

## Hypothesis

1. The land use of Covent Garden typifies that which is common to the Central Business District of town and cities.
2. It is possible to identify vertical use zones.
3. The Sphere of Influence of Covent Garden extends beyond the city.
4. Covent Garden is characterised by high levels of traffic.
5. Covent Garden is characterised by high pedestrian densities.

I will be investigating the five above hypothesis in different ways.

## Methodology

1. Hypothesis 1 – I went round Covent Garden and recorded the ground floor land use (function) of each individual building. I gathered my data in the following table:

Property type	Total Number	Percentage of Total
Offices		
Other Services		
Specialist Shops		
Residential		
Low Order Shops		
Theatres		
Museums		
Banks		
Cafes		

2. Hypothesis 2 – I chose a street in Covent Garden and for each building in that street I recorded the ground floor use (function), number of floors above it and how they were used. I gathered my data in the following table:

[illegible]

3. Hypothesis 3 – I had questionnaires ready to ask people 3 main questions, their answers were be grouped into the following tables:

Do You Live In London?	
Yes	
No	

How Did You Travel To Covent Garden?	
Car	
Public Transport	
Walk	
Other	

How Long Was your Journey?	
Less then 30mins	
30mins - 1hr	
1hr- 2hrs	
2hrs+	

4. Hypothesis 4 – I chose a place in Covent Garden where traffic is allowed, for 10 minutes I stayed there and completed a tally showing the number of vehicles travelling past me, in both directions. I will gathered my data in the following table:

Vehicle	Number of Vehicles in 10 minutes	Number per hour (average)
Car		
Bus		
Van		
Lorry		
Cycle		
Motorbike		
Taxi		
Other		

5. Hypothesis 5 - I was assigned a street. I walked down that street and counted the number of people on it. The length of the street was also required as I had to find the density per 10 metres.

### Hypothesis 1

The land use of Covent Garden typifies that which is common to the Central Business District of town and cities.

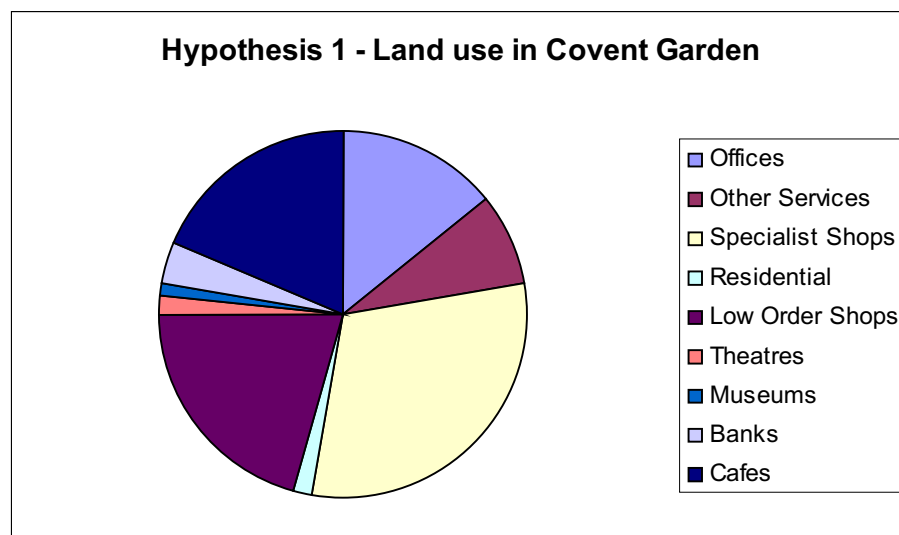
On my base map, which I have included, I have indicated the different types of land uses on ground floors of all buildings in the study area of Covent Garden. I classified each property by type, and formed acronyms to label the corresponding location on the base map

