3. Data collection techniques

We present data collection techniques here, according to their uses in the assessment and evaluation process, starting with the municipality profile as a tool for becoming familiar with the locality and to describe challenges and ongoing discussion. This tool is therefore particularly suitable during the exploration phase. Qualitative interviews, focus groups and Open Space Technology could also be used, while all could also be focused on specific topics that have already been identified. Observation and mapping methods, as well as further tools that incorporate visual material, are more advanced methods and often require greater resources.

3.1. Municipality profile

3.1.1. Facts and figures

The municipality profile is intended to help actors get an overview of the current situation and possible future pathways and can stimulate comparisons with other municipalities. Quantitative and qualitative assessment could address, for instance:

- the current demographic situation and future prognoses,
- the economic and labour market situation,
- the educational background of the population,
- infrastructure and general basic services, such as education, healthcare facilities, places of encounter,
- the budgetary situation,
- social cohesion and current public debates and challenges, and
- further peculiarities.

The municipality profile can be created at a range of scales, not just at the level of municipalities, but for districts, provinces or (Federal) States. The number of participants and composition of groups must be adapted accordingly.



Advantages: A municipality profile can achieve the goal of 'becoming familiar' with a locality, based on statistical data and qualitative evaluations. If a variety of participants is selected, multiple perspectives can be included. It also stimulates interaction and discussion between participants and can identify discourses and challenges in the exploratory phase of an evaluation or development process.

Disadvantages: Creating a municipality profile can be very resource-intense and time-consuming, especially in cases where there is data missing. Participants should therefore either agree on which data are necessary for the concrete process, or consider the tool as one that is both valuable and useful for further processes.

Level of moderator involvement: The role of the researcher is to identify available data and to select the participants who become further involved in the process.

#	Number of municipality profiles	Depends on the research aim, saturation rule is applied.	Acknowledge the availability of people, especially experts in small-scale settings, e.g. rural areas.
	Number of participants	Depends on the size of the municipality, 5-10 as a core group; if a short survey is included, even more.	
Ø	Duration of municipality profile	4–12 weeks	If a process needs to be completed quickly, more responsible persons should be nominated.

3.1.2. Preparation

In the preparation phase, check for the availability of pre-existing data. For instance, possible sources include:

- EUROSTAT, Statistical Offices at (Federal) State level,
- data collected by municipalities themselves, and
- those collected by NGOs, foundations and associations.

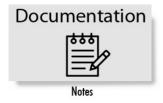
It might be possible to get all the necessary data for the compilation of a municipality profile by requesting it from the above-mentioned institutions. It might also be necessary to carry out short additional surveys. Digital tools, like Mentimeter, MS Forms or feedbackr should be included and questionnaires should not exceed 2-3 questions.

Before the process starts, it is important to reflect on which stakeholders need to be included in order to get a holistic picture of the municipality.

3.1.3. Implementation

The following steps should be considered:

- 1. Agree on a moderator, e.g. from the public administration in the municipality.
- 2. Explain why a municipality profile is being created and what will happen to the collected information.
- 3. Define the aims for example to obtain an up-to-date overview of the current situation in the municipality, to assess the impacts of demographic transformations such as immigration, to foster exchanges between stakeholders, so that the results can be used to draft policy recommendations.
- 4. Discuss open questions on information missing from the template, which can reveal what is necessary, for example, in the design of a focus group.
- 5. Document statistical data and the outcome of discussions in the template.



3.2. Qualitative (in-depth and narrative) interview

3.2.1. Facts and Figures

Definition and application: A qualitative interview is commonly treated as a form of conversation with a purpose - to provide more in-depth information to reflect on and think about (Legard et al. 2003). The design of qualitative interviews can be more or less structured, varying in openness accordingly. The problem-centred expert interview as a special form of qualitative interview aims to unravel interpretational and orientation knowledge from experts (Bogner et al. 2009). Expert knowledge gathered through professional or volunteering practice comprises an institutionalised competence to construct reality. The narrative interview is an open and less structured form of qualitative interview that aims to solicit individuals' experience of events and situations to understand peoples' views and practices in their social context (Clandinin 2007). Narrative interviews can be focused either on someone's entire biography or on a specific period of time. Using a qualitative interview to generate narratives by inviting people to recall a particular situation from the past can help to contextualise their perspectives in the present.

- Advantages: Qualitative interviews offer the chance to grasp individuals' meanings, based on their expert knowledge or their experience, and thus contribute to a deeper understanding of how people construct their realities in national, regional or local settings.
- Disadvantages: Qualitative interviews take time and require a significant number of personnel and proper preparation. Participants have different levels of experience of (open) interview situations and differing narrative competences, which is challenging. Thus, interviewers should check in advance whether there are more chatty or shy participants involved and try to adapt to this.

Standardisation: On the one hand, similar questions and procedures can be used across groups in order to achieve comparability. On the other hand, however, an 'exploratory, open-natured format may be more consistent for scholars dedicated to the goal of not imposing the research's assumptions or interpretations of the research' (Skop 2006, 120); that is, it might be better to take an inductive approach.

Level of moderator involvement: The researcher's role is to direct the interview process; they must be clear about how to manage the interview effectively so as to achieve the aims of the research. Interview guidelines help to control the progress of the interview to some extent: they mostly serve as an orientation and should be understood as a checklist to be ticked throughout the interview. Simultaneously, and depending on the aim of the interview, a participatory research style can also retain flexibility and give the participant the feeling they have an influence on the progress of the conversation to some extent.

#	Number of qualitative interviews	Depends on the research aim, saturation rule is applied.	Acknowledge that certain people, especially experts, may not be available in small scale settings.
	Number of participants	Ideally one per interview.	If more than one participant is present, try to avoid hierarchical situations that may affect responding behaviour, but make use of the joint experience, of, for example, couples.
Ø	Duration of qualitative interview	Variable, depending on the availability of participants.	

3.2.2. Preparation

Sampling: While there are no closely defined rules for sample size, sampling in qualitative research usually relies on small numbers with the aim of studying in depth and detail. Seeking rich information about a particular phenomenon, the sample is derived purposefully rather than randomly (Marshall 1996, Tuckett 2004) (see Infobox 4).

Infobox 4: Sampling methods in qualitative research

- *Theoretical sampling:* necessitates the creation of interpretative theories from the emerging data and selecting a new sample to examine and elaborate on this theory.
- Judgement sampling: the researcher actively selects the most productive sample to answer the research question. This can involve developing a framework of variables that might influence an individual's contribution and will be based on the researcher's practical knowledge of the research area, the available literature and evidence from the study itself.
- *Convenience sampling:* the least rigorous technique, involving the selection of the most accessible subjects. May result in low quality data and little intellectual credibility.

Locality: When thinking about where qualitative interviews will take place, researchers should consider the preferences of the participant, for example by choosing their workplace in the case of professionals or private/semi-public spaces in the case of migrants.

