



# Methods of field research in human geography

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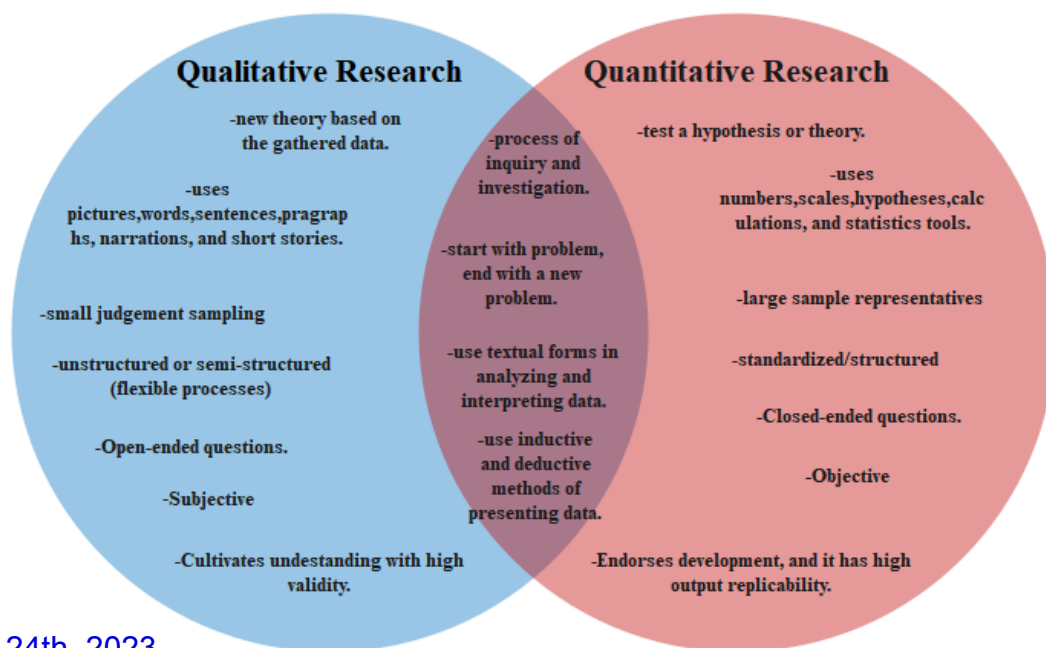
# Introduction: quantitative x qualitative

## ■ quantitative research methods

- primarily number-based,
- more generalizable,
- less in-depth on a large number of cases,
- used to test or confirm.

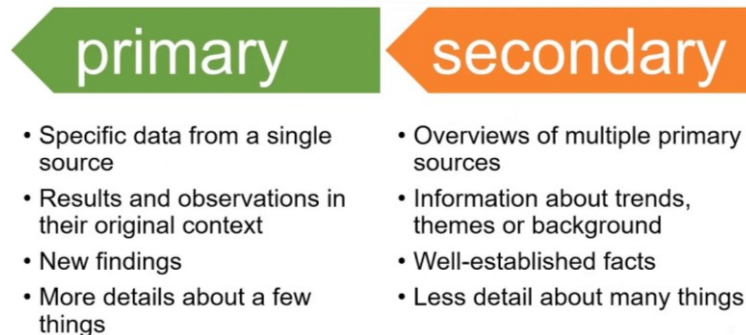
## ■ qualitative research methods

- primarily text-based,
- less generalizable,
- more in-depth on a few cases,
- used to understand.



# Introduction: primary x secondary data

- primary data
  - generated by the researcher himself/herself
- secondary data
  - existing data generated by the institutions (for example the statistical office)

