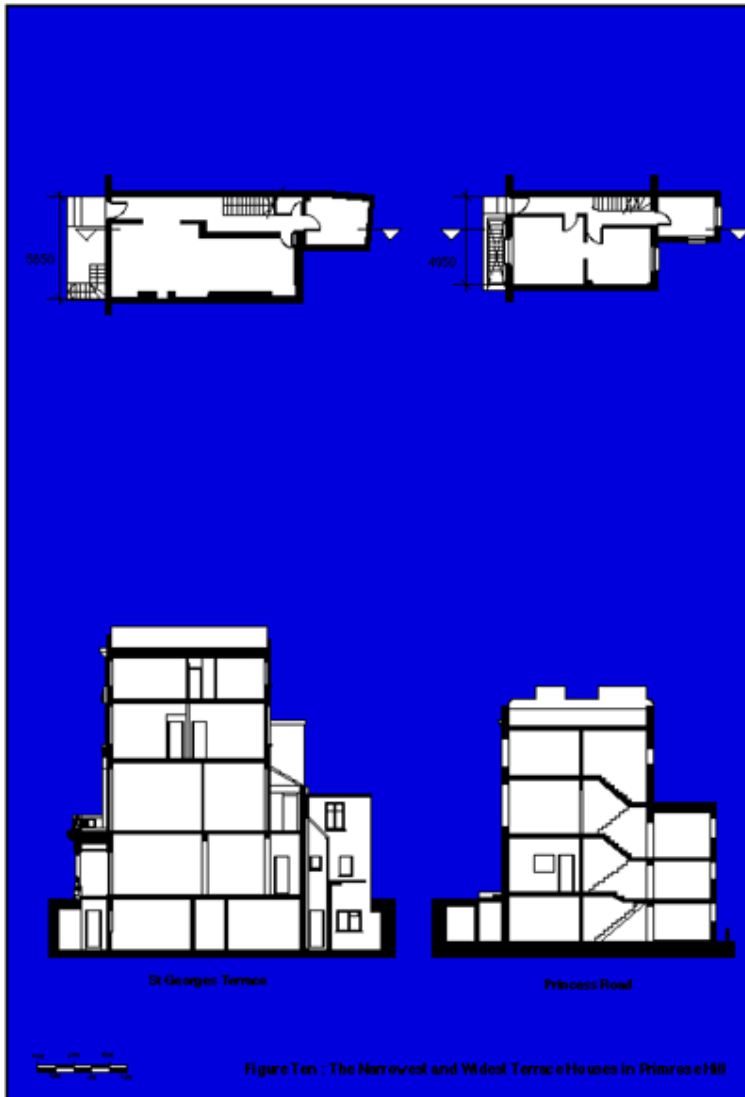


fig. 10 Examples of narrower and wider terraced houses in Primrose Hill, similar in basic layout and proportions, but with the larger properties having 'grander' details.

It is interesting to speculate if the Victorian building values have been maintained today. From an overview of the area the general prices correspond to the Victorian builder's judgement. The one thing that broke the values down was the sooty trains in the goods yard. Their electrification in 1960 allowed the blighted houses to be attractive once more. The smaller workers houses closer to the railway meant lower prices for the urban pioneers who took them over. This was one of the main catalysts of the regeneration of the area.

URBAN PIONEERS AND GENTRIFICATION

Much has been written about the gentrification process in the 1960's which crept across the inner London suburbs. Some say that the pushing out of long term renting residents was a negative process. This was a side effect but the Local Authorities were doing the same thing at the time in the name of Comprehensive Redevelopment. In retrospect it has been better to preserve the Victorian street by the urban pioneers than the destroying of the urban grain by the Local Authorities. But to encourage this process there must be an desire for the area and a impetus to start regeneration.

