## **GEOG 220**

Place, Space and Identity

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The City: Space & Urban Structure

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## Introduction -- The city: urban structure



Figure 11.4 Congregation and separation—Chinatown, Montreal In most larger cities, there is a patchwork of distinctive neighbourhoods that results from processes of congregation and segregation. Most distinctive of all are neighbourhoods of ethnic minorities, such as the Chinatowns and Little Italys, found in a number of Canadian cities.

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- As we know, the city is made up of many distinctive zones....
- These result from processes of congregation {which pull together} and segregation [which push apart]
- These are driven by a variety of social, economic and historic forces

# For example, one inner city zone is called "the zone in Transition"

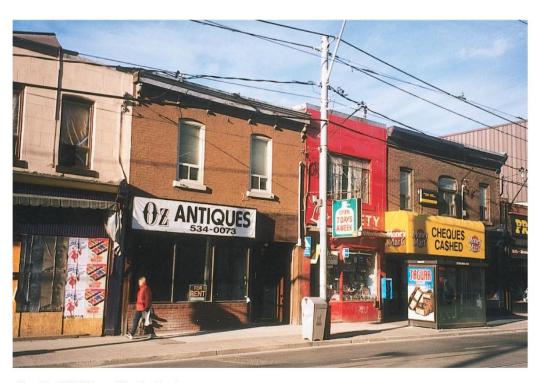


Figure 11.2 The zone in transition
This photograph of stores along the
western end of Queen Street in
Toronto shows part of the zone in
transition. In many North American
cities, the CBD is surrounded by such
a zone, which consists of older neighbourhoods with mixed land uses,
parts of which are in long-term
decline and parts of which are

undergoing redevelopment.

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## Another zone is called the "Central Business District" or CBD

Figure 11.1 Downtown Edmonton from the air This photograph of Edmonton's central business district (CBD) shows the concentration of highrise buildings that is typical of CBDs in North America. In Edmonton, as in other major cities, the CBD originally grew up around the point of maximum accessibility: near railway stations and the intersection of the city's principal road and water transportation routes.





**Figure 11.1.5 La Cité development, Montreal** The original late-1960s plan for this development called for the demolition of 255 houses as part of a slum clearance program. However, the project was greatly amended by community action. Only one-third of the houses were demolished and a greatly scaled down complex (consisting of 1350 apartments in three towers) constructed in the late 1970s. The remaining homes (some 600 housing units) became integrated into cooperative and non-profit housing associations.

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 Other zones become areas of major urban renewal, or rejuvenation

### "Gentrification" is often how inner zones get rejuvenated



Figure 11.3 Gentrification A newly-renovated row of townhouses in Halifax, Nova Scotia, where the process of gentrification has redeveloped an older neighbourhood that had previously been occupied by lowerincome households.

# So the main point is that cities are made up of a lot of different spaces or "zones"

Geographers have tried to go beyond this simple observation, to see if there is any general set of processes at work here – and to see if this means we can think in more general terms about "models of urban structure" which seek to generalize about all cities.

- Geographers have developed a series of theoretical models to explain the pattern of these zones in a typical city.
- There are three models:
  - The Park and Burgess model
  - The Hoyt Model
  - The multiple nuclei model

Broadly speaking, the Park and Burgess model was developed first, then came the Hoyt one, lastly the multiple nuclei one. This is because the last two are basically improvements (or critiques) of the Park & Burgess model