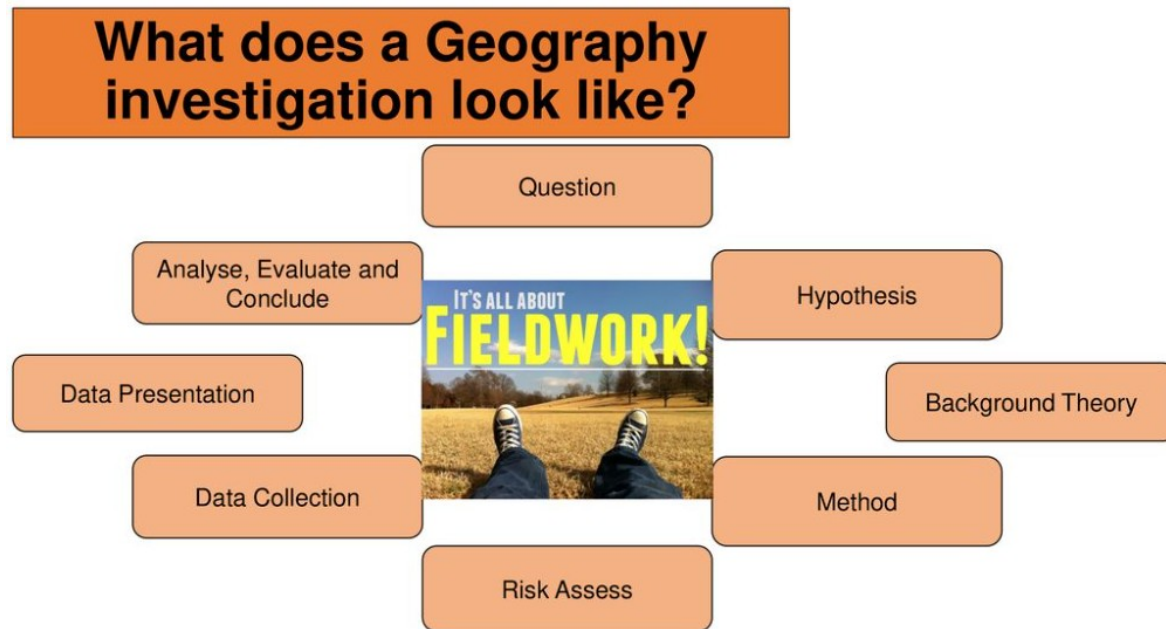


PRIMARY DATA	SECONDARY DATA
Primary data is a type of data researchers directly collect from main sources	Secondary data refers to already existing data produced by the previous researchers
Includes real-time data	Related to the past
Collected to address a current research problem	Primarily collected to address previously existed research problems and can be used to address the current research problem as well
Accessing primary data includes a relatively long process	Referring to secondary data is quick and easy
Data collection tools include observations, surveys, questionnaires, physical testing, online questionnaires, personal or telephone interviews, case studies, and focused group discussions	Data collection tools include journal articles, websites, books, government publications, records, etc.

# Field research

■ example of methods for field research in human geography

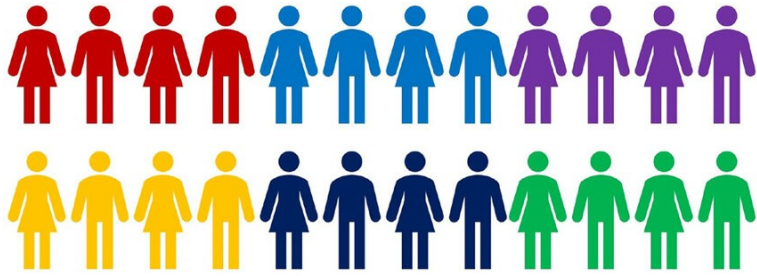
- 1) questionnaire surveys
- 2) semi-structured interviews
- 3) focus groups
- 4) mental maps
- 5) observations



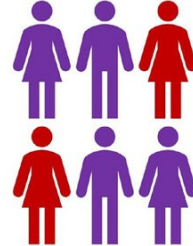
# Questionnaire surveys

- instrument that consists of a set of questions
  - purpose: gathering information from respondents
  
- representative sample
  - sufficient number of respondents (usually tens or hundreds of respondents)
  - corresponding structure of respondents (gender, age, highest level of education...)
  - if the survey is really representative, the results can be applied to the whole population
  - identification questions only at the end of the questionnaire
  - rule of anonymity

## Target population



**Representative sample**



**Unrepresentative sample**

	Perfume Buyers	Respondent Quota (Sample size=200)
Men	40%	80
Women	60%	120

**Representative Sample**  
 [re-pri-'zen-tə-tiv 'sam-pəl]  
 A subset of a population used to reflect the characteristics of the larger group.