Michael Hebbert's book 'More by Fortune than Design' describes how London has developed in many random and overlapping ways. Many urban designers talk about 'seeding' as a process to encourage improvements in a disadvantaged area. The Primrose Hill urban pioneers did this seeding before the term was invented. The examination of this process can give lessons on how subtle and complex the seeding process is. Hebbert feels that this has been a positive process in creating Urban Villages.

'For decades the gentrification and displacement have been a dominant concern in studies of London's intensely competitive housing market. The squeeze on tenants and new owner occupiers is real and critical. But Ruth Glass's foreboding (1973) that Inner London, the old LCC area, will be 'gentrified with a vengeance and be almost exclusively reserved for selected higher class strata' was not fulfilled. The physical mixing of tenures within neighbourhoods, the security of council housing, the survival of philanthropic landlordism and the inventiveness of the private rental sector (legal or otherwise) sustain a degree of social mix in even the wealthiest parts of west Inner London - a point well shown by comparisons with New York. The 'Village' metaphor applied so often to London neighbourhoods is not just a conceit of property writers or tourist guides; it captures a real quality of social and tenure mix unique in urban Britain'. (20).

As a contrast, Jonathan Raban is critical of the process as he lived through it in Islington when he first arrived in London in the late 1960's.

'It rained eviction notices but the agents and landlords kept the slaughter out of sight of the prospective buyers, who were all people of principle, staunch Labour voters, dedicated lovers of the working class' (21).

Hebbert notes that this 'predatory picture' (22) is not the typical way of colonisation.

The hindsight of 30 years has shown that the process was beneficial to all of Inner London, including Primrose Hill. The people moving out leapfrogged the newly created green belt and pursued, in most cases, the lives that they preferred in suburbia and beyond. Most of those who wished to stay managed to do so.

'The word 'Gentrification' - with its implication of a consolidated stake as a freehold owner - occupier hardly conveys the variety of renting, subletting, sharing, squatting, co-operating and other strategies pursued by young professional for their foothold on the London scene'(23).

There have to be reasons for wanting the foothold and that is where the desirability of Primrose Hill nurtured the seeding. By the 1960s it had the following benefits to stimulate the process. One and a half miles from Central London, good tube and bus connection, close to the green spaces of Regents Park and Primrose Hill, a canal link to Camden Lock, and a strong character and defined image. The electrification of the railway had solved a 100 year problem. The houses were still encrusted in soot and full of cheap bedsits but this helped kick start the process as they were cheap to buy. This process took place all over the Inner London suburbs but Jonathan Raban notes that it started in NW1.

'The movement really started in London in the late 1950's and early 1960's with the colonisation of the western side of Camden Town NW1 between Regents Park and the Roundhouse then they went steadily eastwards, across Camden, into Islington, Lower Holloway and Barnsbury' (24).

John Richardson describes the process in more detail.

'Gloucester Crescent and Albert Street led the gentrification movement in Camden Town..... and then, as the smoke from the railway ceased to enfold the area, so renovation in Chalk Farm spread from the grander houses of Regents Park Road and Chalcot Square' (25).

I would argue that the Imaginability and Space Syntax studies prove how the deep structure of the urban grain has given positive starting points to the improvement of the area. The renovation of a polluted area has rediscovered the attractive deep structure of the village hidden in the soot and decay.

PEDESTRIANISATION

The last piece of the jigsaw which enhanced the urban life here was an unplanned event. It was a very small change which has had a major impact on daily life. Regents Park Road leads to Bridge Approach which connects northwards to the main integrating routes. Regents Park Road was a major east west route from central London to the east and made it incredibly busy. Even now it is possible to hear elderly taxi drivers telling you that the closure of this railway bridge added 3 miles onto their favourite routes to Hampstead, Kentish Town and the City.

In the 1960's two children were knocked down and killed at the railway bridge at the end of Regents Park Road. The outcry was made articulate by the first of the urban pioneers that Raban disparages. As a result the bridge was closed to traffic and one of the five entry points to the village was blocked to cars whilst still allowing pedestrian access to the next district.

