

Module 2: Collecting qualitative data

Below is an overview of methods for data collection and analysis, and we'll select from this menu the readings that will be most useful to you.

In the category of collecting qualitative data (drawing on the Routledge Handbook of Research Methods in Military Studies and others) we should be aware of:

1. field work (Sririam)
2. Historical and archival methods (Beaudet and Sibul; Rendon and Snider)
3. Process tracing (Venesson and Wiesner)
4. participant observation (Moelker)
5. interviews, and focus groups (Moore, Morgan)
6. ethnographic research (Stewart)
7. Qualitative data analysis for patterns (Reitjens)
8. Use of "ego documents" e.g. autobiographies (Kleinreesink)

I'll give you a selection of readings, and you can prompt me for more information on the specific methods that you find most useful.

1. Field Work

Sririam et al, Eds (2009) *Surviving Field Research: Working in Violent and Difficult Situations*. Routledge. This collection addresses the essential problems of academic field work in conflict zones, in five parts:

- Ethics: managing relationships with those on whom we depend, and who may be vulnerable as a consequence of the conflict. Successful research depends on trust, but at the end of the field work, you go away, and they stay there. Methods like interviews and surveys will not be the same in a dangerous field setting. See chapters 3 and 4.
- Access: how do you gain access to research subjects? Again, trust is central. Collectives or governing authorities may have to consent before individuals can consent. See chapters 6,7, and 8.
- Veracity: What is true? Sorting data into "truths" and "untruths" may be impossible and undesirable; multiple perspectives of different parties to a conflict (Chapter 10). Empathy with the subjects may not be possible in the case of repellent ideological groups (Chapter 9).
- Security: Researchers should learn from practitioners like human rights monitors and aid workers about improving their own security without compromising that of the people they depend upon for their research (Chapter 11). Security-seeking behaviour by research subjects also affects the research and researcher (Chapter 12).
- Identity and objectivity: who we are and how we identify changes our perceptions of the phenomena we observe. The language of scientific objectivity also limits our ability to get to the truth (Chapter 3). We also need to be careful about how we represent ourselves because these representations can be circulated and distorted to the detriment of our research relationships (Chapter 14).

Personally, I would add that these considerations are important in many institutional ethnographic settings short of a war zone, because concepts of “risk” and “safety” are organizationally constructed. Try working in the Privy Council Office and you’ll see what I mean.

2. Historical Research in the Military Domain

Beaudet and Sibul (Chapter 7 in the Routledge Handbook) available on request but recommended for use only under the supervision of a historian – they’re jealous of other disciplines.

- “As war affects society broadly, the greater value of military history is to society as a whole. The availability of good military history may even help the common citizen think intelligently about military affairs.”
- “the military history researcher must guard against an excess of what Michael Howard describes as ‘myth-making’ or the creation of an image of the past, through careful selection and interpretation, to encourage patriotic feeling, or to create support for a political regime (Howard 1961: 3).
- “Others have argued against ‘camouflaged history’ – history that makes you look good, but is at odds with historical reality (Liddell Hart 1972: 27).
- “The task of the historian can be considered as reconstructing as far as may be possible, the past thoughts and activities of humanity (Barnes 1963: 3). However, the historian cannot possibly hope to cover all human activity in any degree of success and hence the study of history involves the selection of a topic and a somewhat arbitrary elimination of its borders cutting off connections with the universal.”
- “History writing on war and the deployment of armed forces also often reflects the peculiarities of a given military culture or establishment. Though war is widely and long recognized as an utterly messy and chaotic activity, militaries as institutions attempt to maintain a ‘culture of order’ (Lind et al. 1989: 26).
- “Nowadays, [military history] can be divided into three general strains: the study of operational affairs, the study of administrative and technical issues, and the study of the relation between the military and society.
- “The first step after formulating a research question is to decide on a research strategy. The researcher may want to limit himself to books and articles only, or may want to interview witnesses (assuming they’re still around), or use a combination of both. He or she will also have to decide on the advisability of conducting research in archives. Since archival research is time-consuming, this decision involves a trade-off between the time available and the possible gains to be expected from spending it in an archive, i.e. novel and unexpected findings that shed a fundamentally different light on the subject: archival research offers the possibility of correcting well-established but erroneous views. Of course it may also confirm earlier hypotheses. This is the main reward of conducting archival research, apart from getting ‘the feel’ of a certain period or issue.”
- By necessity the decision to conduct archival research is somewhat of an educated guess, based on both past experience and a thorough analysis of what has been written on the subject before. Before embarking on archival research, the researcher will have to identify gaps and inconsistencies in the existing body of literature that may warrant additional research in archives.”

- “wandering off is also one of the main pitfalls involved in archival research.”
- “The challenge is twofold: it will lead the researcher to continue looking for material that in fact doesn’t exist and poses the risk of attempting an in-depth analysis to the point of becoming irrelevant. Knowing when to stop looking and start writing may therefore be the most daunting task”
- “The explanatory force of historians’ accounts is not rooted in theory, but in the ability to convincingly present a story. Writing history is about narrative skills as much as it is about conducting research and analysing the findings.”

