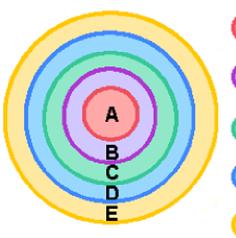
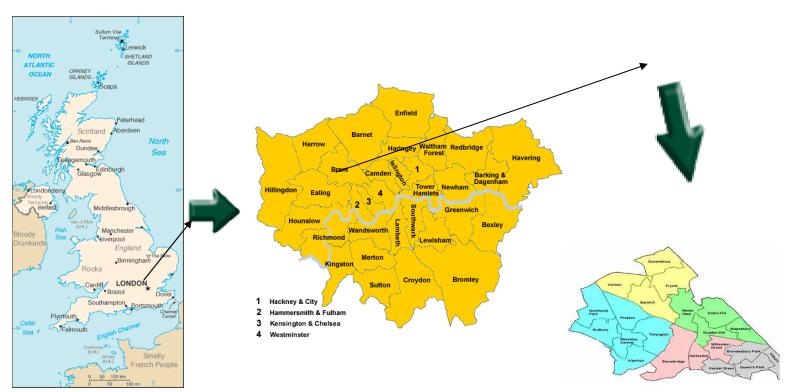


# **Burgess Concentric Ring Model**



- (A) Central Business District (CBD)
- B Zone of Transition
- Residential (lower class)
- D Residential (middle class)
- E Residential (upper class)



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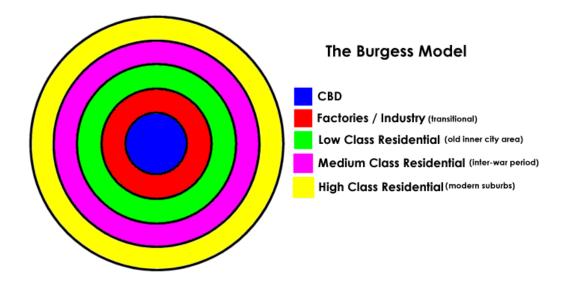
# To what extent does Brent fit the Burgess model?

In this investigation I will be investigating 5 wards, which have been carefully chosen to go from the south to the north of the borough Brent. I will be investigating these wards to see whether or not Brent fits the Burgess mode therefore to do this I will travel through these 5 wards collecting various types of data.

Patterns of land use in cities have often been demonstrated by urban models (theoretical framework). There are three popular types of the urban model. There are the: Hoyt's sector model, the multiple nuclei model and most well known; the **Burgess model**.

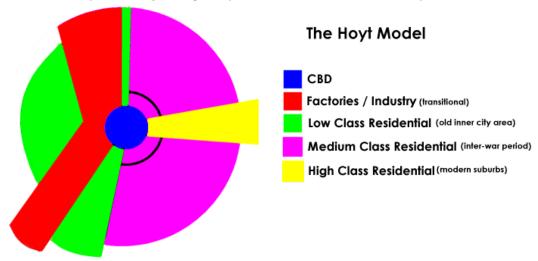
#### **Urban Models**

<u>Burgess model</u>, developed by E.W. Burgess, identified social-ecological zones radiating out from the Central Business District. Ethnic communities, factories, and slums, known as the transition zone, surround the CBD. Outside the transition zone lays a zone of working class housing with higher income residents living in the outer commuter ring.

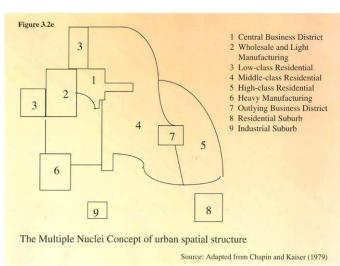


[3]

The Hoyt Sector Model, developed by Homer Hoyt, emerged in 1939 to explain urban growth and expansion and the location of urban land uses. Hoyt recognized that over time a city expanded from the Central Business District along the major transportation lines, such as highways and railroads. This process creates distinctive economic sectors within the city, influenced and contained by the major highways, railroads, and waterways.