Investopedia

Sampling method	Description	Example
Random sampling (aka simple random sampling)	Gathering a representative sample from a population where each member in the population has an equal chance of being selected.	Using a random number generator to select students in a class to complete a task.
Stratified sampling	Smaller groups or strata within the sample are represented proportionally to the population.	Finding out a favourite soap opera from different age categories of people in a year group.
Systematic sampling	Every member in the population is given a number. After the first member is chosen at random, the remaining members are chosen from a given interval.	A list of people with their first names in alphabetical order are numbered. The 5th person is chosen randomly, followed by every subsequent 8th person.
Non random sampling	Convenience sampling is used for ease of data collection. Volunteers usually collect data.	Asking people at a given location about how long their commute to work is.

# Questionnaire surveys



**CAWI**  
(Computer Assisted  
**Web Interview**)



**CATI**  
(Computer Assisted  
**Telephone Interview**)



**PAPI / CAPI**  
(Paper & Pencil /  
Computer Assisted  
**Personal Interview**)

# Questionnaire surveys

- types of questions

- open-ended questions = no options, free space for the respondent, more demanding (harder) to evaluate

- close-ended questions = predefined options, respondent must select one or more of them

- semi-closed questions = several predefined options, plus option "other" that can be specified

- specific questions

- a) dichotomous questions (for example options "yes" or "no"),

- b) Likert scale ("strongly agree", "agree", "neutral", "disagree", "strongly disagree"),

- c) scoring on a scale (for example grades in school),

- d) ranking the options (for example, from best to worst from the respondent's point of view)



# Open-ended and close-ended questions

- mix of both types of questions
- there are usually fewer open-ended questions

Open	Closed
How do you feel about the trip?	Are you going to work by driving, biking, or walking?
Tell me about your relationship with your boss.	Do you get on well with your boss?
What did you manage to accomplish on the trip?	Was your trip successful?
What happened at the meeting?	Did you have a good meeting?

## OPEN QUESTIONS VERSUS CLOSED QUESTIONS

Questions that should be answered with long responses	Questions that should be answered with short responses
Answers are often descriptive and explanatory	Answers are often short and factual
Questions begin with words like how, why, explain, describe, etc.	Questions begin with words like is, would, do, what, etc.
Essay questions	Multiple choice questions
Take a long time to answer	Can usually be answered quickly

# Dichotomous questions

- only offer two possible answers
- they are typically presented in the following format:  
Yes or No, True or False, Agree or Disagree, Fair or Unfair etc.

<b>Do you have a dog as a pet?</b>	<b>Yes</b>	<b>No</b>
Mark your answer in the appropriate box:	<input type="checkbox"/>	<input type="checkbox"/>

<b>Do you have a driver's license?</b>	<b>Yes</b>	<b>No</b>
Mark your answer in the appropriate box	<input type="checkbox"/>	<input type="checkbox"/>

<b>Do you collect social security benefits?</b>	<b>Yes</b>	<b>No</b>
Mark your answer in the appropriate box	<input type="checkbox"/>	<input type="checkbox"/>

<b>What is your gender?</b>	<b>Male</b>	<b>Female</b>
Mark your answer in the appropriate box	<input type="checkbox"/>	<input type="checkbox"/>

## Answer the following questions


<b>Dichotomous Items (Type-1)</b>	<b>Responses</b>
1. Are you a marketing executive?	Yes/No
2. Facebook is a social networking site.	True/False
3. Honesty is the best policy.	Agree/Disagree
<b>Dichotomous Items (Type-2)</b>	<b>Responses</b>
1. Gender	Male/Female
2. Background	Urban/Rural

# Likert scale

- rating scale used to measure opinions, attitudes or behaviors
  - it consists of a statement or a question, followed by a series of five or seven answer statements,
  - respondents choose the option that best corresponds with how they feel about the statement or question.

**LIKERT SCALE EXAMPLES**


**1**



**AGREEMENT**

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree


**2**



**FREQUENCY**

- Very Frequently
- Frequently
- Occasionally
- Rarely
- Never


**3**



**IMPORTANCE**

- Extremely Important
- Very Important
- Moderately Important
- Slightly Important
- Not important at all

**4**



**INTEREST**

- Very interested
- Somewhat interested
- Neutral
- Somewhat uninterested
- Very uninterested

Please rate your satisfaction with the hospital and services offered on the following statements:

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
The overall quality of care received.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication & clarity of information provided.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cleanliness & maintenance of hotel facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information provided for diagnosis and treatment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency of admission & discharge process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Scoring on a scale

- how survey responders feel about a particular product or statement
  - rating scale,
  - evaluation by grades in school.

