

# GEODEMOGRAPHICS

describes and classifies

the places  
where people live

the people  
who live in places

## MAP KEY

### 2011 LOAC

Geodemographics for London based on the 2011 UK Census.

[More info about this map](#)

[Download these data](#)

Intermediate Lifestyles

High Density & High Rise Flats

Settled Asians

Urban Elites

City Vibe

London Life-Cycle

Multi-Ethnic Suburbs

Ageing City Fringe



# WHAT IS GEODEMOGRAPHICS ?

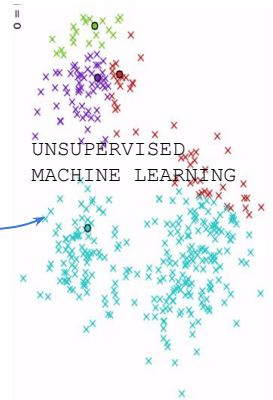
The WORD

“GEODEMOGRAPHICS IS THE NEW MAGIC!”

*Robbin (1980)*

Jonathan Robbin, PhD dropout  
& American entrepreneur

<b>GEO- + DEMOGRAPHICS</b>	“spatial -” + “MARKETING SEGMENTATION” 9/10
<b>GEO- + DEMO- + GRAPHI- + CS</b>	“spatial-” + “social-” + “visual-” + “COMPUTER SCIENCE” 7/10
<b>GEO- + DEMOGRAPHY + -ics</b>	“spatial -” + “POPULATION PROCESSES” 4/10
<b>GEO- + DEMO- + GRAPHICS</b>	“spatial -” + “social -” + “PATTERNS” 7/10





# The Chicago School's Theory of Urban Natural Areas

The THEORY

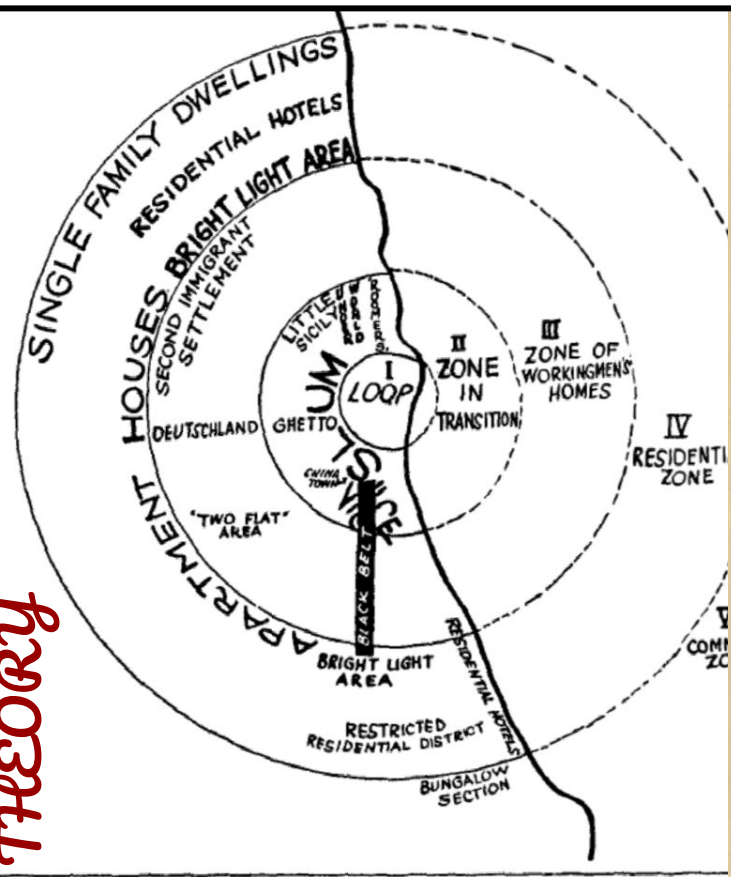
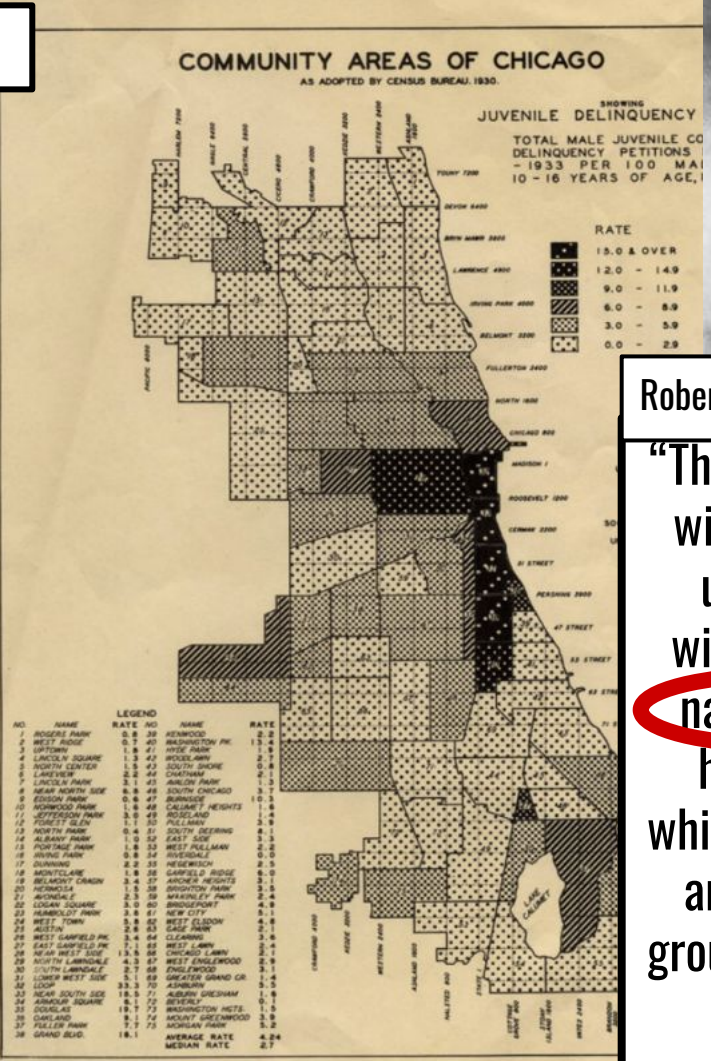