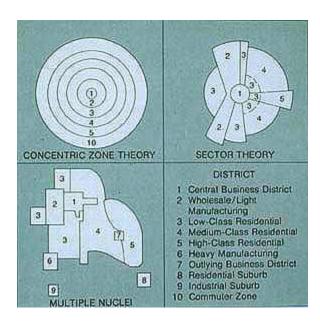


The multiple nuclei model, Geographers C.D. Harris and E. L. Ullman developed the multiple nuclei model in 1945. According to this model, a city contains more than one CBD. Some activities are attracted to particular area while others try to avoid them. For example, a university may attract well-educated residents, pizzerias, and bookstores, whereas an airport may attract hotels and warehouses. Incompatible land use activities will avoid clustering in the same area, explaining why heavy industry and high-income housing rarely exist in the same neighbourhood.



These models have certain similarities they consist of:

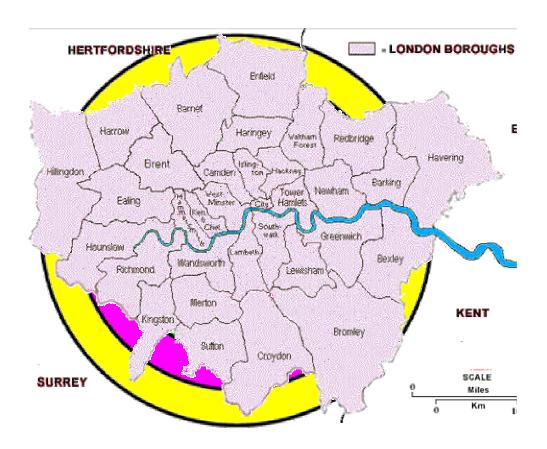
- 1) The central business district (CBD): is where there are the most offices and most major transport links go.
- 2) Light manufacturing area is where most industrial activities take place
- 3) Low class residential: this is were the factory workers in the light manufacturing zone would live because it's not too long of a journey to work. It contains the poorest segment of the urban population, notably it is where the first generation immigrants live, in the lowest housing conditions.
- 4) Inter war period residential zone dominated by the middle class society, this zone has the advantage of being near the major employment areas.
- 5) High class housing: Represents higher quality housing linked with longer commuting costs.



### Problems with the Burgess model

The Burgess model was founded during the 1940's in Chicago there does not take into account of the redevelopment of areas which have occurred recently. Therefore, this model is does not tell the complete truth about different areas in London.

### The Burgess model over London



#### The Burgess Model



From this rough image of the Burgess model and the map of boroughs in London; you can see that Brent comes into the category of the low and medium class residential. Also we see the North and West of Brent are based in the interwar period whereas, the South and East of Brent live in the inner city area.

# As I am doing this investigation I find it appropriate to find a brief history on the borough Brent

Brent was formed in 1965 from the area of the former Municipal Borough of Wembley and Municipal Borough of Willesden of Middlesex. Its name derives from the River Brent which runs through the Borough.

According to the 2001 census, the Borough of Brent has the country's highest percentage of people born outside of the UK (46.53%). This would be no surprise to anyone who knows the area because brent is a well known multicultural society.

<u>Motto</u>; interestingly enough brent has its own motto: "forward together"

#### **Hypotheses:**

- 1) I expect that as you move from South to North Brent; there will be more semi-detached and detached houses.
- 2) I expect as you move from south to North Brent there will be less traffic. I think this is because The South of Brent is closer to the CBD than the North so it is more likely to be more congested because of the jobs and facilities available for people in the city.
- 3) I expect that as you move from South to the North of Brent the houses will be further apart from each other. This is because there should be more space in the North because it further away from the City centre furthermore housing plots will be cheaper as they are further away from the CBD.
- 4) I expect as you move from South to North Brent the streets will become less grid like.
- 5) I expect that as you move from the South to the North of Brent the environment will be much cleaner and will be much quieter because there will be less demand for transport.
- 6) I expect that as you move from the South to the North of prices of houses will decrease because the further away from the CBD you are, the less competition there is for land and property.

### Method:

I choose to investigate 5 different site of Brent which have been chosen to give wide and average results for Brent as a whole.

Going from the south to north:

- 1) Kilburn
- 2) Willesden Green
- 3) Stonebridge
- 4) Preston
- 5) Kenton

Also to back up my results I also used secondary data from the census results of 2001 in Brent, this is because the data is released every 10 years therefore I had to use it because the next census will be available in 2011 which is 4 years from now. I am to use the results to see which type of housing is more popular in Brent so we can compare and hopefully back up my results with the census results.