3.2.3. Implementation

The interview guidelines explain how to conduct qualitative interviews and follow a dramaturgical order, mostly starting with an *opener*, moving to the *main part* of the interview and ending with a *summarising section* and *outlook*. In most cases, asking participants to re-affirm and complete their *socio-statistical data* is done at the very end of a qualitative interview. Narrative interviews usually include one or more long period(s) of storytelling, which should not be interrupted by interventions from the interviewer (see Infobox 5).

Qualitative research methods are commonly based on face-to-face interactions or, as Berger and Luckmann (2009) put it, 'the fundamental experience of the other is that of face-to-face. The vis-à-vis situation is the prototype of all social interaction. Any other form of interaction is derived from it' (ibid., 31, translated by D. Spenger). For this reason, audio (telephone) interviews have long been unpopular in qualitative research (Novick 2008). Nowadays, audio and audiovisual interviews represent an important alternative, which is discussed in the following sections:

Audio interviews

As Misoch (2015) points out, audio interviewing can be useful in all forms of semi-structured and episodic interview. Carrying out narrative interviews by telephone, however, has proven to be problematic.



Advantages of audio interviews

- lower travel costs, increased efficiency, wider geographical spread;
- in methodological terms: as visual elements are absent, the interviewer does not influence the participant's storytelling as much (Misoch 2015);
- thanks to greater anonymity, interviewees show greater openness and willingness to talk about sensitive topics than in physical interview situations (Blee 2003, Schulz and Ruddat 2012);

Disadvantages of audio interviews

- non-verbal, or exclusively visual signs of encouragement to continue speaking or to indicate consent are absent, which further intensifies the power asymmetries of the communication (ibid.);
- a high dropout rate is to be expected (ibid.);
- a lack of visual control over the interview setting, since 'channel control is effected by small non-verbal signals, mainly headnods, and eye movements' (Argyle 2009, 72);
- the interviewer has no knowledge of the participant's current environment and no influence on whether there are others present who might be crucial to the atmosphere of the interview (e.g. in interviews with young people) (Misoch 2015);
- it is not possible to make use of breaks. During face-to-face interviews, breaks can signal that the interviewee is concentrating but in audio interviews '[t]here is a marked tendency to avoid silences [...], and long silences over the telephone are considered improper and rude' (de Leeuw 1992, 15).

Audiovisual interviews

Audiovisual online tools, such as video calls, are a step further towards face-to-face communication, if participants consent. Opportunities for online

3. Data collection techniques

interviews are various and their popularity is growing fast in contemporary research (Deakin and Wakefield 2014; Nehls et al. 2015).



Advantages of audiovisual interviews

- a certain degree of 'social presence' reinforces the confidence of interviewer and participant (Misoch 2015);
- potential for greater access to participants, both geographically and with regard to being able to interview less mobile persons (ibid.);
- Although technical resources are a prerequisite, group interviews can be conducted via online audiovisual tools, and the dynamics of distinct social groups can therefore be traced (ibid.).

Disadvantages of audiovisual interviews

- a lack of olfactory, tactile or gustatory elements;
- technical problems can arise during the interview (e.g. video quality, microphone quality) and disrupt the conversation (ibid.);
- due to relatively greater anonymity, video calls are less reliable and cancellation is more likely (Deakin and Wakefield 2014, Misoch 2015).



Infobox 5: Suggestions and advice for interaction in interview situations

To get participants to tell their stories and give full and unbiased responses, various practices should be avoided (Legard et al. 2003):

- never assume: It is essential not to assume that you understand the
 facts, without giving the interviewee the opportunity to explain the
 meaning of the terms they have used; similarly it is essential not to
 assume that the reason for a particular course of action or belief is clear,
 if it has not been made explicit by the participant.
- refrain from commenting on an answer: Although it may help to establish a trusting relationship between the researcher and the participant, commenting on an answer by saying something like 'that's interesting', can introduce an element of judgement and interrupt the flow.
- refrain from summarising an answer: Attempts to summarise an participant's full meaning may seem patronising to them. It is likely that the summary will be partial or inaccurate. If the researcher needs to check whether they have understood a response correctly, they should do so in the form of a direct question.
- refrain from finishing a participant's answer: Avoid putting words into
 the participant's mouth however tempting it may be to complete their
 answer. It is better to ask a further question that will help them to make
 their point.
- avoid extraneous remarks such as 'right', 'okay', 'yes' or 'I see', which can encourage the participant to close down, seeing what they have already said as sufficient. Prefacing questions with 'and' or 'so' is another habit of new and nervous researchers, but it results in a tone which is less spontaneous and relaxed.

Instead, receptive signals ('hummmm', nodding, smiling) may do more to help maintain the narration. Moreover, interviewers must be able to tolerate silence for a while.

3.3. Focus group

3.3.1. Facts and figures

Definition and application: Focus groups are a special form of group discussion, where data are collected through group interaction on a topic determined by the researcher or participants (Morgan 1996, cf. Krueger 1994). They are used to 'uncover the 'world-views' (especially regarding attitudes, perceptions and experiences) of different groups of people (...) in a variety of locations' (Skop 2006, 121). They are therefore used in both the exploratory phase of research to generate hypotheses or identify problems and in the validating phase, e.g. for examining the acceptance of options or discussing potential strategies (Pratt 2002; Schulz 2012).

Advantages: Focus groups offer the chance to grasp the effects of group dynamics and controversies (Bedford and Burgess 2001, 124, cit. after Skop 2006; Schulz 2012). By means of spontaneous expressions and interactions, they stimulate new ideas and questions (Pelz et al. 2004; Cyr 2016). Focus groups may also provide a forum for the perspectives of disadvantaged or marginalised groups and provide a means to overcome feelings of systemic exclusion (Skop 2006; Carey 2015), thus constituting a potential element of participatory action research and empowerment (Skop 2006; Gailing and Naumann 2019). They encourage reflective research practice (Skop 2006), since participants may finally question researchers' assumptions, preventing them from jumping to early conclusions (Kamberelis and Dimitriadis 2013) and may thus be able to reduce the imbalance in power relationships between researcher and participants (Gailing and Naumann 2019).

Disadvantages: By contrast, group dynamics may prevent individuals from talking freely (Littig and Wallace 1997) and lead to censoring or conforming (see also Skop 2006). Simultaneously, they may create 'chatterboxes' and '(wo)men of few words', a situation that calls for a high level of moderator involvement (Bennett 2002; Hollander 2004; Schetula and Gallego Carrera 2012; Schulz 2012), making individual narratives difficult to grasp. In addition, a toorigid orientation to the interview guidelines, or too-rapid change

of topic, and mistakes in time-management, may compromise the 'success' of focus groups (Vogl 2014).

Standardisation: On the one hand, to achieve comparability, similar questions and procedures can be used across groups (Morgan 1996; Skop 2006). On the other hand, however, the 'exploratory, open-natured format may be more consistent for scholars dedicated to the goal of not imposing the research's assumptions or interpretations of the research' (Skop 2006, 120). Morgan (2002, cit. after Skop 2006) suggests a more closed character with predefined questions during the first, and a more open character during the second part of a focus group.