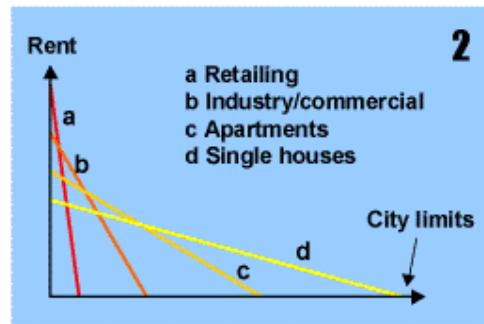
Acronym	Property Type
Off	Offices
OS	Other Services
SS	Specialist Shop
R	Residential
LOS	Low Order Shops
T	Theatre
M	Museum
B	Bank
Café	Café

## Results

I have made a tally of all the buildings that need to be included; the results table looks as follows:

Property type	Total Number	Percentage of Total
Offices	16	14
Other Services	9	8
Specialist Shops	34	30
Residential	2	1.7
Low Order Shops	23	20
Theatres	2	1.7
Museums	1	0.8
Banks	4	3.5
Cafes	21	18





This bid-rent graph shows land use and the rent values from the CBD going outwards toward the edge of the city

It is evident that retail (Specialist) is the most common land use (30%) in Covent Garden, followed by another type of retail, Low Order Shops (20%). The least common is museums (0.8%), this seems fitting as it is the least profitable land use in the Covent Garden area. This is because Covent Garden is in the CBD of London, Central Business District.

Specialist shops need easy access to their shops, and what better place than the centre of the city, where integrated transport is run. It is served by bus, tube, taxi, etc... Also the easy access means workers can get there easily too, if workers can get there easily it means shoppers can too; this is one of the most important reasons for high retail numbers in Covent Garden. Communications are also at prime in the CBD which means businesses (offices) and banks need to be in such a place which can cater their needs.

I would say hypothesis 1 is correct; Covent Garden obviously typifies the land use of a CBD in the UK. The proof of this is shown above by the pie chart and the percentage figures of the relative land uses.

## Hypothesis 2

It is possible to identify vertical use zones.

I chose Long Acre, North Side as my street and the results of my study for hypothesis 2 are as follows:

Number of Floors in Building	Ground Floor Use	Upper Floor(s) Use
6	Off	Off
6	Off	Off
6	Off	Off
6	Con	Off
6	Café	Off
6	Con	Off
6	Off	Off

6	SS	Off
6	Con	Off
6	Con	Off
6	Off	Off
5	Off	Off
4	Con	Off
4	Con	Off
5	Con	R
5	Con	R
6	SS	R
5	SS	R
5	Con	R
5	Con	R
5	Con	R
4	Con	Off
4	Con	Off
4	Con	Off
4	Con	Off
4	Con	Off
4	Con	Off
4	SS	R
4	SS	R
4	Con	R

In this table;

SS represents Specialists Shops  
Con represents Convenience Shops  
Off represents Offices  
Café represents Café  
R represents Residential

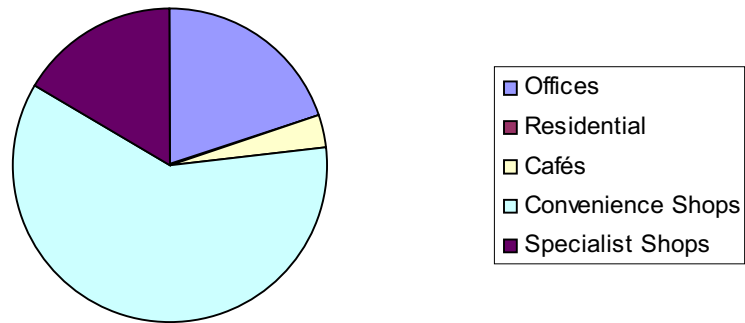
### Transect

I have drawn a transect of Long Acre North Side by hand and attach it to my final coursework so its acts as a visual aid and as evidence for this hypothesis. Along with the transect I have drawn, I have included an idealistic transect of what it should look like going outwards from the CBD into outer parts of the city.