Method	How was this done (equipment used)	Why this method was chosen	Problems encountered and how they were overcome
Survey sheet to find out different types of housing	A tally chart for different types of housing on the street.	This method was a simple and efficient way to justify my hypothesis of; as you move further North of Brent, there will be more Semi detached and detached houses.	Many roads were long and different amounts of houses on each road. So I stopped the tally after roughly 60 houses on each street
Pictures of housing	A camera was used to take a picture of the different houses on each street	This was to compare to the different types of feature of houses in different wards to justify my hypothesis of as you move further North, there will be more interwar style houses.	Many houses were different from each other in one street so we took more pictures of different houses on one street to compare which houses matched the pattern.
Walked a 140 paces and counted how many houses were passed	Walked in a straight line using the same size of pace.	To compare the distance between each house.	Had to work out the length of one pace.
Walked in a parallel line across the road	Walked in a straight line using the same size of pace.	To compare the width of the road	Do not know how many meters it is so I measured the length of 1 normal step and multiplied it by the number of paces.
Walked around the area of the street to find any open spaces	Walked around the area writing down the different types of open space	To see which area had more open space	Did not walk in the same radius from the street.
Did an environmental survey of the street	Walked up and down the road and area surrounding the street and labeled the different types of environmental situations on the road.	This is to compare the environment and surroundings of the area	I was there at different times of the day so the surroundings may have changed.
Secondary Data	Used Census results from 2001	This is to show that the street I investigated was not an exception.	Very difficult to find a set of results which are important for this investigation.

Results; from south to north:

# Milburn



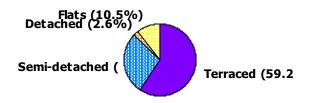
# **Kilburn**

I have carried out environmental surveys which are labeled -2 to 2. -2 being poor and 2 being excellent.

I have also looked at over head shots and street maps to look at the range of idea in the areas I've chosen.

<u>Kilburn</u>; Exeter Road had large houses. There were many more terraced houses than semi detached in this road as shown in the table below.

### Types of housing in Kilburn

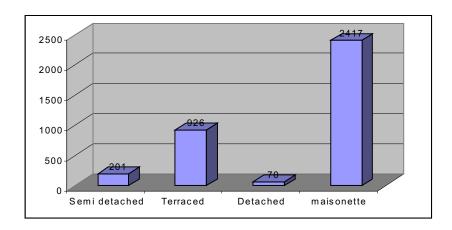


This supports my hypotheses that there will be more semi detached and detached housing in the North of Brent rather than the southern part.

Census data for Kilburn

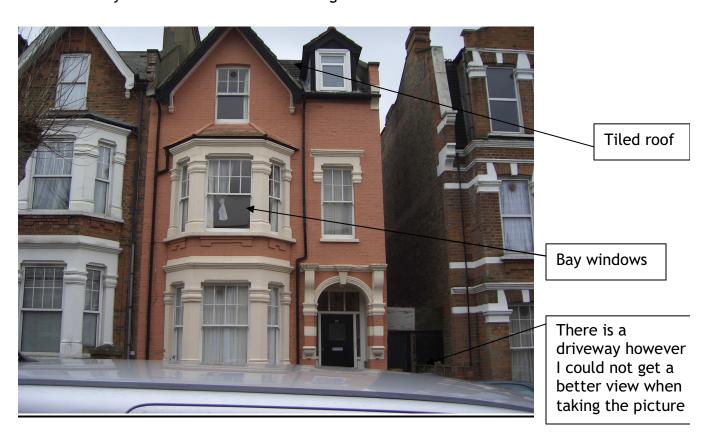
A type of flat

Type of	Dwelling	S						
	vacant	Whole h	ouse or bu	ıngalow:	Flat; mai apart	Caravan or other		
		detached	semi- detached		Part of a converted or shared house	In commercial building	mobile or temporary structure	
Total	118	70	201	926	2405	212	7	
%	1.8	1.0	2.9	13.7	35.8	3.2	0.1	
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1	