**Task 2**

How difficult (1) or easy (5) was it to log into the app?

1       2       3       4       5

Very difficult      Very easy

[Next](#)

How likely is it that you would recommend BEST SERVICE INC. to a friend or colleague?

0 1 2 3 4 5 6 7 8 9 10

Not at all likely      Extremely likely

[Prev](#) [Next](#)

# Ranking the options

- ask respondents to compare and arrange multiple options based on their preferences
  - key element = respondent's point of view,
  - strongly subjective assessment.

Please rank the following in order of importance from 1 to 4 where 1 is most important to you and 4 is least important to you

**Speed of Service**

**Ease of Parking**

**Cleanliness**

**Friendliness of Staff**

2. Rank the following in order of preference

<input type="text" value="v"/>	Football
<input type="text" value="v"/>	Rugby
<input type="text" value="v"/>	Cricket
<input type="text" value="v"/>	Boxing

# Questionnaire surveys

- questionnaire evaluation
  - tables, graphs
  - interpretive text



# Interviews

- structured interviews
  - unchanging order of questions
  - all communication partners receive the same questions
  - almost identical to a questionnaire survey with only open-ended questions
  
- semi-structured interviews
  - only predefined topics and example questions
  - the interviewer continuously responds to the communication partner's answers
  - not all topics and questions may be used
  - the important thing is to answer the research question

# Interviews

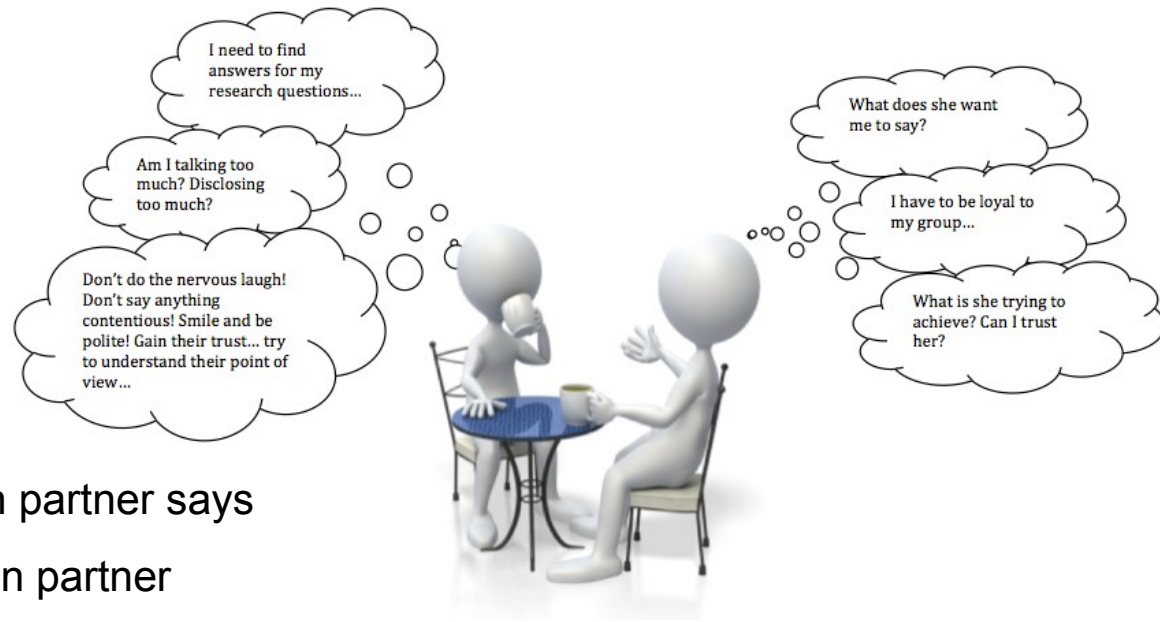
- unstructured interviews
  - only the topic is predefined
  - very difficult for interviewers
  - can be used for „hard topics" that the communication partner wants to talk about





# Interviews

- practical advice
  - listen more, talk less
  - follow what the communication partner says
  - not interrupt the communication partner
  
  - try to ask open questions
  - don't give examples (immediately)
  - try not to ask leading questions
  - not to evaluate the communication partner's answers, even if I do not agree with them



# Interviews

- communication partners
  - fewer communication partners compared to survey respondents
  - the interview is on average longer (at least tens of minutes)
  - not a representation of individuals, but a representation of the problem (people with different experiences relative to the topic)