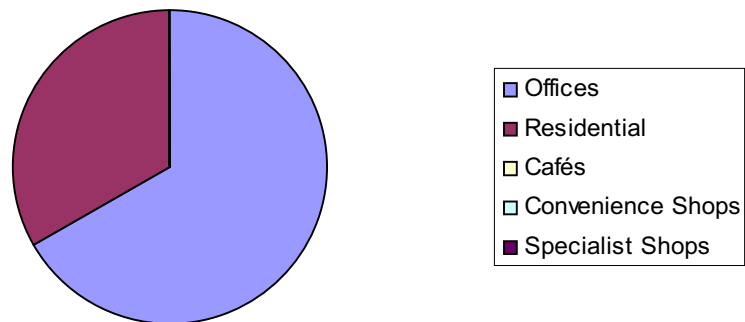
### Distribution of Functions and Floors

Land Use	Number of Floors on Ground Level	Number of Floors higher then Ground
Offices	6	20
Residential	0	10
Cafés	1	0
Convenience Shops	18	0
Specialist Shops	5	0

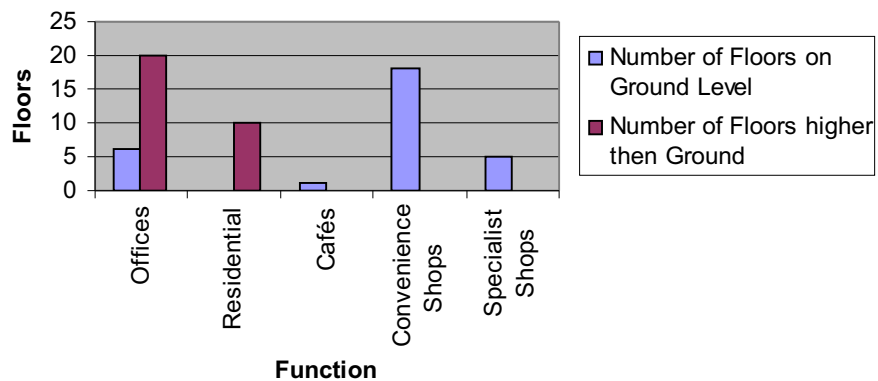
**Distribution of Functions and Floors, Long Acre  
North. Ground Floor Use**



**Distribution of Functions and Floors, Long Acre  
North. Upper Floor Use**



**Land Use on Different Floors**



The two pie charts show the contrast between ground floor uses and upper floor uses. It is easy to see that there are no residential functions on the ground floor anywhere along Long Acre North, whereas on the upper levels it counts for 33% of the land use. Convenience Shops hold 60% of the land use on the ground floors but aren't on the upper floors at all, an example which can be used for Specialist Stores as well. The bar chart shows the distribution on floors side by side for each of the uses.

The most frequent land use on the ground floor is Convenience Stores, on the upper levels its offices. A use which wasn't on the ground floor but was on upper floors is residential. Uses that were on the ground floor but weren't on the upper floors were cafes, convenience stores and specialist shops.

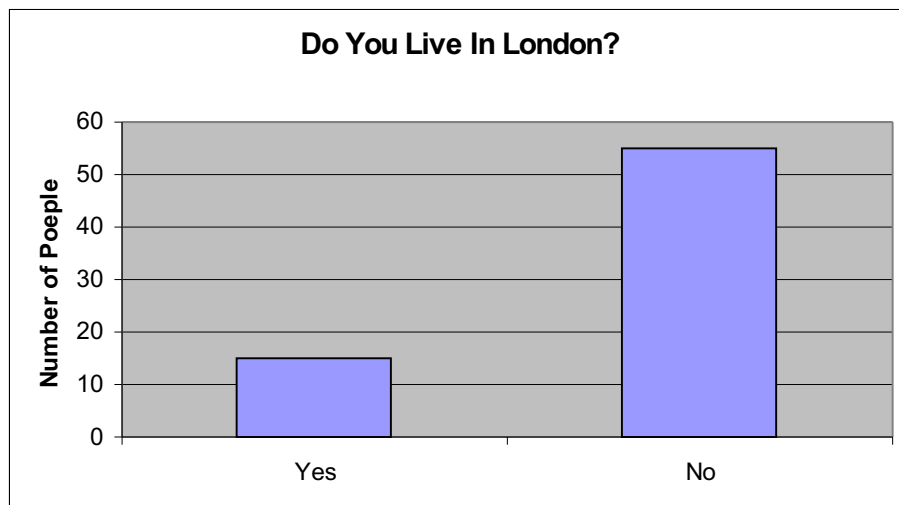
### Hypothesis 3

The Sphere of Influence of Covent Garden extends beyond the city.