## So lets think about the first onethe Park and Burgess model

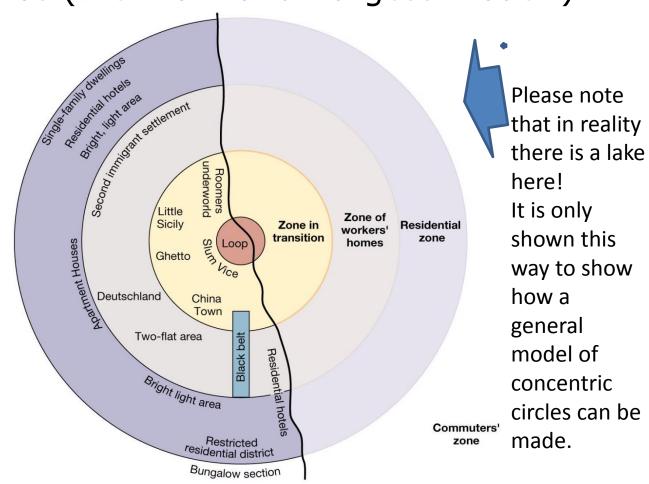
This was developed -- as the reading says – by Chicago sociologists Park and Burgess in the 1920s They noticed that Chicago had a distinctive pattern of urban zones —
They saw it as a set of concentric rings radiating around the centre

What they thought they saw was a process that saw the arrival of poor immigrants at the city centre where they lived all crammed together in very poor housing and where they all worked in unhealthy surroundings

Over time, as the immigrants got richer, so they could afford to move out from the city centre to nicer housing and surroundings further from the city centre This basic process kept going like an engine in Chicago – new immigrants into the centre, richer ones moving to suburbs – and this process structured the city's spaces.
They called it "Urban

ecology"

## Ecological Model of Urban Land Use: Chicago in the 1920s (the "Park and Burgess model")



## An interesting aside

The Park and Burgess model was re-interpreted by urban geographers in the 1960s (remember – "spatial science" and all that ) as a response to the economics of the land market in a western city

## Park and Burgess becomes a spatial model for the 1960s

Basically – you had to pay more to be at the centre of a city, and less to be at the edge. So only those enterprises or types of houses that could afford the land downtown could be there. People lived where they could afford to, and it was this process that structured the spaces of the city.

## Accessibility, Bid-Rent, and Urban Structure

This diagram tries to show how such an urban land market works – in this case, expensive retail stores pay more to be downtown.... Residential houses on the edge



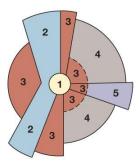
Figure 11.6 Accessibility, bid-rent, and urban structure Competition for accessible sites near the city centre is an important determinant of land-use patterns. Different land users are prepared to pay different amounts—the bid-rent—for locations at various distances from the city centre. The result is a tendency for a concentric pattern of land uses. (Source: Reprinted with permission of Prentice Hall, from P. Knox, Urbanization, © 1994, p. 99.)

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## Now, Hoyt thought this was all too simple

His model said we also need to think about how access to the city (roads, rivers etc.) would mould (or distort) the basic pattern of Park and Burgess model

## Corridors and Sectors ("The Hoyt model")



- 1. Central business district
- 2. Industrial area
- 3. Working-class residential district
- 4. Middle-class development
- 5. High-income residential district

#### Figure 11.9 Corridors and sectors

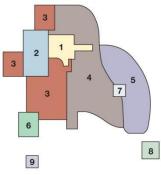
Cities that have not been dominated by successive waves of migrant or immigrant ethnic groups tend to be organized around the linear development of two main features that grow outward from the CBD (1): corridors of industrial development (2) and sectors of high-status residential development (5). Sectors of working-class residential districts (3) surround the industrial corridors, while sectors of middle-class residential districts (4) surround the high-status developments. (Source: C.D. Harris and E.L. Ullman, "The Nature of Cities." Annals of the American Academy of Political and Social Science 242(1), 1945, fig. 5.)