Level of moderator involvement: Generally, the role of researchers (or moderators) is to facilitate discussion in a less-directed way, as the focus is on the participants and the relations between them (Parker and Tritter 2006). However, since the researcher wants to collect data, he or she may want to control the discussion, ensuring that relevant topics are discussed (by, for example, directing attention away from what are deemed to be less important issues) and that participants are able to interact (by trying to get everyone to participate equally in the discussion) (Morgan 1996). Benighaus and Benighaus (2012) distinguish two types of techniques for moderators: a) Questioning-route-technique, where core questions are prepared beforehand and the moderator 'machines off' the questions, fostering comparability between focus groups and facilitating the coding; b) topic-guide-technique, where a list of topics is prepared beforehand, while moderators are free to formulate questions of their own.

#	Number of focus groups	3-6 focus groups, saturation rule is applied.	Acknowledge people's availability.
	Number of participants	4–12 (fewer, if focus groups are conducted online) depending on the topic; smaller groups, if emotionally charged topics are to be discussed; larger groups if more neutral and general topics are on the agenda.	The more participants are included, the more challenging it is to include them all and unravel their perspectives.
Ö	Duration of focus groups	1–5h, depending on availability of participants; shorter if professionals are included.	

3.3.2. Preparation

Sampling: Sampling participants requires preparatory work to avoid reinforcing existing power relations (Skop 2006). The selection of participants and the composition of focus groups should be based on the research question and social and demographic characteristics of the target group (e.g. age, gender, mother tongue, ethnicity, social class) (Knodel 1993, cit. after Skop 2006). Segmentation – the creation of groups consisting of particular categories of people – may foster the security of the group and the participation of group members. Moreover, ensuring that participants are similar to one another may facilitate discussion (Morgan 1996; Lloyd-Evans 2006; Skop 2006). To facilitate participation itself, the different schedules of potential participants should be considered; for example a focus group could be organised in the evening of a day of bad weather to include people employed in agriculture, while an important leisure event, such as a football match, could be taken into account (Lloyd-Evans 2006).

Infobox 6: Reducing uncertainties

Because the focus group tool may be an unfamiliar experience for some, pre-focus group interviews and pre-screening questionnaires or exercises may be helpful to explain the project and get to know more about participants. These also help participants to structure their thoughts beforehand, which may foster their aeloquience during the discussion.

Locality: When determining the location of the focus group, researchers should be aware of practicalities, e.g. the acoustics in the room and whether it is accessible to all participants (especially those living in peripheral locations who have no access to individual transport), as well as the symbolic meaning attached to the locality (Gailing and Naumann 2019).

3.3.3. Implementation

Following Benighaus and Benighaus (2012, referring to Krueger and Casey 2008), focus group management can be divided into five phases:

First Phase – Introduction: The moderator welcomes participants and presents her/himself. (S)he explains the topic and aims of the discussion, provides information (for example, about who is sponsoring the project, data protection and processing, and naming rules for the discussion).

Second Phase – First-Person-Perspective ('I'): Incorporating an introductory question, participants present themselves.

Third Phase – Group-Perspective ('We'): Incorporating their practical or occupational background, participants' experiences in relation to the topic are collected.

Fourth Phase – Main Questions ('It'): the main questions are discussed in order, from general to specific.

Fifth Phase – Conclusions: The moderator sums up the most important aspects of the discussion and the participants are allowed to amend them. After resolving unanswered points and dealing with formalities, the group is drawn to a close and the participants go home.

Infobox 7: Focus groups as safe spaces, the example of MURAL tool

Apps such as MURAL, MIRO or FLINGA boards can be used to work efficiently in online focus groups, and technical devices and assistive apps can engage participants in online discussion formats. For example, MURAL boards offer participants the chance to include photographs of their lifeworlds in rural areas: they are invited to pin them on a board, and discussions follow from this. Moreover, such tools foster the collaboration of all participants in real-time, which can be used for brainstorming activities (of things such as confirming what integration support infrastructure is available in the municipality or region), as well as for the subsequent joint clustering of the information collected. MURAL also offers the option of including online sociometry: focus group participants can position their chosen avatar on a scale and express their consent/sympathy or antipathy/ opposition to pre-defined statements (e.g. 'I have easily made contact with the local population.') They can also use it to rate the importance of particular measures. Visual life voting tools such as MENTIMETER can be used at the beginning of a focus group to stimulate discussion, by asking, for example, 'How comfortable do you feel in the region of...?'

FLINGA boards can also be used for joint brainstorming activities and the joint collection of ideas and information. Finally, networking and video conference tools such as ZOOM and online collaboration apps (such as MURAL or MIRO) not only support online focus group discussions but also provide a safe space for vulnerable groups like female migrants and refugees to meet, talk to each other and express experiences and feelings in a room with other participants from similar backgrounds.

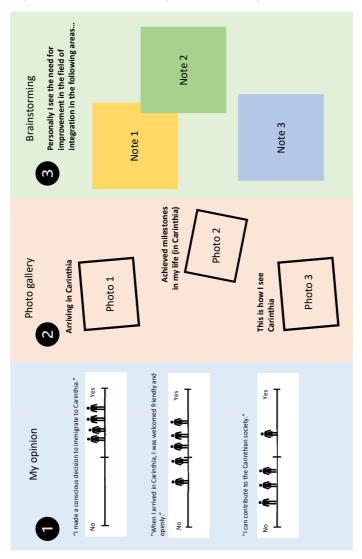


Fig 3: MURAL Board, own graphic C. Lobnig, H. Groicher, M. Gruber



3.4. Open Space Technology (OST) and participatory workshop

3.4.1. Facts and figures

Definition and application: Open Space or Open Space Technology (OST) is a method designed for organising and running large group workshops or conferences with 500–1000 participants. Participants are invited to discuss challenges or a specific problem by setting their own agenda for the event (Owen 1997). A prerequisite for the successful application of the Open Space Technology, also known as the 'method of the big coffee break' (Baumann and Detlefsen 2005, 249), is to conceive 'Open Space' literally by ensuring that participants are not faced with too many constraints during the event. Such constraints might consist of an extensive and imposed official agenda, hindering the open expression and exchange of ideas, objections or propositions. Topics for including participants during those events should relate to each other, allowing participants to approach them from different points of view while aiming for constructive and viable solutions.

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Advantages: One of the main benefits of using OST is that it is a relatively cheap and unconventional opportunity to organise large group events while also promising quick results by inviting diverse participants to take responsibility and join in the decisionmaking process. Open Space can contribute to an empowering atmosphere in which people can articulate their intrinsic motivations and natural points of view of the topic under discussion in a productive manner (Owen 2008). It can also facilitate interaction between the participants by inviting them to collaborate and solve problems on their own terms, by organising themselves into different groups which deal with certain aspects of the main theme. Allocating the responsibility to participants can ensure the sustainability of a project since it helps make them aware of the fact that the results of the event have not been dictated by the organisers but elaborated by themselves. Overall, using OST promises quick and sustainable results, which makes it especially attractive not only for the exploration phase of a project, but also for the transformation phase.