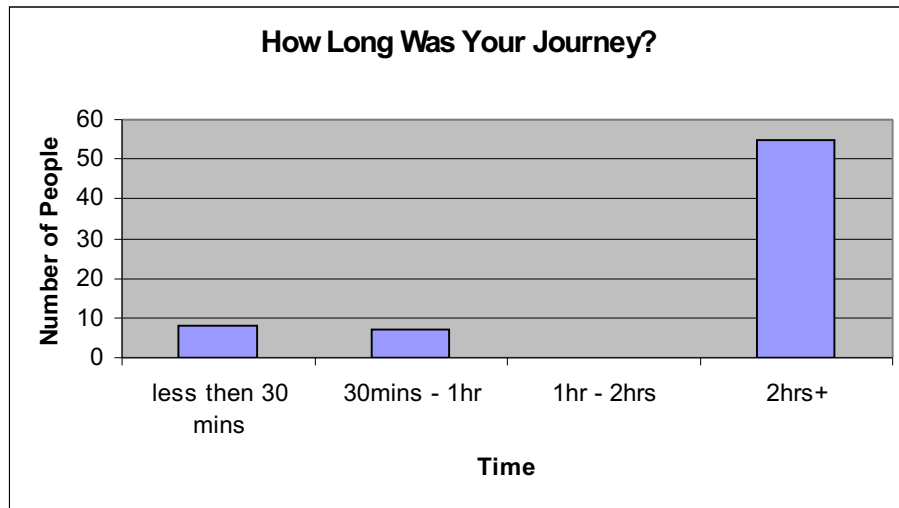
People use public transport to access the CBD of London, which is served by bus, tube and train. This gives visitors or workers an easier journey than private transport because there is less congestion, due to many factors including congestion charging and parking restrictions.

There is a high concentration of shops and services in the area. They have a larger range (distance people are prepared to travel) than local areas, which means people will travel greater distances. This means within the catchment area (sphere of influence), the population threshold (minimum number of people needed to support a function) for these shops will be met or exceeded.

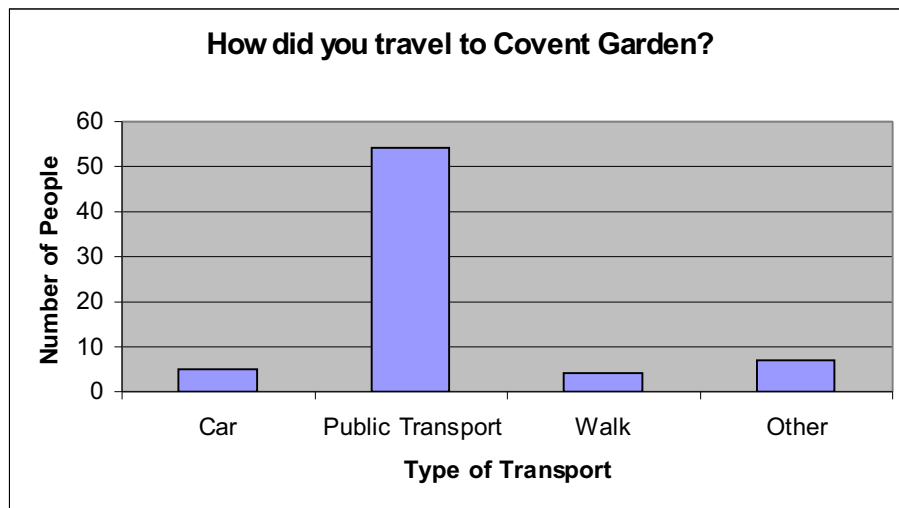
Do You Live In London?	
Yes	15
No	55



How Long Was your Journey?	
Less then 30mins	8
30mins - 1hr	7
1hr- 2hrs	0
2hrs+	55



How Did You Travel To Covent Garden?	
Car	5
Public Transport	54
Walk	4
Other	7





As you can see from the first graph, most of the people there were from outside London, which made them tourists.