Here, the pattern is distorted because people will pay more to be on a transport route, even if they are further from the city centre

The third model is a greater recognition of the fact that now our cities have many centres – not just one downtown – and this creates:

The multiple nuclei of Harris and Ullman

# Multiple-Nuclei Model of Urban Land Use ("The Harris & Ullman model")



- 1. Central business district
- 2. Wholesale light manufacturing
- 3. Low-income residential
- 4. Medium-income residential
- 5. High-income residential
- 6. Heavy manufacturing
- 7. Outlying business district
- 8. Residential suburb
- 9. Industrial suburb

Figure 11.7 Multiple-nuclei model of urban land use When cities reach a certain size, the traditional downtown (1) is no longer sufficient to serve the commercial needs of the whole city, and so additional nodes of shops and offices emerge in outlying districts (7). Functional groupings of related activities of other kinds-manufacturing (2, 6), wholesaling (2), and so on-also tend to develop, creating multiple nuclei of economic activities around which the city is organized. (Source: C.D. Harris and E.L. Ullman, "The Nature of Cities." Annals of the American Academy of Political and Social Science 242(1), 1945, fig. 5.)

Of course, to just think of our cities in terms of these three models is now seen as way too simple

So, in recent years, urban geographers have tried to become more sophisticated. In particular, they have developed 3 main critiques of the urban structure models. We will now look at each of these.

### The Criticisms of these 3 models are:

- 1. not all cities across the world are the same
- 2. Even US and Canadian cities are different
- 3. The 3 models only look at economic 'space" i.e.
  - What about "gendered" space?
  - What about ethnic neighbourhoods?

## First critique

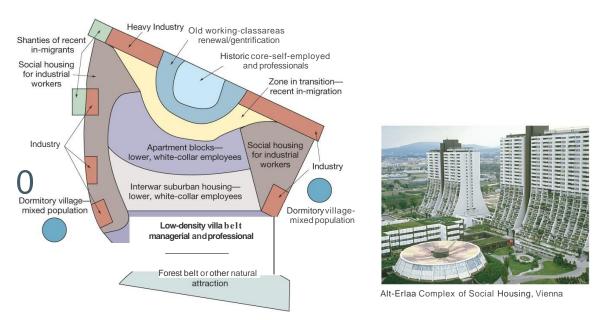
- 1. Not all cities are the same
  - Certainly history and economic backgrounds are very different in different parts of the world: in Europe or in the Islamic world.
    - The key observation would be that the patterns of land ownership that drive city structure formation are different
    - So for example cities not run on capitalist economy would have a different market in land.
       i.e. Vienna (our next slide) had a socialist city council for many years and so has different urban zones





CBD, Vienna

Low-density Villa Belt, Vienna



**Figure 11.14 Urban structure in continental Western Europe** In the typical continental Western European city, the historic core has a more dominant role in commercial and social life than in North American cities. This illustration depicts land-use patterns in the generic Western European city. The density of residential develop ment is also high, with large amounts of nineteenth-century housing-including stable, high-status neighbour hoods close to the city centre-and significant amounts of social housing. (Source: P.White, *The* West*European* City. London: Longman, 1984, fig. 7.6, p. 188. Reprinted by permission of Addison Wesley Longman Ltd.)

## Second Critique of these standard models

- Even in similar contexts i.e USA and Canada – there can be differences – important ones... i.e the Canadian city is different from the USA city
  - Until the publication of Goldberg and Mercer's The Myth of the North American City (1986), little attention was paid to these differences

## American vs Canadian cities

- Yet overall, compared to US cities, Canadian cities are
  - More compact in size
  - Have a higher density of population
  - Have fewer inner city zones of poverty
  - Have greater levels of public transit
  - Have greater levels of pubic investment in infrastructure
  - Have more dispersed immigrant populations
  - Have more powerful and less fragmented municipal governments
  - In total, represent an even larger share of the country's population than found in the USA

A question for you ... how do any of these models think about homelessness – do they have a home? Are they visible or invisible?

## The "New Homeless": Tent City, Toronto, Ontario

XXXXX Front Crate xxx fence Tailer The Canal In shack a double prefab Essroc

Question: do the homeless only exist in "public space"



Figure 11.25 The new homeless
Tent City, Toronto (Source of Map: Down to This: Squalor and Splendour in a Big-City Shantytown by Shaughnessy Bishop-Stall.
Copyright © 2004 Shaughnessy Bishop-Stall.
Reproduced by permission of Random House Canada.)