Disadvantages: The advantages listed above depend on the character of the people involved. Open discussion formats like Open Space tend to favour the engagement of extrovert people who

flourish in this sort of socially dynamic environments, whereas introverted people tend to have problems taking the initiative in these informal settings. Consequently, the ideas and perspectives of extroverted people may be overrepresented while those of introverted people, who flourish in more formal settings, may be underrepresented. Although this could be counteracted by the law of two feet during the group discussions, it does not apply to the preceding drafting phase, in which groups are formed by group leaders who take the initiative by stepping forward to present their own group topic. Finally, while OST might be suitable for the exploration phase of projects, it is somewhat problematic when it comes to improving already existing and working projects, since the discussions often produce radically new ideas and stir up new expectations instead of delivering incremental refinements and corrections. When using OST for research purposes, this loss of control over the discussion could be counteracted by asking preprepared questions on the subjects that originally interested the researcher (cf. Freitag 2009).

Standardisation: OST relies on the individual motivations of each participant, which is why no strict guidelines can be formulated. However, in his books *Brief User's Guide* (1992) and *Open Space Technology – A User's guide* (1997), Owen started to formulate general principles for Open Space Events and proposals for how to approach them as a moderator. There is also an active community of practitioners who are exchanging their experiences and thus continuously developing the technology (https://openspaceworl d.org/wp2/oslist/). Experts in the field describe the process of running an event as intuitively reacting to the way the event is unfolding (Owen 2008).

Level of moderator involvement: During an OST event, the tone is dictated by the participants, not by the moderator. Except at the beginning, when the moderator introduces herself/himself to the group, a moderator's task is to facilitate the discussions by focusing only on maintaining the right (suitable and safe) atmosphere (Owen 2008). (S)he achieves this by providing the right spatial arrangements but not intervening thematically, because the aim is to uphold the principle of participant's self-organisation and empowerment. A moderator's final task is to close the event by moderating the final discussion (Owen 2008).

#	Number of OST	Depends on the number of people who consider a topic important enough to discuss.	Acknowledge the availability of people, especially experts in small-scale settings, e.g. rural areas.
	Number of participants	In its original form 50-100, but is also possible with smaller (<50) and larger groups (>1000).	
Ŏ	Duration of OST	Half a day up to three day long workshops.	In general, one principle of OST is that every group session goes on as long as each participant considers it to be worth her or his time. Practitioners, however, calculate with time slots of one or one and a half hours.

3.4.2. Preparation

The only way to create a sample is by looking at which groups and institutions might be interested in the main theme of the Open Space event. However, this impact is limited since 'voluntary self-selection is the absolute sine qua non for participation in an Open Space event' (Owen 2008, 26). The main theme of the event should be carefully selected and introduced by choosing a topic that is both controversial and urgent, and sketching it out briefly and concisely in the invitation (ibid., 30f., Herman n.d.). This indirect influence on the composition and number of participants may run the risk of undermining the preprepared research issue as well as reducing the representativeness of the self-selected group with regards to other parties concerned with the main theme (Freitag 2009). In the preparation phase, organisers must also reflect on the spatial scale of an OST. If a medium-sized or small town is concerned, it might be an option to focus on selected districts.

3.4.3. Implementation

The actual event usually starts with a short introduction by the person responsible for the event, who initiated this mode of group discussion, and who is often a state official or manager of an organisation (Owen 2008). Following this segment, the moderator starts to open the space by pacing

up and down the room, making eye contact with the participants, and giving a brief description of the method.

The main motive of OST is not to gather qualitative empirical data in a narrow sense, even though the processes of self-organised group discussions and decision-making offer opportunities for subsequent analysis and interpretation (cf. Freitag 2009). The following processes and tools should be considered after opening up the room (Owen 2008):

Bulletin Board: At the beginning, each participant is invited to step into the middle of the room to propose a specific issue related to the main theme, which in her/his opinion is worth discussing further, by saying: 'My name is (...), my issue is (...)'. This makes that person responsible for the topic they have proposed, and for determining the time and place for the group discussion on the bulletin board.

Market Place: When the bulletin board has been filled with the various topics taken on by participants, the entire group is asked to sign up for all the different group sessions they are interested in.

Group Sessions: The way a group session runs depends on size of the group and its participants. The principle of self-organisation reoccurs in this dynamic group setting, since each group can freely choose how to run the session (Owen and Stadler 1999). Furthermore, the principle of 'the law of two feet' allows each member of the group to leave the discussion, if (s)he neither feels able to contribute to the discussion nor that (s)he is profiting from the conversations taking place. The moderator's task during the group sessions is to prevent interventions and to maintain the open space by ensuring an environment which allows for fruitful discussions.

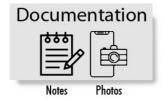
World Café: This is another open format suited to facilitating group discussions in an empowering atmosphere, and shares several similarities with OST. World Café events can be held with anywhere from twelve to 12,000 participants (Nanz and Fritsche 2012). The all-encompassing belief of World Café that 'we humans want to talk together about things that matter to us' (Brown and Isaacs 2005) leads to the conclusion that this impulse should be utilised by acquiring shared knowledge or collective wisdom that fosters the creation of solutions and initiates change (Brown and Isaacs 2005). Like OST, the World Café method is especially

useful in the exploration phase of projects where a roadmap hasn't yet been laid out. Dittrich-Brauner et al. (2013) also recommend applying the World Café method immediately after presentations for people to reflect on their own opinions and ideas about the subject of the talk (ibid.). In general, hosting World Cafés requires relatively little logistical effort, apart from arranging the right setting by recreating a Café atmosphere and bringing people together. The former is achieved by arranging smaller tables around which chairs for four to six people are placed (Nanz and Fritsche 2012). At the first, spontaneous, World Café which took place in January 1995, practitioners began the practice of sometimes using (easel) paper as tablecloths on which participants could write or illustrate their ideas and thoughts (Brown and Isaacs 2005). World Café events usually start with all participants entering the room together and taking a seat at one of the pre-arranged tables (Dittrich-Brauner et al. 2013). The moderator is then required to introduce the event's theme or main questions, and then the participants begin group discussions (ibid.). As during OST events, one person in the group - 'the host' takes responsibility by staying at the table and reporting to newcomers the findings of the discussions at her or his table up to this point (cf. Nanz and Fritsche 2012). The remaining members of the group, however, are supposed to change tables at the end of each 20-30 minute session (ibid.). After several rounds, the moderator's task is to gather and present the results from the different tables, for example by exhibiting the tablecloths, using post-it notes for central points, creating an idea cluster, telling a detailed story or engaging a professional illustrator (The World Café Community 2002 cit. after Dittrich-Brauner et al. 2013). Löhr et al. (2020) suggest that café hosts and moderators also take additional notes during the sessions at the tables. However, this is very resource-intensive.