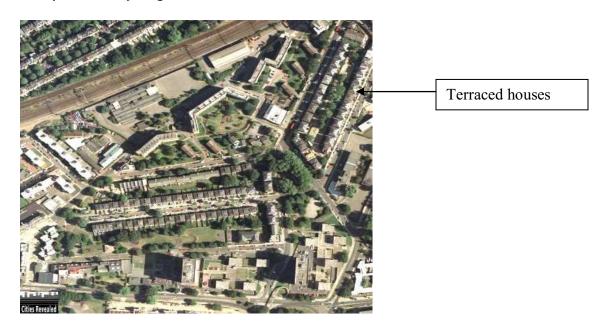


This census data roughly corresponds with my results from St Cuthbert's Road showing there are more terraced housing than detached. However, there are many more maisonettes than terraced housing. This could be due to the fact that Kilburn is only two miles away from the CBD, so more accommodation needed to be built. These were mainly maisonettes (Maisonettes are usually homes converted to flats from a terraced building). Therefore it shows there was general - redevelopment in Kilburn because of its location from the CBD.

Kilburn mainly consisted of terraced housing.

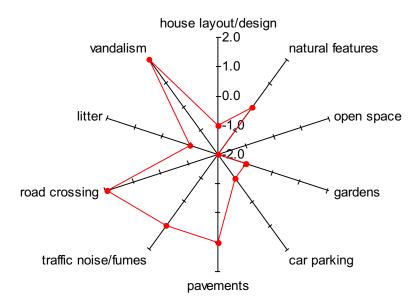


This house isn't detached. Also the house has three floors, no front garden and no garage. This shows it is definitely not a typical interwar type house but this is expected as you go closer to the CBD.



Kilburn is not grid like to an extent which goes against my hypothesis of there being more grid-like areas in the south of Brent.

The environmental survey showed how the area is like. <u>Environmental Survey</u>



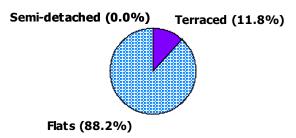
In my hypotheses it states as you move from the north to south of Brent the traffic will be more congested. This is shown in this survey as traffic free got a score of 1. This shows that Kilburn is a very busy area.

# Willesden Green



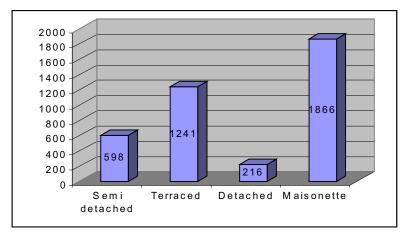
<u>Willesden Green</u>; St Paul's Avenue consisted of only a few terraced houses with flats owning the majority of the road this goes against my hypotheses of the fact that there will be more terraced houses in the south of Brent. This anomaly may have occurred because more living space was required from this area.

### Types of housing in Willesden Green



This yet again proves my hypotheses to be correct as it shows there are not any semi detached or detached houses on this particular road.

1	de la constant de la										
Type of Dwellings											
	vacant	whole house or bungalow:				Flat; maisonette or apartment:					
		detached	semi- detached	Terraced	Part of a converted or shared house	In commercial building	mobile or temporary structure				
Total	156	148	599	994	2042	275	5				
%	3.0	2.8	11.2	18.6	38.2	5.1	0.1				
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1				



This matches with my data from St Cuthbert's Road that there would be more terraced houses than detached. However, there are more maisonettes showing again; the closer to the city the more housing is needed to accommodate people.

Tiled roof

Bay windows



However it does not have a drive way, this is not typical for a house nearer to the city centre.