### Hazards of the homeless

- "hostile" urban environments
- Street lighting
- No public toilets
- COVID limitations how many of us even carry cash now [to donate]?

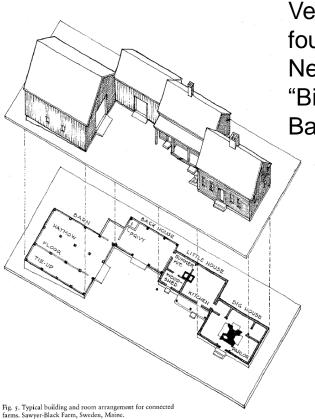
## Third Critique of these standard models

- 3. These models only look at very limited types of space – what happens if we consider some other types of space?
  - such as ethnicity or gender.

The idea that the city or space can be gendered is a new angle, and a powerful insight

To think about this, we need to think of examples that show particular spaces are used more by one gender than another – here I will use first the example of a type of vernacular house

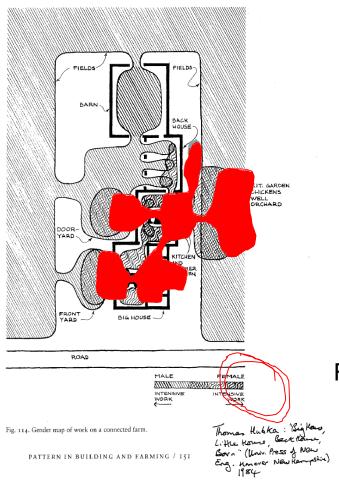
## Gendered space: the micro view



Vernacular house type found in New England called "Big house, little house, Back house, Barn"

Thomas Hubka 1984

## Gendered space: the micro-view



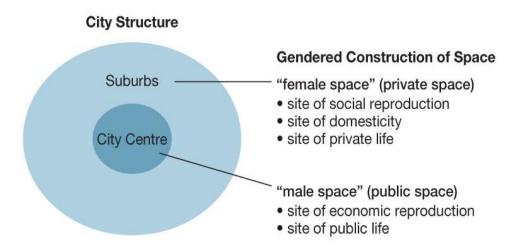
What we see is that the space occupied by the gender category female is in this house mainly the kitchen front rooms and garden. The back of the house, and barn are considered male space – at least by the society and people of that time

Female space=red

### The Gendered Construction of Space

We can take the idea of gendered space and apply it to a whole city, if we think about the world of the 1950s and the way it saw gender categories. The downtown was the place or work and was male space. The suburburbs = domesticity = female

Figure 5.41 The gendered construction of space This simple model shows the ways in which nineteenth-century and twentieth-century constructions of gender in Western societies affected how those societies created and used landscapes, such as the city. Men, as breadwinners, inhabited a very different social world from that of women, and this affected not only their economic roles but also their geographic experiences in our cities.



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Of course, we no longer have such gendered views of society and space – or do we??

Take one example – if I am embarrassed to be crying at work is this because I ought not to be carrying out a private arena/ domestic {female} practice in the public arena (male/world of work}?

#### And a COVID-19 example

At the moment we "work at home" – we have brought the public and private world together – we must make allowances for people who have young families to care for at the same time they are working on their other jobs - in other words, to the extent that we have to be told this, we are forgetting (or overlooking) that two types of space have now been merged, and that family care - historically once seen as a "female" private sphere task – now needs to be conducted in the same space -- that of "work" (traditional "male" public sphere) which has now to occur "at home" so it is no wonder we are all having a problem adjusting and that is even before we consider how we allow ourselves to be interrupted by the cat!

# Gendered space: gay village

The latest human geography recognizes that there are many genders and that these each create (or have the potential to create) different types of space



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Figure 5.42 Montreal's "Gay Village" This building, known as the Complexe Bourbon, incorporates a café and a restaurant. It is located on the corner of rue St. Catherine and rue Alexandre de Sève in the heart of Montreal's "Gay Village." The building flies multicoloured flags recalling the rainbow, an emblem of gay culture.