Maintaining an open and plural democratic society, where diversity is addressed actively and productively is explicitly taken into account by the tool 'village talks' (Dorfgespräche, Wenzel and Bieser-Schnebel 2019). Village talks, aim first of all to establish a dialogue format to initiate interaction between all the members of local communities. A second aim is to initiate a local development process. The concept involves three steps, split into three evening events that take place consecutively: 1) establishing personal encounters by drawing on new places and means of communication; 2) ini-

3. Data collection techniques

tiating productive confrontations about (non-)shared values and existing conflicts; and 3) consolidating joint action.



3.5. Observation

3.5.1. Facts and figures

Definition and application: As an ethnographic method that has become popular in many fields of the social sciences, observation can be generally defined as 'the systematic description of events, behaviours, and artefacts in the social setting chosen for study' (Marshall and Rossman 1989, 79). It therefore consists of recording all perceptible sensory aspects of human action and reaction not initiated by researchers (Thierbach and Petschick 2014). It is important to distinguish between observation with a scientific purpose and everyday observation (Driscoll 2011). While everyday observation can also initiate orientation and gather information about a locality, it does not have a primary scientific purpose or follow scientific principles such as repeatability or intersubjective traceability (Atteslander 2008; Watson and Till 2010). By means of scientific observation, researchers may become familiar with a locality. This sort of observation can also include everyday techniques like reading the newspaper or more quantitatively-oriented observations like conducting a traffic census. In cultural anthropology, participant observation includes the researcher's participation in the daily activities, ritual, interactions, and events of a group of people as one of the means of learning both the explicit and tacit aspects of their life routines and culture' (Musante 2015, 251).

Level of moderator involvement: Depending on the level of involvement of the researcher, observation can be divided into three or four types (Bernard 2006, Mattissek et al. 2013, cited after Gold 1958, 219-221). First, the researcher is completely immersed in the field and their own role as an observer is (almost) invisible (complete participant). Second, the researcher participates widely in the field, but their role as an observer is either overt or communicated explicitly (participant-as-observant). Third, the observation is given priority over the participation and a low level of moderator integration and identification is characteristic (observer-as-participant). Fourth, the moderator remains uninvolved in actions and events and remains at a distance from the field, for example by video recording (complete observer). According to Mattissek et al. (2013), only the first two types can be defined as participant observation in the strictest sense, while the last two types are non-participatory observation. Observation can be carried out by the researcher her/himself (internal) or by another

person (external) who is not familiar with central objectives of the study. A combination of both internal and external observation can also be a useful way of collecting data and encourages a reflexive attitude (Weischer and Gehrau 2017).

Advantages: Observation takes place in people's everyday environments and not in a laboratory setting. The aim is that the presence of the observers should not modify their actions (Mattissek et al. 2013). According to Spittler (2001), observation allows researchers to grasp complex issues at a glance, which might otherwise be expressed in a long-winded way. While qualitative interviews are mostly done only once and are relatively short, (participant) observation is better for long-term and in-depth understanding of practices and situations (Mattissek et al. 2013). Therefore, '[w]hen you want to know what people actually do, (...) there is no substitute for watching them or studying the physical traces their behaviour leaves behind' (Bernard 2006, 413).

Disadvantages: Contrary to what is often assumed, observation is not objective, but always subjective and selective. Thus, research results are part of a process of socio-spatial construction. Especially in an unfamiliar context, observers will be particularly attentive to begin with and will focus on many aspects, which they assume to be 'new'. When things become more familiar, their attention will decrease (Mattissek et al. 2013). As a consequence, researchers doing participant observation find themselves in an ongoing dilemma. On the one hand, they have to be interested in being integrated into the field and becoming more familiar with situations but on the other hand they also have to keep their distance (Mattissek et al. 2013, cited after Lüders 2010). This dilemma needs continual self-reflection. Finally, observation takes up a lot of time and is often considered to be less effective compared with interviews (Spittler 2001). It can therefore be useful (and is recommended) to combine observation with qualitative interviews.

Standardisation: Depending on the level of moderator involvement, observation can be structured or unstructured (Mattissek et al. 2013). Structured observation focuses on selected aspects of the field, for the 'purpose of quantification' (Lamnek 2010, 508) and schemes and categories for data

collection and analysis are therefore defined beforehand (Flick 2009; Mattissek et al. 2013). The level of standardisation can be increased by developing observation guidelines. Unstructured observation does not follow a standardised scheme. Rather, it is open to new structures, processes, situations and interpretation during the observation (ibid.). Nevertheless, unstructured observation is also conducted in a systematic way and is in no way arbitrary or random; it is planned, recorded and later analysed (Mattissek et al. 2013, cited after Lamnek 2010). Moreover, it is important to note that – for ethical reasons – observation must be transparent and should not be conducted in a covert way (Legewie 1991; Bernard 2006). In most cases, a mixed form is used, in which the people being studied are told about the scientific observation but don't know its exact purpose (Mattissek et al. 2013).

#	Number of observations	Depends on the breadth of the topic and whether an observation is focused or takes place over a longer period of time.
	Number of participants	Not possible to define.
Ö	Duration of observation	From an hour to half a day.

3.5.2. Preparation

During the exploratory phase of a wider evaluation or assessment activity, almost everything, from material issues to social interaction can be observed until saturation is achieved; in any other case, a concrete human interaction to observe must be chosen (Ostrower 1998) and observers have to identify a suitable research area and position within this given scenery (Mattissek et al. 2013). During participant observation, it is crucial to get access to the field of interest, mostly via *gatekeepers*, people who are widely accepted in the group and not outsiders (see reflections on access in chapter two, section 2.1.). In the course of the observation, moreover, ethical issues must be considered (e.g. not eavesdropping on people's conversations). A common understanding of how to record field notes after the observation must also be developed, covering such things as what to record (material conditions, social interac-

tions etc.) and the level of detail the notes should contain. It is also good practice to record open questions that arise during the observation.

3.5.3. Implementation

Following Spradley (1980), observation is carried out in three phases: *Descriptive observation*, *focused observation* and *selective observation*. As soon as access to the research field is complete, observers start to take notes. In the first phase, researchers orient themselves in the field and describe situations and actions in a relatively unstructured way. The aim is to catch the complexity of the field and to clearly define the research questions. In the second phase, the only observations noted are those that go well with the processes and problems of interest. The third phase validates the observed processes and patterns and more selectively gathers examples of central interest.

Considering the fact that the observer influences the field simply by being present, the observation should be accompanied by a continuous process of self-reflection. This performativity must be acknowledged from the very beginning. One has to assume that individuals might change or adapt their behaviour simply because unknown people are present.



3.6. Mobility mapping

3.6.1. Facts and figures

Definition and application: Mobility mapping is a spatio-visual tool useful for the investigation of the spatial dimension of everyday life of individuals or groups, and for quantitatively and qualitatively capturing both the meanings attached to places and spatial (im)mobility (Kordel et al. 2018). Individuals or groups are invited to draw maps of places that are personally important to them and which they may or may not frequent, as well as the means of transport they use to get there. This captures their perceptions and experiences of the distance to and (in)accessibility of particular places (Kumar 2002; Weidinger et al. 2019). If combined with narrative interviews (see also narrative mapping, Lutz et al. 2003; Täubig 2009), mobility mapping also offers the opportunity to grasp information about the purposes, preferences and frequency of people's travel as well as the meanings they attach to places. Mobility mapping is mostly applied at a later stage of the research and evaluation process, when a specific group has been identified, whose (im)mobility patterns are of interest to researchers (Kumar 2007).