This was the most dramatic improvement to the area since rail electrification because Regents Park Road was no longer a through route. The massive decrease in traffic flows encouraged restaurants and shops to settle and form an even more vibrant village centre. Some residents would argue that the process has gone to far as yet another overpriced shop selling novelty goods opens. This small act of road closure has consolidated the desirability of the true urban village. Some may argue that it has also bought in influx an frivolous shops that Jonathan Raban calls the Moroccan Birdcage outlets. However the lack of through traffic means that these shops never last as long as the more practical ones as they are non sustainable in a mainly residential area.

An urban promenade has been created in Regents Park Road with all the richness of a village centre. This would not have been possible if the road had remained a busy traffic through route. This is an essential difference to the other quoted London villages of Highgate, Hampstead, Chelsea and the like. Although they have many attributes, the presence of the busy through routes ultimately prevents the formation of a relaxed village neighbourhood.

LESSONS DRAWN

My years teaching at the University of Greenwich have exposed me to many theories and concepts of late 20th Century Urban Design. Many of the student schemes were stimulating, innovative, interesting and inspiring and they offer examples of application of the methodologies discussed here. The evolution of Primrose Hill during the last 200 years can offer guidance to urban designers because it represents one version of the Urban Village which is presently being held up as a worthwhile model. My lessons drawn are a summary of how these tools could be used and how they should be expanded and applied carefully.

Use as many tools of analysis as possible.

No one theory can ever capture all the richness and diversity of the urban experience. In this paper the propositions have been selected to demonstrate a relevance to the study area. However none of them fully explained the subtlety of the urban experience by themselves. They must always be backed up by field studies and the cross checking of alternative theories.

'More by Fortune than Design'

Although this implies that the designer can just give in and go home early, I believe a more positive lesson can be learnt. Just as a botanist can assist propagation an urban designer can lay the foundations of improvements. Once these seeding operations are complete the elements of fortune can be encouraged but never completely determined. Alexander talks of evolution and most pleasant urban environments did grow in this way. However Darwin makes it clear that evolution consists of two related mechanisms. Random mutation produces many different types of development. The process of Natural Selection then allows only the well adapted forms to survive the test of time.

What is needed is a type of provoked Fortune, as a way of bettering the odds of a successful outcome. The mutations can be encouraged by the designer as part of the seeding and these can be nurtured to ensure survival in an assisted process of Natural Selection. This recognises the many organic and uncontrollable criteria of the city but uses design as a catalyst to shape the end product.

A strong image of a district makes it a desirable place.

City life is messy, stressful and potentially alienating. If the Inner suburbs can be perceived as Urban Villages then an area of the city can be appreciated as a pleasant enclosure. The current brownfield sites in Europe tend to be close to the Inner Suburbs but alienated from them in terms of pollution and linkage. If they can be designed to feel part of the City but to have their own imaginability they have a chance to be desirable and sustainable.

Mission Statements can be reverse Mental Maps

The device of Mental Mapping appears to be sidelined in Urban Design, but it can offer a way of imagining the tangible results of a potential design. If you can predict how the residents would describe their new Urban Village to a visitor you will identify those features which are desirable. This can then be a Mission Statement which drives the design forwards.

One group of University of Greenwich students in 1997 (.....) produced a tape recording of an imaginary walk around their proposals. Although parts of it were slightly trite the aspirations were exactly right as these extracts show.

'Let's go down this alleyway now, it leads to the river and there is an collection of small shops before we reach a wonderful riverside pub..... The tram stop takes me direct to the shops and is only two minutes from home..... Just around the corner from here are the business starter units which are only a ten minute walk from home' (26).

This is a Mental Map of a place not yet built. If written before design commenced it could form a manifesto for how parts of the urban grain should function.

Railways and Roads are not always bad

Many followers of Lynch would propose bridging, demolishing and burying of roads and railways to 're-stitch' the urban fabric. Although this is often valid Primrose Hill proves that dramatic urban boundaries with a few crossing points can improve Imaginability whilst maintaining links to the remainder of the city. Brownfield sites are often segregated by rail or road links and the celebration of the entry points and the edges can improve the legibility of a district.