CHART II. Urban Areas

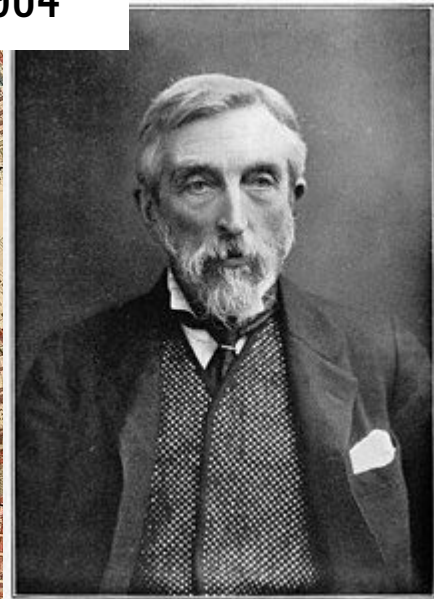


Robert Park (1925), The City

"There are forces at work within the limits of the urban community -- within the limits of any natural area of human habitation, in fact -- which tend to bring about an orderly and typical grouping of its population and institutions."



# CHARLES BOOTH MAPPED LONDON POVERTY, STREET BY STREET, 1887-1904



The Map includes Whitechapel, St. George's-in-the-East, Stepney, Mile End Old Town, Bethnal Green, most of Shoreditch, and part of Poplar.

The streets are coloured according to the general condition of the inhabitants, as follows :

- Well-to-do ..... Professional classes and large shopkeepers
- Fairly comfortable.....Regular employment, good ordinary earnings.  
(little or no poverty)
- Mixed with poverty.....Some comfortable, others poor
- Poor ..... { Those who have a fairly regular, though bare income, as 18/- to 21/- per week, for a moderate family.
- Very poor, casual..... { Those who fall below the above standard and are in chronic want
- Very poor, lowest class...Vicious, semi-criminal.

The proportions of the classes in East London may be stated numerically as follows :—

CLASSES.	Shoreditch.	Bethnal Green	White-chapel	St. George's	Stepney	Mile End Old Town	Poplar	East London
Black ALowest Class .....	1'0	1'2	3'3	1'5	1'4	8	1'1	1'3
Dk.Blue BCasual earnings .....	9'4	16'0	8'9	15'1	15'8	6'8	12'9	11'2
Light CIrregular earnings .....	10'6	12'6	10'7	12'5	6'1	6'0	6'2	9'0
Blue DRegular minimum .....	19'2	14'9	16'3	19'7	14'7	12'6	16'3	16'1
Pink EOrdinary earnings .....	45'4	32'9	43'3	38'1	41'6	32'0	45'2	44'3
GLowly-paid labour .....	11'1	11'3	11'3	10'5	13'8	14'9	13'4	12'5
GLower Middle Class.....	2'1	2'9	4'4	2'3	4'5	4'5	3'1	3'3
Red HUpper Middle Class.....	1'2	1'2	1'8	3	2'2	2'4	1'8	1'6
	100	100	100	100	100	100	100	100
Population .....	121,161	127,641	73,518	47,578	62,063	110,321	166,336	708,567



# The Big Question: Can we develop street-block geodemographics with open data?



1. **Geometrically**, can we define the tessellating polygons?
2. **Statistically**, can we transform data to higher resolution without too much noise and uncertainty?
3. **Ontologically**, does it make sense to define a \*neighbourhood\* just in terms of a street-block?
4. **Ontologically**, would it be better to do a multi-scale analysis that treats street-blocks connected by minor streets as larger natural units? (cf. Grannis (2009), *From The Ground Up*).
5. **Ethically**, what are the implications of higher resolution geodemographics?
6. **Ethically**, what are the implications of an analytical methodology with an epistemic bias for homogeneous units?

# Peter Prescott

Data Scientist || PhD Researcher  
Geographic Data Science Lab

<http://github.com/peterprescott>

<https://www.linkedin.com/in/peterprescott/>