# THE ONLINE AND ONSITE PPGIS DATA ANALYSIS



# HOW DID THE URBAN PLANNERS VALUE VARIOUS LEVELS OF ANALYSIS?

# Minkälainen asukastieto on mielestäsi hyödyllisintä yhdyskuntasuunnittelussa?

What kind of knowledge from people is most usable in urban planning



Mentimeter

# ONLINE AND ONSITE ANALYSIS

## Online, interactive analysis tools





## Online tool to analyse the qualitative data



http://koti.kapsi.fi/~hannes/helsinki/sanapilvi.html





FURTHER ANALYSIS OF THE CHARACTERISTICS OF URBAN SETTINGS



### The systematic use of Google street view

School ID 15

Unhealthy food/beverage marketing to children



School ID 16 Unhealthy food/beverage marketing to children



Other food/beverage marketing to children



gle Street View Pture Outdoor tising Around chools

<sup>DI for External Use - Not to</sup>

Schools
Unhealthy food/beverage advertisements
Other food/beverage advertisements
School boundary deprivation tertile 1 (most deprived)
School boundary deprivation tertile 2
School boundary deprivation tertile 3 (least deprived)

**Density of advertisements** 

0 - 3 (lowest density)

≥12 (highest density)

KDE values

3.1 - 6 6.1 - 9

9.1 - 12

Other food/beverage marketing to children





Figure 2 Kernel density maps, for example, schools in highly walkable neighbourhoods. KDE, kernel density estimate

Egli et al. (2018): Viewing obesogenic advertising in children's neighbourhoods using Google Street View. Geographical Research. doi:10.1111/1745-5871.12291

### Classification of children's places (behavior settings)



Place function	Openness		Communality				
	Indoor	Outdoor	Child-specific	Shared	Land use	_	
Shopping mall	*			*	Commercial		
Small shop	*			*	Commercial	Se	
Bookstore	*			*	Commercial		-
Game/DVD shop	*			*	Commercial	CI	al
Karaoke	*			*	Commercial	Cia	al
McDonald's/Restaurant	*			*	Commercial	Cia	al
School	*				Educational	cia	al
Cram school					Educational	cia	al
Library	*			*	Educational	tia	al .
Field		*		*	Nature	hai	
Forest				*	Nature	nal	!
Beach		*		*	Nature	al	1
River bank		*		*	Nature		
Pond		*		*	Nature		
Biotope				*	Nature		
Sports hall				*	Recreational		
Sports field		*			Recreational		
Park		*		*	Recreational		
Parking lot		*		*	Traffic	al	
Street				*	Traffic	al	
Train station	*	*		*	Traffic	3I	
Vacant lot		*		*	Other		1
Construction site				*	Other		
Shrine/church	* (Fin)	* (Jap)		*	Other		
	x4	~ (Jap)			Other		
		2.00		*	Other		

# Expert audit



### Hotspots by water: Expert audit & PPGIS data

Home locations

of visitors



#### Aurinkolahti beach, (99 points)



	Urban	~
Urban vs. rural	Semi urban	
	Rural	
	Remote	
	Beach	
	Rocky area	
	Marsh and	
T	vegetation	
waterfront	Open space or park	
	Trail	
	Square/plaza/urban public space	
	Harbor	
Type of	Seashore	~
water	Inland water (sea)	
feature	River	
	Lake	
	Seating	~
	Showers	
	Bathrooms	~
	Restaurants, bars or cafes	
Amenities	Recreation areas, sports fields, docks, barbeque, etc.	~
	Shops	
	Many nearby destinations/very urban	

Recreation activities	62%		
#1 Recreation activity	Visiting shop or restaurant		
#1 Recreation activity %	38%		
#2 Recreation activity	Relaxing near water		
#2 Recreation activity %	35%		
Sports activities	24%		
#1 Sport activity	Swimming		
#1 Sport activity %	13%		
#2 Sport activity	Jogging		
#2 Sport activity %	11%		
Nature activities	14%		
#1 Nature activity	Other nature observation		
#1 Nature activity %	8%		
#2 Nature activity	Hiking		
#2 Nature activity %	6%		

#### 40% 30% 20% 10% 0% On foot Bike Public Car Other transit

**Travel mode** 

# Urban analysis a la Jan Gehl



## Observations about urban life

### How to study public life?



#### GENDER Applies to people staying and moving



#### **Example Questions:**

Do all genders feel equally invited?