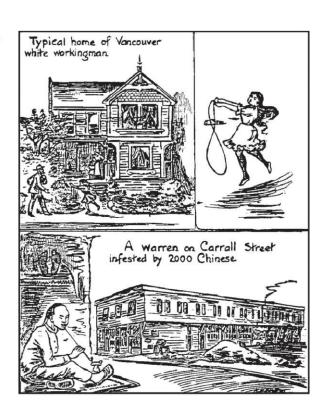
#### Ethnic and immigrant space

In the same way, different ethnicities create – or have the potential to create different types -- of space in the city. This because the forces of congregation or segregation – mentioned at the start of today's class - will create areas within the city where particular groups feel more comfortable living together (as support groups, extended families, chain migration, etc. connect people) or as the forces of discrimination exclude groups from parts of the city and force them into particular areas – the example of Venice's "ghetto" - the original word used for an area of Jewish population in that city or Canada's many Chinatowns demonstrates.

## Ethnic and immigrant space

Figure 5.39 Chinatowns Chinatowns are features of most major North American cities. (Source: Illustration, Annals of the Association of American Geographers 77[4], December 1987.)

It is important here to consider how we are defining "ethnic" - What are your suggestions?



## Ethnic and immigrant space



Figure 5.38 Parade in Montreal
Many ethnic groups use city parades
as an opportunity to promote pride
and an alternative picture of what it
means to belong to an ethnic group.
This photo shows members of Montreal's
Temple Hare Krishna in their annual
Ratha Yatra parade along St. Laurent
Boulevard. Known as "the Main," this
street was traditionally the first place
immigrants lived on when they reached
the city, and it still constitutes a major
divide between Montreal's anglophone
and francophone populations.

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- Parades and street festivals provide opportunities for many groups to celebrate important events
  - Through a temporary use of space
  - Not a permanent use.

# Now, in the time remaining in this class, let me take a completely different angle on this

And suggest that the city is not the rather arid world of the urban modellers, but made of all sorts of different types of spaces — so, for example, let us imagine the city is one zoned according to our senses ...

# "Senses in the City: An Alternate Approach to Urbanism"

 A different take on city spaces and places is to use our full range of senses

Not just sight – which has been the predominant frame for urban planners

.

### Town planners, Ottawa 1949



**Planners work on the design of Ottawa** These assistants were photographed in 1949 as they prepared a model of Jacques Greber's 1937 plan for the National Capital Region. The plan guided federal development for the capital for more than a generation. The section in the foreground contains the Parliament Hill area; Hull is at the lower left.

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Here we see the city planned strictly according to how it looks

- the sense of sight

#### The Senses

- How many senses do we have??
- What are they??
- Which are the most important?
- See David Howes, <u>Empire of the Senses: The Sensual Cultural</u> <u>Reader</u> (Oxford: Berg, 2005);
- David Howes and Constance Classen, <u>Aroma: The Cultural History of Smell</u> (London: Routledge, 1994) available electronically through Concordia library

### The Senses in the City

- The "elite" senses:
  - Sight
  - Sound

So-called, because they are the senses most privileged by our society

- The ordinary senses:
  - Smell
  - Touch
  - Ability to sense temperature
  - Taste

{the senses of the working folk}

# The top two tastes 'privilege' certain activities

Sight – the art gallery the design of the city Sound – the symphony orchestra

#### But add time

What of NIGHT – darkness – city lights – curfew – here we see a division of activity by time – night/day – legal/illegal – safe/unsafe – all of this patterns the city

WHAT of SILENCE - ?

# Let us try to take some of these senses in order

So – the ability to sense heat or cold....

### Temperature: Montreal in winter



Figure 11.11 Snow plowing in downtown Montreal This typical scene reflects our growing refusal to allow winter weather to impede our ability to drive around the city at any time of year.