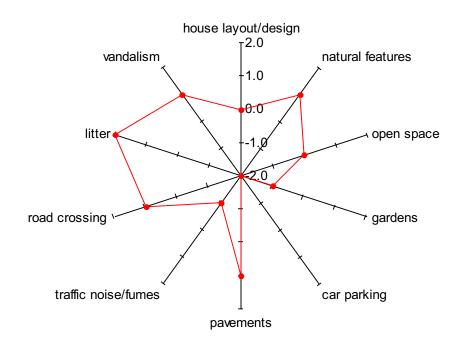
Grid like

Little greenery Thomas Boyce 10R

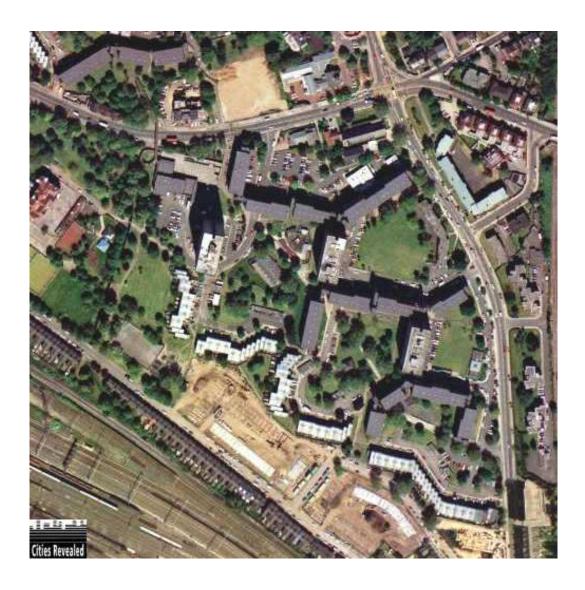
As you can see from this overhead photo Willesden Green is fairly grid like as expected as you go further south of Brent as my hypotheses states.

The environmental survey

This shows there is less traffic here than in Kilburn showing that as you go further away from the city centre the less traffic there seems to be.

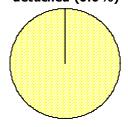


# Stonebridge



<u>Stonebridge</u>; Aldbury Avenue had many more semidetached houses than in any road more southern than this one.

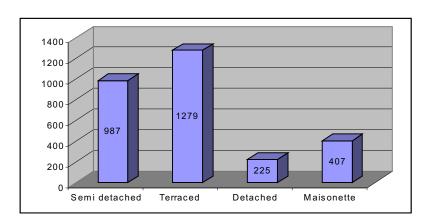
Types of housing in Stonebridge detached (0.0%)



Semi-detached (100.0%)

### Census data

Type of Dwellings									
	vacant	Whole house or bungalow:			Flat; marionette or apartment:		Caravan or other		
		detached	semi- detached	Terraced	Part of a converted or shared house	In commercial building	mobile or temporary structure		
Total	141	225	987	1279	369	38	31		
%	2.4	3.7	16.4	21.3	6.1	0.6	0.5		
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1		



Tiled roof

Baywindow The census shows there are less flats and maisonettes compared to Kilburn and Willesden Green which could show that the further away you move from the city; the less housing is in demand.

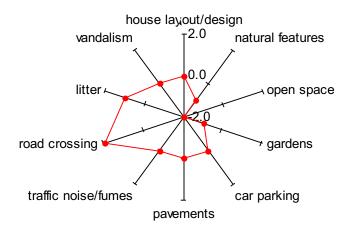
Stonebridge is further North of Willesden Green and contains more houses which look like interwar style houses.



Stohebridge looks like a typical interwar period house as it consists of the elements which are labeled above. The only thing is, it does not have is a garage.

This overhead shot shows that it is fairly grid like, however; the houses are spread apart more, showing a lower density of housing. There is some open space which is usual for a place away from the city. There are curved roads and redevelopment is apparent which is more common now in the inner suburbs.





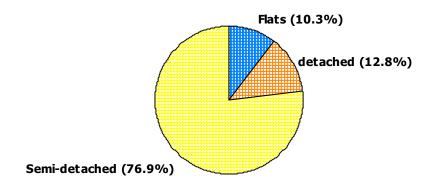
The traffic is not very congested but there is still some. This could be due to the fact that Stonebridge is still not completely away from the city traffic and the fact that it is very close to a main road which is a route people use to enter the city centre.

# Preston



<u>Preston;</u> Carlton Avenue East; was more or less the same as Aldbury Avenue in Stonebridge in the sense of the types of housing.

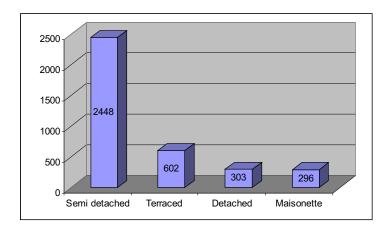
**Types of housing in Preston** 



This yet again showing my hypotheses to be fairly correct as there are more semi detached and detached housing being seen as you move further north of Brent.