Tourism: Covent Garden is tourist hot spot because of its many attractions which include theatres, the Transport Museum, bars and cafés, the history of the area, specialist shops (which aren't found in other areas which are this easy to access) and many others. On my flow maps there are three scales; London, Southern England and Europe. This is because some people have come to Covent Garden from as far as the USA (17 people), yet as close as Kensington (1), Lambeth (2), Camden (4) and Brent (2).

The Sphere of Influence of Covent Garden does indeed extend beyond the city, even beyond the country and the continent, as the graphs and flow maps show.

#### Hypothesis 4

CBD is characterised by high levels of traffic.

The central business district is the most accessible part of the city and therefore should have high levels of traffic. I have taken traffic surveys in three different areas, Floral Street in Covent Garden, Oxford Circus in the West End and Abbey Road, NW8 so I can get a good comparison and get better results for the hypothesis.

Floral Street, Covent Garden      Time: 11.00

Vehicle	Number of Vehicles in 10 minutes	Number per hour (average)
Car	25	150
Bus	0	0
Van	17	102
Lorry	3	18
Cycle	4	24
Motorbike	19	114
Taxi	9	54
Other	7	42

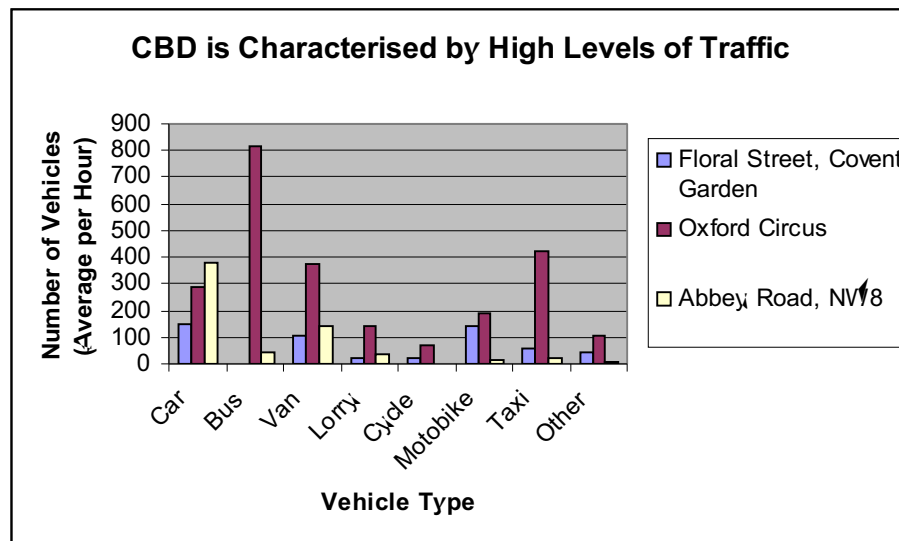
Oxford Circus      Time: 10.00

Vehicle	Number of Vehicles in 10 minutes	Number per hour (average)
Car	48	288
Bus	136	816
Van	62	372
Lorry	23	138
Cycle	12	72
Motorbike	32	192

Taxi	70	420
Other	17	102

Abbey Road, NW8      Time: 11.20

Vehicle	Number of Vehicles in 10 minutes	Number per hour (average)
Car	63	378
Bus	7	42
Van	24	144
Lorry	6	36
Cycle	0	0
Motorbike	2	12
Taxi	4	24
Other	1	6



As you can see, in most cases Covent Garden has lower levels of traffic for each particular type of vehicle than both Oxford Circus and Abbey Road, there are a few exceptions are cycles, motorbikes, taxis and others (with Abbey Road). The reason for this can be the fact that these types of vehicles do not have to pay Congestion Charges, whereas cars, vans and lorries do. Also Floral Street has no buses at all; this contradicts the much believed statement that the CBD is the most accessible part of the city, how can this be true if a part of the CBD is not served by a bus route.