# Interviews

- principles of interviewing (Seidman 2005)
  - 1) listen more, talk less
  - 2) follow up on what the participant says
    - a) ask questions when you do not understand
    - b) ask to hear more about a subject (gather details and circumstances)
    - c) explore, don't probe (communication partner should feel safe and comfortable)
  - 3) listen more, talk less, and ask real questions
    - a) avoid leading questions (try to ask neutral questions, don't prompt an answer)
    - b) ask open-ended questions
  - 4) follow up, but don't interrupt (don't jump into the conversation, take notes)
  - 5) two favorite approaches
    - a) ask participants to talk to you as if you were someone else
    - b) ask participants to tell a story

# Interviews

- principles of interviewing (Seidman 2005)
- 6) ask participants to reconstruct, not to remember (this is not a test)
- 7) keep participants focused and ask for concrete details
- 8) do not take the ebbs and flows of interviewing too personally (don't bring in your opinions and emotions, they will not help you understand the communication partner)
- 9) limit your own interaction
  - a) only share experiences occasionally (you are “only” a questioner)
  - b) avoid reinforcing your participants' responses (do not rate the answers)
- 10) explore laughter (non-verbal communication is also important)
- 11) follow your hunches (and intuition, be natural)
- 12) use an interview guide cautiously (it is only a guide, not an exact and unchanging script)
- 13) tolerate silence (short silence usually means thinking)

# Focus groups

- thematic group interview

- uses group interaction, people react to each other

- it arises spontaneously, it cannot be prepared in advance

- types of groups for focus groups

- I.) natural groups = the researcher does not create the group, but only takes it over (e.g. participants of a certain course)

- II.) formed groups = members selected according to pre-defined criteria with regard to the research question, an effort to include people with different opinions on the given topic

# Focus groups

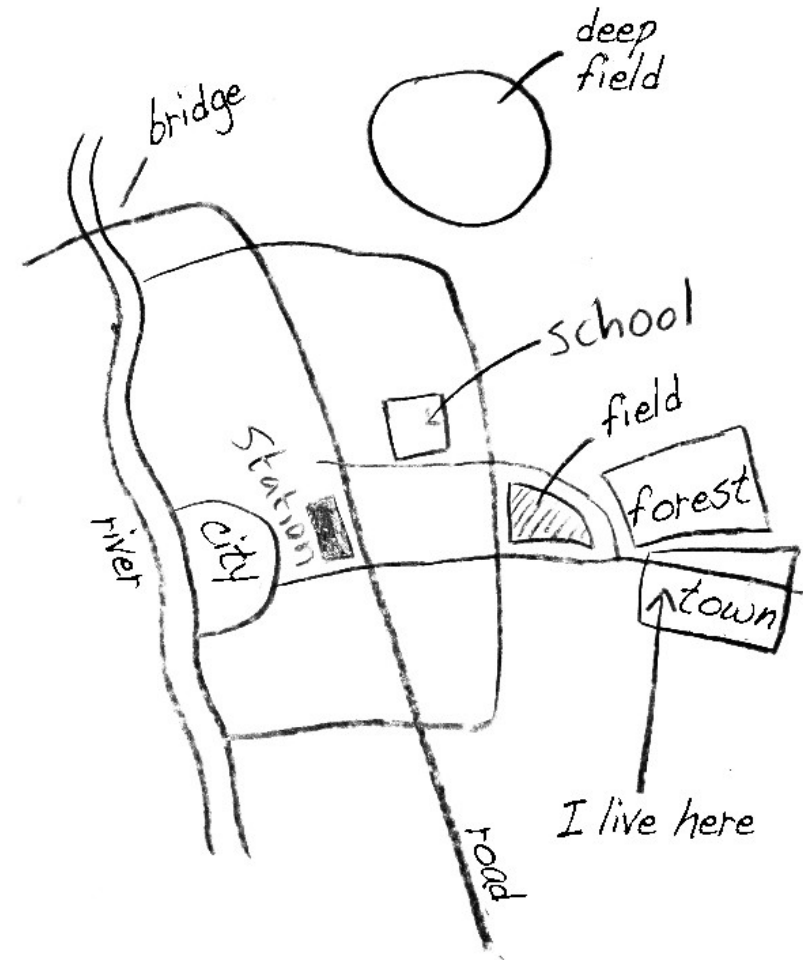
- practical advice
  - the question of group size, smaller groups produce few opinions, larger groups are poorly managed
  - there may be more researchers (main researcher, assistant, silent observer)