### Census data

	vacant	Whole h	nouse or b	ungalow:		Flat; marionette or apartment:			
		detached	semi- detached	Terraceo	d Part of	a In ed commerci	or other mobile or temporary structure		
Total	98	303	2448	602	204	92	4		
%	2.0	6.0	50.2	12.4	4.2	1.9	0.1		
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1		
	vacant	Whole he	hole house or bungalow: F			Flat; marionette or apartment:			
		detached	semi- detached	Terraced		In commercial building	mobile or temporary structure		
Total	98	303	2448	602	204	92	4		
%	2.0	6.0	50.2	12.4	4.2	1.9	0.1		
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1		

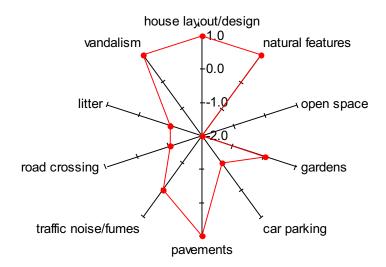


The graph shows the link between Carlton Avenue East to the rest of Preston. It states that there are more detached and semi detached housing than terraced in Preston. This links with my hypotheses of, as you move further north of Brent the more detached and semi detached housing there will be.



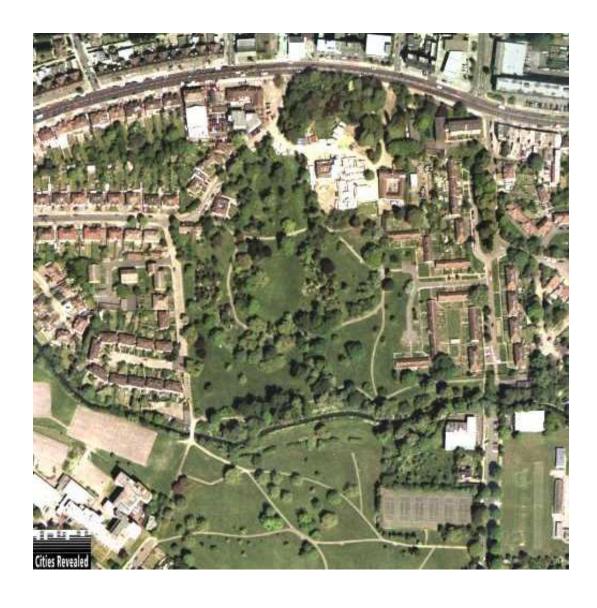


As you can see, back gardens are more common as you go further north of Brent which is typical for an interwar period house. The houses are spread more apart showing a low density of houses. However, it is still quite grid like, contradicting my hypothesis.



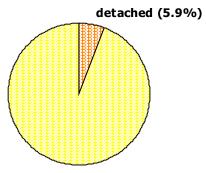
The traffic is less congested but it is still a factor of the noise. This road is fairly quiet and doesn't seem to be very busy at any time of the day.

# Kenton



Kenton; Allonby Gardens- was more or less the same as Preston.

# **Types of housing in Kenton**

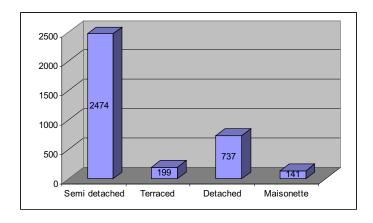


Semi-detached (94.1%)

Overall my prediction was correct because as you move from South to North of Brent you can see that terraced housing disappears and more and more semi detached and detached houses are present.

#### Census data

Type of Dwellings									
	vacant	Whole house or bungalow:			Flat; marionette or apartment:		Caravan or other		
		detached	semi- detached	Terraced	Part of a converted or shared house	In commercial building	mobile or temporary structure		
Total	60	737	2474	199	72	69	0		
%	1.5	17.9	60.1	4.8	1.8	1.7	0.0		
Borough average	2.0	6.7	29.3	19.0	16.9	1.9	0.1		



The census data is similar to my investigation on Allonby Gardens. This is because semi detached housing was dominant in this area. This is just like my hypotheses stated. The further north you of Brent you go the more semi detached housing you will find.