Other reasons for lower levels of traffic in Covent Garden may be;

- Pedestrianisation
- One way traffic systems
- Cost and lack of parking
- Easier to get there via public transport (Hypothesis 3)

These reasons all help to prove that the hypothesis is incorrect. Although the following reasons should have helped prove the hypothesis right:

- People travelling to work
- People travelling to shop
- People crossing the CBD to get to other places
- Traffic generated by business

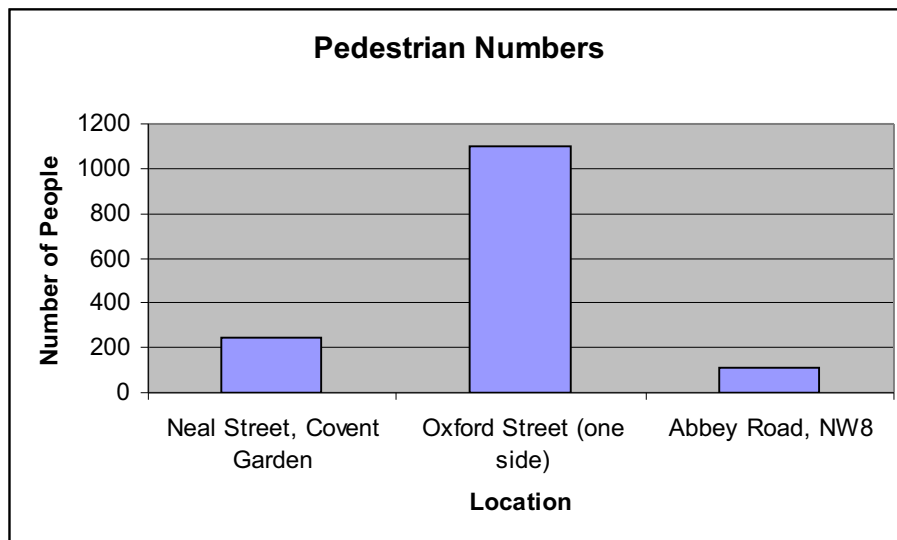
Altogether I have found that the hypothesis is incorrect due to factors which I have mentioned above. Also the factors which should have meant the statement being correct are mentioned above, but could not out-weigh the factors against it.

### Hypothesis 5

Covent Garden is characterised by high pedestrian densities.

Covent Garden should have inevitably high pedestrian densities, seeing as it part of London's CBD. To find out if this is true, I have taken the other 2 locations from hypothesis 4 so I can once again make a comparison. My results are not complete as I haven't got the length of the streets, so I can not work out density per 10m.

Location	Number of People
Neal Street, Covent Garden	247
Oxford Street (one side)	1102
Abbey Road, NW8	113



As the graph shows, Neal Street in Covent Garden is no way as populated with pedestrians as Oxford Street, but does definitely exceeds Abbey Road. This shows the statement to be correct and incorrect. Although only one side of Oxford Street has been recorded, it is clearly much more heavily used by pedestrians then both Neal

Street and Abbey Road combined. This may be for many reasons in Oxford Street favour:

- ◆ Reputation
- ◆ Variety of shops
- ◆ Ability to shop around easily
- ◆ High order goods

I have found the statement to be incorrect but the actual densities may have made a difference if I had them.

### Final Evaluation

In my final evaluation, I would say that Covent Garden's land uses and functions are those which are typical to a CBD. Covent Garden's sphere of influence extends beyond the city, even beyond the country and continent. This is a sign of a true CBD, the fact that it can pull in people from as far as the USA. Its accessibility is excellent with over half the people questioned saying they got there by public transport and also that their journey was mostly just over 2 hours long.

There are two hypotheses which show that Covent Garden doesn't typify all characteristics of a CBD, these are high levels of traffic and high pedestrian densities. The reason why Covent Garden may have not shown itself to be a proper CBD in those categories may be the fact that I have compared it to Oxford Street/Circus, which is much more of a shopping area and will indeed have more traffic and pedestrian numbers. I feel it is good I have done this comparison as it does give a real idea of how congested or decongested the Covent Garden area is. I could have made my results better if I had accurate street lengths, as I have mentioned above in my summary of hypothesis 4, this would have given me a third column in my hypothesis which would have stated the density per 10m and would have given me an average which I could have then used as another comparison of Covent Garden with different areas.

All in all, I would definitely say that Covent Garden does typify characteristics which are associated with the Central Business District.