- Advantages: Mobility mapping offers valuable insights into the (im)mobility patterns of a group or individual. Participants are encouraged to think about their life worlds, initiating a process of reflection. Due to its visual character, it is less dependent on participants' language and literacy and thus fosters their power to recall and structure information. It also stimulates interaction and discussion between the participant and the researcher and even allows for joint analysis during the interview. Finally, spatial (im)mobility and related experiences of exclusion and inclusion can be compared according to variables such as age, gender or household composition to identify commonalities and differences in mobility patterns (Weidinger et al. 2019, 17). Thus, mobility mapping addresses core challenges in rural and mountain areas.
 - Disadvantages: Mobility mapping is very resource-intensive and time-consuming. It may be difficult to implement with participants who have only recently moved to their place of residence, with those who are not used to open forms of interviewing and drawing exercises and those who are not confident about their ability to draw and write (Weidinger et al. 2019). Moreover, at

least two members of the research team (e.g. one researcher and one assistant) are needed to instigate mobility mapping.

Standardisation: To foster intersubjective traceability, the researcher should standardise the colours and shapes of cards used during mobility mapping (Kordel et al. 2018). In order to facilitate and accelerate the process, pictograms representing important places could be prepared. Too strict instructions on how to complete the mapping, however, could lead to a neglect of subjective encounters (Pretty et al. 1995; Weidinger et al. 2019, 8).

Level of moderator involvement: The role of the researcher is to motivate participants to draw or write for themselves. If they hesitate, they should be reassured that scale-based drawing, completeness, aesthetic and orthography do not matter (Kordel et al. 2018). Only if specifically requested by participants can researchers 'take back the pen' from the participant and write or draw under their guidance (Kordel et al. 2018).

#	Number of mobility mappings	Depends on the research aim; saturation rule is applied.	Acknowledge the availability of people, especially experts, in small-scale settings, e.g. rural areas.
	Number of participants	Ideally one per interview.	If more than one participant is present: capture different experiences, e.g. of members of one household or an association.
Ö	Duration of mobility mapping	45 to 180 minutes.	

3.6.2. Preparation

Sampling: Depending on the aim of the study, either a supposedly homogenous or a rather heterogeneous group may by chosen, while different sampling strategies should be applied. A mobility mapping should be carried out with either a single person or a family.

Locality: Appropriate locations should feature a big table or have enough space to work on the floor.

Ex ante-exercises: The research team should do some background checks on the investigation site, e.g. its structures, places and actors. They need

to prepare small cards of different shapes for the places the participants may or may not frequent with pictograms that show different realms of everyday life (such as shopping, visits to the authorities or services, free time), different colored marker pens for different modes of transport and prompt cards for the respective pictograms and short written explanations. For reasons of inclusivity, the latter should be provided in all the relevant languages spoken by participants. Finally, the researchers need to set out fixed roles and responsibilities beforehand; for example, one person to ask questions (interviewer), a second to take notes (note taker), and a third to provide participants with materials.

3.6.3. Implementation

Introduction: At the beginning, the interviewer explains that (s)he wants to learn about participants' everyday lives and (im)mobility practices and how the method works. Those who hesitate to draw and write for themselves are encouraged to do so, but also reassured that help is available at any stage if they need it (for example, with the 'correct' spelling of place names (Weidinger et al. 2019).

Implementation: Participants are invited to draw their apartments, houses or accommodation at the very centre of the poster. They are then asked to talk about the places they usually visit in their everyday lives. Once the participants have started to narrate or write/draw the small cards, they are not interrupted until they stop. When they have finished, they should be asked to clarify or add places they have mentioned but have neither written about nor drawn. The prompt cards with pictograms and short explanations of different realms of everyday life serve as reminders. In a subsequent step, participants arrange the small cards with the places visited around the apartment/house/accommodation according to their perceived distance from home. Then, if the participant is happy with the arrangement, the small cards are glued onto the poster.

Afterwards, participants are asked to draw lines between their home and the places they visit, indicating the means of transport they use to reach each place. For the different modes of transport (on foot, by bicycle, public transport or long-distance bus service, or in a car, whether they drive it themselves or are driven by someone else), different coloured marker pens are used. If they have not already done so, the interviewer encourages the

3. Data collection techniques

participant to explain the meaning of the places drawn, including their reasons for going there, what goes on there, the duration and frequency of visits, who accompanies them, and the modes of transport they use to get there (Weidinger et al. 2019).

After that, the participants are invited to draw or write on differently shaped small cards places where they must, but do not want to go, as well as places they never frequent for various reasons. Reasons may include the inaccessibility of a place due to the cost in time or financial resources, legal issues or health constraints, negative representations or experiences of places due to discrimination or racism, which indicate exclusion processes (Gifford et al. 2007; Täubig 2009; Weidinger et al. 2019). Finally, these cards are also fixed on to the poster.

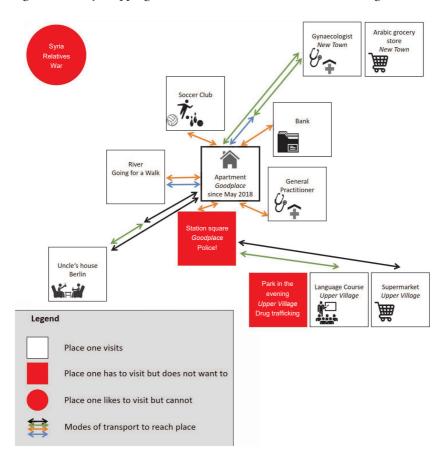


Fig. 4: Mobility mapping, own illustration S. Kordel and T. Weidinger

Conclusion: To bring the mapping to a close, a balance can be drawn up. At the end, a picture of the final version of the map is taken by the interviewer and the map is handed over to the participant.



3.7. Social mapping

3.7.1. Facts and figures

Definition and application: The process of social mapping 'seeks to explore the spatial dimensions of people's realities' (Kumar 2007, 54), while (infra)structures and stakeholders are of peculiar interest when it comes to the assessment of the social inclusion of specific groups (Manahl 2023). The scale is not fixed by researchers, since local people are given autonomy to decide what is most relevant and important to them (Kumar 2007; Ferguson and Heinz 2014). Social mapping is best carried out at the beginning of the appraisal and can provide useful information for future steps in the research process (Callens 2002). Besides, the application of social maps is suitable for participatory situational analyses, needs surveys and planning and evaluation processes, as well as for research questions which aim to find out how people perceive their life worlds, their relationships within the community, their access to resources and their agency (Kumar 2002 cit. after Gangarova and von Unger 2020). Moreover, through the process of drawing and talking, social maps allow participants to move from description to depiction to theorising the reasons for the ways in which they have represented features on the map (Emmel 2008). The map is therefore not an end in itself, but is rather a tool for gathering information and can work as an 'ice-breaking' element (Kumar 2007). Social maps can also be applied to identifying diachronic dynamics in a given social setting. That is to say, they can be used to grasp changes in social networks and the different positions within them. To achieve this, social maps must be created at different points in time.