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#### The Urban Heat Island

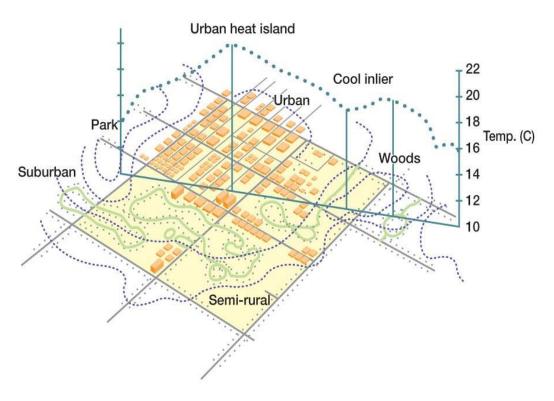
#### Urban heat island

 An effect resulting from the absorption and radiation of thermal energy by buildings and roads, together with the heat generated by urban living, which causes the average city to be warmer than its surrounding countryside.

# The Urban Heat Island: A General Model

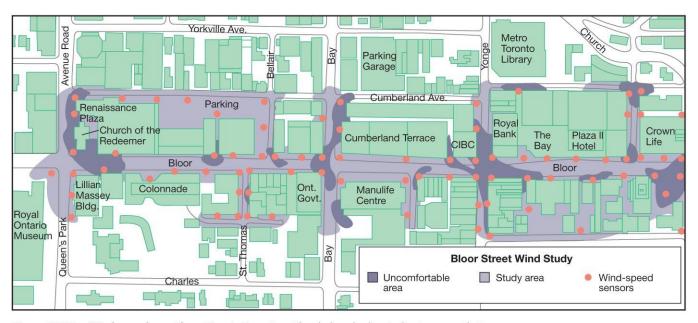
Figure 11.26 The urban heat island: a general model The urban heat island effect results from the absorption and radiation of thermal energy by buildings and roads, together with the heat generated by urban living. The average annual temperatures in cities can be 0.3°C to 3°C higher than the surrounding countryside; average humidity can be 6 percent lower; average summer cloud cover is increased by 30 percent and average snowfalls reduced by 5 percent to 10 percent. (Source: W.M. Marsh, Landscape Planning: Environmental Applications, 2nd ed., 1991, p. 231. This material is used by permission of John Wiley & Sons, Inc.)

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Ability to sense motion – wind?

# Wind Speeds on Bloor Street, Toronto, Ontario



**Figure 11.27** Wind speeds on Bloor Street, Toronto The darker shading indicates areas that are uncomfortable for any pedestrian activity. Along parts of Bloor, a modest wind of 13 km/h (8 mph) can be accelerated to 19 km/h (12 mph) by the funnel effects of the street's buildings, a speed that will drive rain laterally. If the average wind speed is stronger than 32 km/h (20 mph; which it can be in the winter), occasional gusts of up to 48 km/h (30 mph) will be accelerated to more than 71 km/h (44 mph), a speed accepted as the limit for people's safety. At the foot of the Toronto Dominion Plaza (an office block not shown on this map), it has been necessary to string ropes for handholds. (Source: Canadian Geographic, vol. 107, no. 1, February/March 1987. Rowan Williams Davies & Irwin and Canadian Geographic.)

#### To hear -- Noise?

- Noise strictly speaking, this engages our sense of sound, a more elite sense
- However, not until very recently have urban geographers been at all interested in patterns of noise across a city
  - We can map them in decibels.

### Noise as pollution

Noise Pollution in Selected Chinese and American Cities Source: *GeoJournal*, Vol. 4, No. 6, Recent Research in China (1980), pp. 573-575

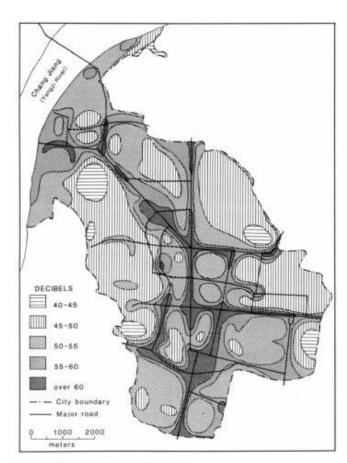


Fig 1 Nanjing, China Noise Patterns

### And smell...?

# "Smell the view: Jeff Koons' floral sculpture in Bilbao, Spain



Figure 11.10 Smell the view!