# Mental maps

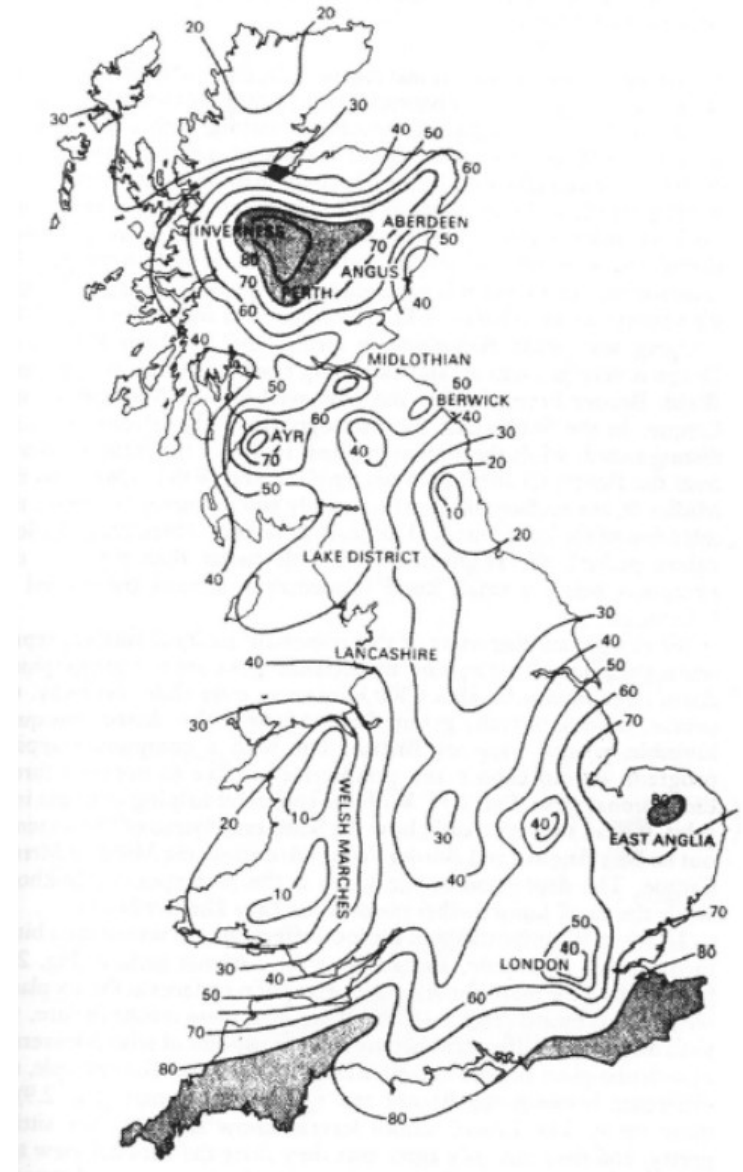
- basic information
  - no mind map (text bubbles)
  - a person's point-of-view perception of their area of interaction
- mental maps according to Lynch
  - Kevin Lynch (1960): The Image of The City
  - the result is a sketch / picture / scheme / map representing the individual's vision of space
  - 5 key elements: paths (lines), edges (where space ends), areas (surface elements), nodes (crossroads / intersections), landmarks (significant elements)