Kenton is the furthest Northern area I have researched and consists of the typical features of an interwar house.

Tiled roofing



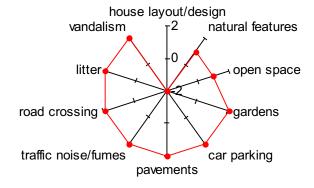
Baywindows

Driveway

This house proves my hypothesis of there being more semi-detached and detached housing in the northern areas of Brent. This is mainly because housing is less in demand the further you get away from the CBD.



Houses are more spread out and back gardens are present and cover a much wider area than we had seen before however it is still grid like to an extent.



This shows that it is regularly traffic free therefore it is fairly quiet. This all links in with my hypotheses that as you move north the traffic will be less congested meaning that the area will be quieter.

There is a big contrast between Kenton and Kilburn.

- The traffic is less in Kenton.
- There is more semi-detached housing in Kenton.
- There are more open spaces in Kenton.

### **General Results**

As I walked up the road I was investigating in each area I counted in 140 paces (which is roughly 100 metres) how many house doors I passed to see how spread out they are.

From South to North

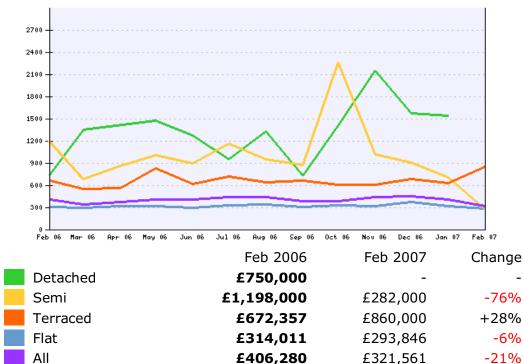
Kilburn - 17 houses Willesden Green - 41 houses/flats Stonebridge - 33 houses/flats Preston - 23 houses Kenton - 18 houses

This shows that Kilburn had a larger space between houses and had larger houses. This goes against my hypothesis but I think that this is because Kilburn is nearer to the CBD and therefore is a richer area. However the rest of the area does fit in with my hypothesis of there being more space between front doors of houses as you go further North of Brent.

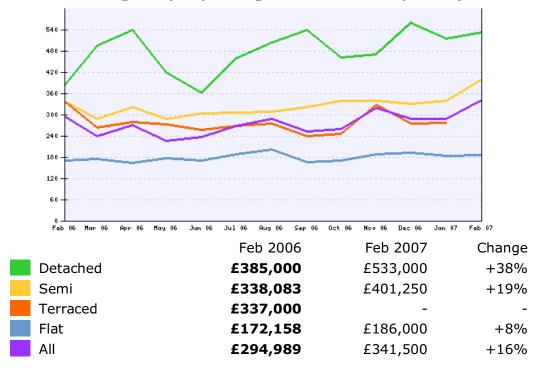
# **Housing prices**

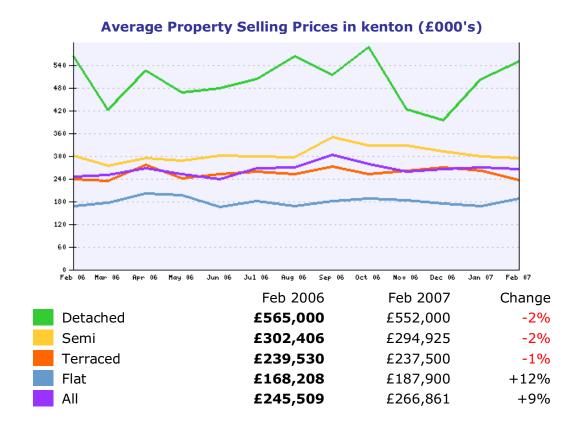
I have researched the prices of some of the houses in the different areas. It showed that the further South you go the more the prices increase.

### **Average Property Selling Prices in Kilburn (£000's)**



#### **Average Property Selling Prices in Preston (£000's)**





The graphs clearly show that house prices are far more expensive in the south of Brent (Kilburn) than the north (Preston). This is because land becomes more expensive as you move closer to the CBD. This proves my prediction correct.