Use Checklists

The assertions made by Christopher Alexander 'A Pattern Language' are never going to be totally correct especially when transported from the American 1970's cities of his studies. However some of the ideas should be pursued to test the proposals in a rigorous and organised manner. The themes are echoed time and time again by Krier, the Urban Villages Forum and Richard Rogers amongst many and this ensures their continued application. The

only reservation is that in big cities working and living in the same area is not always practical or desirable. The influx of nearby visitors to work actually brings a richer and more vibrant mix to an Urban Village. This is probably the key difference between the romantic village concept and the urban reality.

Use Space Syntax for analysis and prediction

The success of the Space Syntax techniques seems to increase as more and more world class Architects and Urban Designers use Bill Hilliers' research facilities. If the analytical research is backed by field studies, high quality prediction can be used to show the effect of potential designs. However, topography gives another dimension to the urban form and must be factored into the analysis.

Speculation, Gentrification and Renovation are seeding in a positive way.

These processes tend to produce instant negative reactions. However the great speculators of London were a positive thing. The Victorian builders of Primrose Hill achieved a balance of desirability matched to sizes of houses. This has produced a matrix of the right house in the right place which is a positive achievement. Although there is a prejudice against gentrification it is really only what the 'Seeding' schemes of the 1990's seek to achieve under a different name. Stimulation of pride in an area can take many forms and can be beneficial in raising everyone's expectations.

A Masterplan may be only a collection of controls and covenants.

The Victorian growth over the study area was not controlled by Governments or Local Authorities as it is today. It was generated on economic grounds by Landlords. The successful results derive from negative rules and covenants from the Freeholders as well as the positive stimulus from the market.

'The leasehold covenants served not so much as obstacles to bad building as encouragements to good, and an implied guarantee that the rest of the estate would be built to similar standards' (27). The idea that the Masterplan can be an 'encouragement to good' seems to contradict the Local Authorities view of Planning but may be a better way for the Urban Designer to act.

Small changes can create massive improvements

The closing of the railway bridge to motor vehicles was unplanned in Urban Design terms. The capital cost was merely for some signage, bollards and paving. However the impact was enormous and long lasting. It truly was by Fortune rather than Design that the final part of the upward climb of Primrose Hills' fortunes was given impetus by this action. The smallest positive acts by a designer sometimes have the most significant effects long term.

CONCLUSION

The above guidelines offer ways that Urban Designers can be aware of their tools for change and can apply them. Primrose Hill is unique and therefore atypical but the lessons have universal applications.

It appears realistic that great cities can have a village life in some areas, however we must be careful not to romanticise these attributes. The ten minute walk to work may not be achievable or desirable in a modern city and Primrose Hill benefits from an influx of workers every day. What is certain is that the mixture of residential, shopping and workplace gives richness to an area. The interchange of ideas and life that happens between inhabitants and visitors is a significant part of urban living. If these mixed uses are coupled with a choice of

tenure, a density of development and a strong sense of place a vibrant and sustainable area can be formed.

Further studies of other Urban Villages will expand our understanding of the components of a successful urban space. This will help achieve similar environments in future designs for brownfield sites.

Footnotes

I would like to thank: Janis Patterson, Martin Eyre, Mark Baker and Sean McPeake.

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FIGURES

Figure One

Central and North West London - with Study Area Shown.

Figure Two

Map of 1851 with the study area shown.

Figure Three

Lynch Map of the study area.

Figure Four

10 minute shop walk

Figure Five

Shops, Studios, Offices

Figure Six

Estate Agent's mental map.

Figure Seven

Single and multiple occupancy.

Figure Eight

Space Syntax, Diagrams.

Figure Nine

Party Wall Widths of Victorian Terraces.

Figure Ten

The narrowest and widest terraced houses in Primrose Hill.