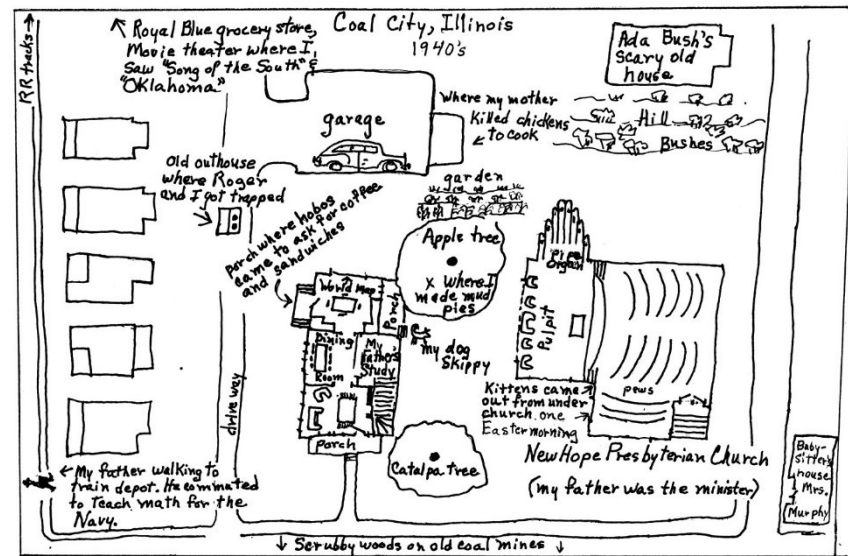
# Mental maps

- mental maps according to Gould
  - Peter Gould and Rodney White (1974):  
Mental Maps
    - drawing on the underlying map (e.g. where you would like to live or which place you prefer for your summer vacation)
    - blind or blank map with borders
- Lynch = maps about perception
- Gould = maps about preference



# Mental maps

- practical advice
  - inaccuracy does not matter, on the contrary, it is beneficial
  - suitable for children and people who do not like to express themselves in words or text
  - basic drawing ability and basic spatial imagination are required



Unnumbered Figure pg 3  
World Regional Geography, Third Edition  
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# Observations



- tracking (monitoring), recording and analyzing space and its elements (including people)
  - traditional method, very typical and natural for people

- structured and unstructured observation

I.) unstructured = only the general objective of the observation is specified

*How do people behave in the park?*

II.) structured = observer concentrates on previously defined phenomena in more detail

*How do people (not) form a queue at the bus stop while waiting for the bus?*

# Observations

- participant and non-participant observation

I.) participant = observer is a part of the situation he observes

*a participant in a demonstration for higher wages*

II.) non-participant = observer is separated from the situation he observes

*observer of the demonstration for higher wages*

- disguised and undisguised observation

I.) disguised = physically hidden or socially hidden observer

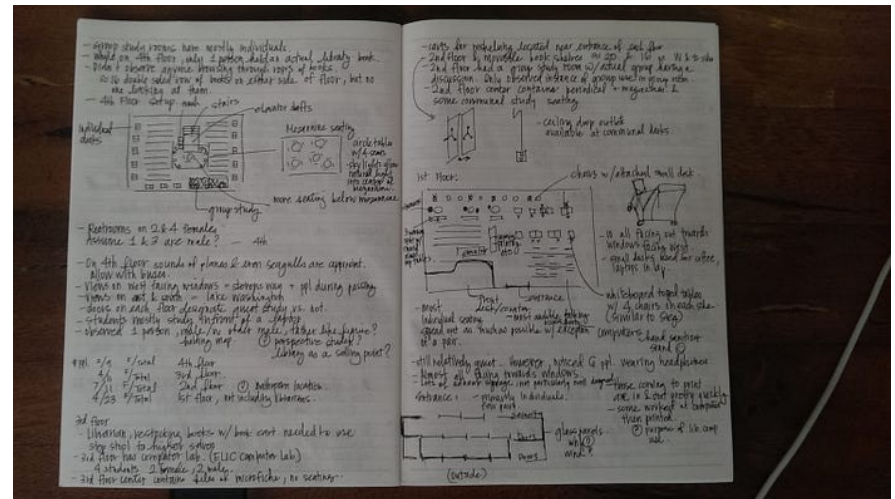
*a researcher playing the role of a supermarket employee*

II.) undisguised = the observer does not hide that he is a researcher

*the researcher not hiding the fact that he observes supermarket employees*

# Observations

- field notes
  - conducted during the observation or after the end of the observation
  - previously often handwritten notes, this may have affected the observations
  - today the possibility to use a mobile phone or other technology, it is easier to hide



# Thank you for your attention !

## Questions ?

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# Task 1

- questionnaire survey
  - create 7 to 10 questions for the questionnaire on the topic “Quality of life in the city XY”
  - identification questions (gender, age, education) do not count
  - use a combination of different question types (open-ended, closed-ended, Likert scale, scoring, ranking etc.)
  - test your questionnaire survey in practice and interview your classmate

# Task 2

- semi-structured interview
  - create a structure for the interview: main topic, individual subtopics and basic questions
  - topic: “Exploring a new city”
  
  - create pairs or trios and conduct this interview, then evaluate what you have found out
  - give your interviewer constructive feedback