Advantages: Social mapping has the advantage of being able to depict visually a variety of individual information about a specific place. Within the process of gathering information, a more and more complete image of the place is created. It is also possible for participants to join later, discuss and add representations to the map. The composition of the group does not play a decisive role, as long as there are enough different perspectives represented (cf. Schönhuth and Jerrentrup 2019). Besides accessing participants' life-worlds, the method can also promote and support communities, for example by contributing to processes of community-building (von Unger 2014). Finally, social maps can be combined

with other methods (such as wealth ranking or Venn diagrams) for further in-depth analysis (Callens 2002; Kumar 2007).

Disadvantages: Hand-drawn maps allow for great flexibility but are not always directly intelligible to external users. In choosing methods, it is necessary to clarify methodological priorities: is it the mapping process, in which the participants' subjective views are expressed in a simplified manner, or the map itself, which is also immediately intelligible to outsiders and clearly communicates particular content (cf. von Unger 2014)? Kumar (2007) points out that the process of social mapping also needs a certain level of confidence.

Standardisation: Making social maps should include at least two researchers/facilitators, one moderator and one note-taker.

Level of moderator involvement: Within the process of mapping, the moderator should keep an eye on the extent to which different groups participate. In particular, marginalised communities should not be excluded, but should be motivated to contribute to the process (cf. Kumar 2007). Throughout the entire process, researchers should take care to ensure that once somebody has given an oral or drawn statement, other participants are invited to comment, agree, disagree or add something. In order to ensure that participants understand this tool, a simple example can be generated at the very beginning (Sontheimer et al. 1999)

#	Number of social maps	Depends on the topic and the place under study, satu- ration rule is applied.	
	Number of participants	Ideally one per interview.	If more than one participant is present, ask the group to nominate one person to draw the map at the outset.
Ø	Duration of social mapping	1–2,5 hours, depending on the level of detail.	

3.7.2. Preparation

Sampling: According to Kumar (2007), for contextualisation and further interpretation it may be helpful to characterise the people participating in the process of social mapping, for example in terms of their socio-economic background, gender, occupation etc. (ibid.). At the same time, ethical issues must be considered. Poverty and disease, may go hand in hand with social stigma for instance, and to be described as 'poor' can cause hesitation about participating (Callens 2002). Alternatively, the exercise can be done with a few key informants who know the location well. In this case, researchers should reflect on the selection of key informants, as they most likely belong to the better-off group (ibid).

Locality: Selecting a location for social mapping can be seen as crucial for achieving its purpose. The required number of participants should be present at the site selected, which should be a central place accessible for all members of community. Moreover, it should be comfortable and potential external influences such as weather or noise should be considered (cf. Kumar 2007).

Ex ante-exercises: The moderator should tell participants about the mapping process before it begins. The explanation should include the objectives of the study, the research question and a brief description of what is expected of them. The moderator should allow the participants to take their time making the drawings and explain them. He or she also should inform them about the amount of time they will have to commit to the study (cf. Emmel 2008). Field visits and observation prior to carrying out the mapping can help to sensitise researchers to relevant (infra)structures and stakeholders, and can help them structure the exercise, for example by preparing small cards containing icons or symbols (Manahl 2023).

3.7.3. Implementation

Taking into account the above preconditions, the process of social mapping follows several steps, as pointed out by Kumar (2002, 54, 56) and Ferguson and Heinz (2014). It is important to mention that the implementation and documentation of social mapping are closely intertwined (see also chapter 3.4).

- a suitable location and time scale for the exercise should be selected and appropriate materials identified. It is important to ensure that all members of the community can access the location, and have enough time to do so. Local people should be consulted about these issues and later invited to the event.
- 2. the purpose of the tool should be explained to the participants. To begin with, participants should be asked to draw the main physical features of their locality.
- the moderator should stay alert, watching and listening closely to the discussion and drawing process. Meanwhile, the note-taker should take detailed notes.
- 4. the moderator should let the discussion flow and show that (s)he has faith in the participants, who should have total control and be encouraged to take the initiative.
- 5. the moderator should take care to ensure the participation of every section of the community and take proactive steps to involve anyone left out.
- 6. the moderator should keep in mind that her/his role is limited to facilitating the process. Therefore, she or he should only intervene when necessary, for example when the interaction between the participants is tense.
- 7. the moderator should propose clarifications or additions unobtrusively, by asking questions such as 'what about...?', or 'what does this symbol represent?'
- 8. for orientation, when the mapping has finished, some participants should be asked to identify their own houses on the map.
- 9. depending on the specific purpose of the exercise, participants should be asked to provide details of their households.

As with the suggested implementation for mobility mapping, Manahl (2023) allocated 2–3 researchers to the role of organising social mapping.

Social Network Analysis

As social mapping addresses the material and social aspects of social life (Kumar 2002), it can be easily combined with social network analysis. A social network can be understood 'as a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behaviour of the persons involved' (Mitchell 1969, 2). Networks consist of nodes (e.g. individuals, collective actors) and their relations to each other (ties), of friendship, conflict and so on (Gamper 2020). The main aim of a network analysis is to describe actors and their relationships and to make causal statements about the effects of relationships on actors - or vice versa. Network analyses can be divided into two main groups: (1) egocentric networks and (2) and overall network analysis. The former describes the interpersonal networking of a particular actor. This subject-centred network consists of the relationships of the interviewed actor (ego) to other actors in their network, the so-called alteri, to which they relate. It is also possible to ask ego about relations between the alteri. An overall network analysis considers nodes and their ties within predefined limits, while its focus is on the internal networking of the actors in a certain area (ibid.). Thus, the main research focus is on a certain number of actors and their very specific relationships (Jansen 2006). As in social mapping, since many local actors are involved, overall network analysis can be a valuable supplement.

Moreover, social network analysis can be either quantitative or qualitative – or a combination of both. In standardised network research, statistical descriptions of structure or causal relationships are of interest (Gamper 2020) and include the use of parameters such as network size, centrality, heterogeneity and density (Wasserman and Faust 1994; Scott 1988; Jansen 2006). Qualitative network analysis investigates the 'stories' behind interpersonal relations and seeks to understand mechanisms and contexts (Gamper 2020). Thus, for deconstructing the development of networks or dynamic changes in them, people's stories and the possibilities for action in their respective contexts must be understood (Schweizer 1996, White 2008).

A narrative stimulus represents a starting point for network analysis, while the participant draws her/his individual network on a blank sheet of paper or reconstructs it using a software program (e.g. VennMaker) afterwards. The subjective ascription of meaning is done through the interviewed person (cf. Gamper 2020).