Are the planned activities in accordance with the users of the place?

Do gender minorities choose to walk in public at night?

#### POSTURE

Applies to people staying



#### **Example Questions:**

Do people feel comfortable lying down and sitting within the space?

Are there invitations for people to rest?

How do people use the urban furniture and other elements within the space?

#### AGE





#### **Example Questions:**

How many children visit this place?

Do the people on the street match the census data for the area?

Do the elderly have adequate facilities to spend time outside?

#### ACTIVITIES

Applies to people staying and moving



#### Example Questions:

Are people engaged in a single activity or multiple activities?

Are the activities that people spend time doing optional or necessary?

#### What is the diversity of activities?

#### MODE

Applies to people moving



#### **Example Questions:**

What is the detailed mode-split across a street section?

Is the street of the right width and surface type for the users?

How many people move through the space at night?

#### OBJECTS

Applies to people staying and moving



#### **Example Questions:**

How many of the pedestrians are also walking a dog?

Do people carry their own chairs or blankets into the space?

Are bicyclists wearing helmets?

#### GROUPS

Applies to people staying and moving



#### **Example Questions:**

How sociable are the people staying within this place?

Does the urban furniture provide opportunities for groups to meet?

Do people need space to walk in pairs?

#### GEOTAG

Applies to people staying



#### Example Questions:

Which corners of the space are more popular for people to spend time in?

Are some kinds of urban furniture more popular than others?

What is the impact of shade and sun?

### Gehl's 12 quality criteria



# YOU NAME IT...







Visualizing ideas based on your analysis (Here: Sirkku Huisko)

# IT MIGHT BE A GOOD IDEA TO DO

# Data analysis plan...

### Here: Everyday Urbanity project case Kuninkaankolmio



## **FIRST!** CHOOSE A GROUP

Please form groups of 4-5 persons by using the grouping tool in MyCources



# SECOND!

CHOOSE 2-4

Modify Map & Sign In



# THIRD!

### DESIDE TOGETHER WHAT KIND OF ANALYSIS YOU WILL DO

## THE OPTIONS ARE MANY!



SOME POSSIBILITIES FOR THE ANALYSIS TASK

# You can for example analyze THE CHARACTERISTICS OF THE PLACES BY DOING:

1. GIS-analysis or visualization and compare the land use in the clusters that you have chosen and analyze e.g.:

- Mixed land use
- Density level
- Intersection density
- Green structure proportion
- Something else...
- 3. Deeper analysis of the site characteristics

Get additional information about the characteristics of the site for example by:

- Realizing an expert audit, systematically observing the characteristics of the site
- Using Google street views to analyze the characteristics of the site
- Realizing a historical analysis of the site
- Something else...

... or can also deepen the understanding of place experiences of people by e.g.

- Realizing behavior mapping a la Jan Gehl and observing how people use the site
- Realizing interviews among the users of the site: for example short street interviews or walk along interviews might be doable
- Making a video on the site and how it is used
- Something else...

...or you can concentrate on thinking how the mapped place experiences of people could inform urban design and planning

Do improvement suggestions based on the place experiences by people

### Feel free to come up with more options!

**SOME TIPS** 



It is important to reflect both the experiences of people and the characteristics of settings.

Please make a presentation about your work for the last session.

The presentation can be 5-10 min long, you cannot exceed this time!



Find your unique way to address the analysis challenge.

- Divide tasks!
- Do an analysis plan!

Find links to the relevant research literature

During the next two sessions help from Tiina & Kamyar will be available!