Jeff Koons' playful organic sculpture of a puppy outside the Guggenheim Museum in Bilbao, Spain, challenges us to experience a city's landscape with more than just our sense of sight.

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### The city mapped by smell?

- "...the intangible but overpowering fact of smell...seemed central to the place...he found himself wondering about a map of the city which would convey this sense of his. In his head was a map of Kabul which did not describe the streets and buildings, but set down the intangible and rich sudden odours of the place; described where a whiff of horse [manure] mingled with the heavy perfume of rotting mulberries, where dead dog and fruit blossom competed. He closed his eyes, and there, in his head, was a weighty flush of sensation, a wave like the colour purple arriving in his head, foreign, uninvited, irresistible. You did not need to walk the streets to map them in this olefactory manner; you only needed to sit by the window, and wait for a breeze... The city came to them, its perfumes carried on the wind."
- Quoted from Philip Hensher The Mulberry Empire (London: Flamingo, 2003) page 8.

# Ozone Concentrations in Vancouver

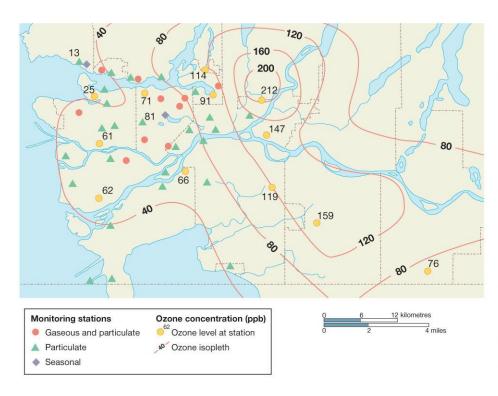


Figure 11.28 Ozone concentrations in Vancouver The map shows the distribution of air-quality monitoring stations across the greater Vancouver Regional District. The numbers and isopleths show ozone concentrations in the lower atmosphere (in parts per billion [ppb]) at 4:00 p.m. on 3 September 1988 during a particularly severe period of air pollution. (Note: Lower level atmospheric ozone is harmful to humans if its concentrations pass certain levels. Federal government guidelines stipulate that 0 to 50 ppb/h is "desirable"; 50 to 80 ppb/h "acceptable"; and 80 to 150 ppb/h "tolerable," a level that needs abatement immediately to prevent damage to human health. It should be noted that the highest reading on this map is 212 ppb/h.) (Source: Reprinted with permission of the Publisher from Vancouver and Its Region, edited by Graeme Wynn and Timothy Oke. © University of British Columbia Press 1992. All rights reserved by the publisher.)

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#### And what of Taste?

How can we taste the city??

### Paris – mapped by taste?

- Rebecca Spang (<u>The Invention of the Restaurant</u> 2000: 152-3) observes that the inventor of the restaurant review was Alexandre Balthasar Laurent Grimrod de la Reynière in his *Almanach des gourmands* (Paris: 1803-12)
  - The most famous eater in First-Empire France
  - A former editor of a theatre weekly, "The table", he wrote "is a stage on which there never has been a flop".

# "As Grimrod wrote, he created...

- ... his own Paris .. a city strikingly different from the one with which others were acquainted. Travelers had long had recourse to guidebooks, but the First-Empire proliferation of restaurants and food sellers produced (and, in a sense was produced by) a sort of guidebook for residents."
- Grimrod "wandered the streets and neighbourhoods of Paris, infallibly led by the gourmand's 'subtle sense of smell'. As they walked, they commented on the storefronts they passed and paused to examine particularly delightful specimens."