3.8. Participatory photo/video talk

3.8.1. Facts and figures

Definition and application: Participatory photo/video talk describes the use of visual material such as photos or videos for empirical research. Developed from anthropological documentaries and sociological record keeping, it involves 'inserting a photograph into a research interview' (Harper 2002, 13). The subjective interpretation of visual artefacts is a key part of visual methods and pictures are commonly understood as representations, 'showing not what was but how things were seen' (Rose 2008, 152). Finally, a collective interpretation and process of negotiation about the meanings of photos or videos may draw on a participatory process. In terms of participatory photography, 'graphical records of local histories, experiences and agency created by photographers have been powerful in eliciting understanding and empathy among academic and public audience' (Cubas 2020, 270).

Visual methods such as photo or video talks can be designed for various purposes, target groups and for varying degrees of participation. The following list provides an overview of four key tools evolved from different sub-disciplines of the social sciences. Although most of them were initially designed for photographs, videos can easily be included, too, if necessary.

Photo-elicitation is a combination of photography and interview, which has its roots in ethnology and sociology (Harper 2002). The photo itself is taken by the interviewer and is subsequently discussed together with the participants. If the aim is to depict collective representations, the tool can also be used with small groups.

Auto-driving, derived from psychology, aims to take photos of individuals in everyday life situations over a certain period of time. Photos are taken by the researcher, too, while a diachronic perspective is used in order to identify changes in behaviour.

When applying *photo-novella* (photo-voice), the participant is involved in taking photos or producing videos. She or he is documenting her/his life-world, also over a certain period of time. The roots of this method can be found in ethnology.

Reflexive photography makes use of participant-generated visual data. Here, reflexivity is achieved twice over: first when the photo is taken and secondly when the content of the photo is put into context during the interview. Referring back to participant-generated photography enables the researcher to trace the discursive negotiation of meanings (Kordel 2015).

- Advantages: Visual methods provide the opportunity to grasp the meanings individuals and groups attach to places and their social contexts. Inserting photos or videos appeals to all the senses and actively taking photos can be a stimulus for further discussion. Respondent-generated photographs, in particular, enable the researcher to acknowledge individuals' perspectives when 'viewers attribute new meaning through their own cultural experience' (Edwards 1992, 8). During the interviews, photography becomes a communicative bridge between the interviewer and the participant 'that can lead into unfamiliar, unforeseen environments and subjects' (Collier and Collier 1986, 99; Kordel 2016).
- Disadvantages: Visual methods need time, personnel and material resources as well as proper preparation. Challenges include the different levels of experience of participants with technical preconditions, as well as logistical issues.

Standardisation: On the one hand, a certain degree of openness, for instance, about which objects participants should photograph, is crucial for visual methods. On the other hand, in order to achieve comparability, guiding questions and stimuli can be included, such as places that are important in everyday life, places you do not like, situations that are characteristic for the respective participant.

Level of moderator involvement: The researcher's role is firstly to introduce the method, including giving advice and explaining technical issues if photos/videos are to be taken by the participant. Secondly, she or he has to be accessible to answer further questions and respond to problems during the photo/video taking phase. Thirdly, the researcher has to organise and conduct the interview. During this phase, the moderator must ensure that the photos or videos to be discussed during the interview are available (either printed or displayed on a technical device). Although the interview

3. Data collection techniques

is itself directed mostly by the participant, interview guidelines help to control the progress and serve as an orientation.

#	Number of participatory photo/video sessions	Depends on the topic and place under study; saturation rule is applied.	
	Number of participants	Ideally one per interview.	If more than one participant is present: capture different experiences, e.g. those of members of one household or an association.
Ö	Duration of participatory photo/video sessions	1–2,5 hours, depending on the level of detail; to reduce the length of interviews, the number of photos/videos can be reduced; these can be pre-selected jointly with the participants.	

3.8.2. Preparation

As suggested above, a clear introduction to the method should be given during an introductory meeting. It may be helpful to employ small cards with instructions stating what kinds of objects or situations participants should photograph, how many photos they should take and where. Furthermore, it should be pointed out that aesthetics are not important. Reassuring participants that it does not matter whether or not they are good photographers is another important issue closely interlinked with power relations (Kordel 2015). It is also important to decide what devices will be used for taking photos (whether this will be the participants' own cameras, cameras provided by the researchers, cameras on mobile devices or disposable cameras) and whether photos will be printed for the ensuing discussion. Regarding the latter, printed photos entail the opportunity for haptic experience during the interview, which may stimulate the discussion.

Infobox 8: Taking the right photo in an adequate light – the matter of locality

A decision about place has to be made twice: first, it is important to decide where photos/videos should be taken. Most commonly this will be participants' immediate living environments and the most important places in their everyday lives, such as their homes. This should be explained beforehand, since otherwise participants tend to show photographs taken during excursions or trips to (tourist) places to showcase their lifestyles (Kordel 2016). Secondly, the place where photos are to be discussed together with the participant must be selected carefully. Good light is particularly important when showing digital photos or videos, and a large table is necessary when printed photographs are to be used. Just as for qualitative interviews, researchers should consider the participant's preferences.

3.8.3. Implementation

In the interview itself, one could begin by asking about the participants' experiences of taking photos. This allows for an affective approach and can give the interviewer early insight into the evaluation of the method itself (for example, whether participants were satisfied or dissatisfied), and ultimately of the places visited. Regarding the incorporation of visual materials into an interview, Collier (2003, 245) emphasises the benefits of inserting a photograph at the very beginning of an interview. Apart from that, photographs can also be used as interventions within an interview, discussing problems from several points of view and finally as fixtures for one's daily life.' Despite Collier's (2001) beliefs about the importance of including photographs in sequence, it is assumed that this runs the risk of destroying the associative character of the interview (Kordel 2015). Thus, interviewees should be invited to talk about whichever pictures they want to, whenever they wish. As Kordel (2015) has shown, some participants actively refer to the photos during the interview. 'This was especially the case when they wanted to illustrate or give in-depth insights into narratives that had already been mentioned' (ibid. 36). In cases where participants do not use photos, the interviewer should intervene and encourage them to think of a concrete situation in relation to the content of a picture in order to stimulate further narratives. As in qualitative interviews, interviewers should be able to tolerate a certain amount of silence, and it may be helpful

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to give receptive signals to maintain a pleasant atmosphere. When carrying out a visually stimulated interview, the researcher should always be aware that results are achieved through a combination of picture and text. Commonly, visual methods are audio-recorded and fully transcribed afterwards, while the insertion of visual materials is marked in the transcript. For a full reflection on audio interviews, see the section on qualitative interviews.



Further readings

Municipality profile: Gruber 2013

Qualitative Interview: Gubrium and Holstein 2002

Focus Group: Lloyd-Evans 2006

OST: Owen 2008

Observation: Bernard 2006; Musante 2015

Mobility mapping: Bagnoli 2009; Weidinger et al. 2019

Social mapping: Manahl 2023

Participatory photo / video talk: Rose 2008; Spencer 2011; Cubas 2020