# **Conclusion**

From the data I collected during this investigation I've found that Brent appears to fit into the Burgess model as predicted. As you move from the South to North of Brent you can see the changes. As you move south of Brent you can see that areas start to become very congested with traffic. However, this maybe because the south of Brent is close to the city so that the traffic tails into areas like Kilburn. I feel that the North of Brent is in the middleclass interwar section of the Burgess model. However, as you move further South of Brent you begin to enter the Lower-class residential area. This would be like in places such as Willesden Green, where there is only terraced housing. But the most Southern area in Brent is Kilburn and that is in the Twilight zone. This is why Kilburn has big houses and is very congested with traffic because it is closest to the CBD.

My hypotheses were:

1. I expect that as you move from South to North Brent; there will be more semi-detached and detached houses.

This was fairly correct as can be seen through the graphs in the analysis.

- 2. I expect as you move from South to North Brent there will be less traffic. This is fairly correct as you can be seen in the environmental survey. This is because of the South of Brent is nearer to the City so there will naturally be more traffic.
  - 3. I expect that as you move from South to North Brent the houses will be further apart from each other.

This is somewhat true. However, this was not the case for Kilburn. This is because it is a rich area because it is so close to the CBD that many rich businessmen may like to live there so big houses are needed.

4. I expect as you move from South to North Brent the area will be less grid like.

This is true as there were more grid-like areas in Kilburn and Willesden Green as it gets more crowded and the housing density is higher in the lower parts of Brent.

5. I expect as you move from the South to the North of Brent the environment will be much cleaner and will be much quieter because there will be less people passing by.

This is true to the extent that this was usually the case. This due to the fact that as you went further south the area was either more crowded and congested or just a lower standard of living.

6. I expect that as you move from the South to the North of prices of houses will decrease.

This was fairly true and this is because the South of Brent is closer to the CBD, therefore the competition for property is healthier.

# To what extent does Brent fit the Burgess Model?

I feel that as my investigation went on; you could see the change in Brent, for example, the difference in traffic and open space. There was more open space in the north of Brent. I feel that Kilburn looked a very rich area but that was jus a certain part of Kilburn that I researched. The North of Brent appears to be in the medium class of the Burgess model. This is because it contains more interwar type housing. The centre and more southern parts of Brent appear to be in the 'inner city' zone because the area seems to only consist of terraced housing.

I feel that this investigation is quite fair as I have investigated 5 different areas in Brent to see the change in environment and housing as you move from the North to South of Brent.

# **Appendix**

### Census Data:

http://www.brent.gov.uk/demographic.nsf/61b63a407eca 7a438025663c0065cadd/1444fe88cc2376cd80256cd8003aab d8/\$FILE/census\_ammend.pdf

http://www.brent.gov.uk/demographic.nsf

http://www.brent.gov.uk/demographic.nsf/24878f4b00d4f 0f68025663c006c7944/2f92474dabbecec480256ef3003b951e ?OpenDocument

http://www.brent.gov.uk/demographic.nsf/Documents/Willesden%20Green%20Ward?openDocument

## Street maps

http://www.streetmap.co.uk/newmap.srf?x=525250&y=183 250&z=1&sv=525250,183250&st=4&lu=P&mapp=newmap.srf &searchp=newsearch.srf&ax=524991&ay=183770

http://www.streetmap.co.uk/newmap.srf?x=522500&y=184 500&z=1&sv=522500,184500&st=4&lu=P&mapp=newmap.srf &searchp=newsearch.srf

http://www.streetmap.co.uk/newmap.srf?x=517500&y=188 500&z=1&sv=517500,188500&st=4&lu=P&mapp=newmap.srf &searchp=newsearch.srf&ax=517500&ay=188500 http://www.streetmap.co.uk/newmap.srf?x=518500&y=187 500&z=1&sv=518500,187500&st=4&lu=P&mapp=newmap.srf &searchp=newsearch.srf&ax=518500&ay=187500

Urban model information

http://en.wikipedia.org/wiki/Urban\_structure

Brent history information

http://en.wikipedia.org/wiki/London\_Borough\_of\_Brent

house prices information

http://www.home.co.uk/guides/house\_prices\_report.htm?l
ocation=kilburn&lastyear=1

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