3.Process Tracing

Vennesson and Wiesner, “Process Tracing in Case Studies” Chapter 9 in the Routledge Handbook. The example given is Wiesner (2013) Importing the American Way of War? Network-Centric Warfare in the UK and Germany. This is a particular method that is applied to case studies, in this case comparative cases.

- “Process tracing helps to carefully reconstruct and compare the sequences of events constituting the process through which the relevant actors in each country became aware of NCW, used the concept and implemented it. It becomes possible to identify, and explore, the causes and consequences of differences in timing and pace, as well as differences in concept and implementation faithfulness.”
- Vennesson and Wiesner point out that most military and security research is broadly positivist, and often looks for causal relations but experiments aren’t feasible and statistical analysis can show correlation but not causation, so researchers typically fall back on case comparison or single case studies.
- Process tracing is an approach to case studies which began with cognitive psychology in the 1970s, and has been used (often implicitly) in studies of adaptation, innovation, doctrine change,
- “Process tracing is useful to establish causal-process observations (distinguished from data-set observation), ‘an insight or piece of data that provides information about context or mechanism’ (Collier et al. 2010: 184). These observations about contexts and processes provide an alternative source of insight into the relationships among the explanatory variables, and between these variables and the dependent variable.”
- “Since the end of the 1990s, the use of process tracing for social science research has become more widespread and increasingly discussed (George and Bennett 2004; Bennett and Elman 2006; Checkel 2008; Vennesson 2008; Collier 2011).”
- “Like in social science research in general, process tracing accounts in military studies vary along a spectrum from descriptive narration to abstract causal explanations (Bennett and George 2001; Vennesson 2008).”
- “A number of related techniques, such as analytic narratives (Bates et al. 1998) and comparative historical analysis (Mahoney and Rueschemeyer 2003), that share some similarities with process tracing have been developed. Furthermore, some interpretivist scholars might go about their research in a similar fashion as positivist case study researchers.”
- “Process tracing belongs to case study research, especially within-case analysis (Mahoney 2003; Bennett and Elman 2006: 455). Well-researched single-case studies

contribute to the explanation of outcomes, such as Lynn Eden's account of the impact of organisational frames in the US Air Force's neglect of the effects of fire in its damage assessment of atomic blasts (Eden 2004). Process tracing is also useful in small-N comparative study designs, in which more than one case is examined and in which the process tracing technique is combined with a structured focused comparison research design..."

- "How can process tracing help social scientists to make sense of a case or a class of events? Even though process tracing does not solely aim at writing good narratives, the descriptive function of process tracing should not be disregarded..."
- "Through descriptive inference based on process tracing the researcher might be able to uncover the causal mechanisms of a unique and outstanding event..."
- "Moreover, process tracing helps to evaluate theories (Ragin 2000; George and Bennett 2004; Checkel 2006; Mahoney 2012). As a complement of statistical analyses, for example, process tracing can help identify measurement error, spurious correlations or instances of endogeneity (Bennett and Elman 2006: 459)."
- "As an analytical tool, process tracing affects the framing of the research design, the gathering of pieces of data and the analysis (George and Bennett 2004; McNabb 2008: 287ff.). By relying on prior theory-based expectations that guide, at least initially, the empirical work, process tracing differs from research procedures where theorising starts only after the gathering and organising of data."
- "In sum, theoretically guided case studies need some idea of social sciences theories or approaches that will be applied, tested or altered in the course of research. For social scientists using process tracing the research agenda might not so much be concerned with understanding a specific case but with patterns and causal processes that were at play not only in the particular case but hypothetically also in others. The use of diverse and independent empirical sources, such as interviews, media reports, documents, as well as when relevant a discerning use of the participants' correspondence, private papers or memoirs, is an important aspect of process tracing. These sources help to identify the arguments or reasons that actors give for their action. In some cases, it might be possible to compare public statements and private deliberations."
- Data gathering: "To trace processes scholars may rely on a variety of sources. In the conduct of process tracing, any kind of empirical sources and tool (interviews, archives, statistics, participant observation, etc.) can be put to the task. Official documents, meeting minutes, speech manuscripts, diaries, newspaper articles and articles in professional journals relevant to the case(s) are often valuable, although problematic in their own way, written sources for establishing the process that led to a specific outcome. If process tracing is conducted in a structured and theory-informed way the researcher will specifically look in these written materials for the absence or presence of particular process-relevant factors."
- Making sense of the data: "Process tracing accounts benefit from the integration of new evidence into the research framework. Moreover, the objectives of data gathering might change in the course of the research. Evidence for rival explanations might appear that need to be addressed or included into the research framework. Social scientific research is a circular process in which the researcher usually goes back and forth

between theorising, data collection and analysis. Openness to adjustment can result in a better specification of causal mechanisms and, thus, more reliable research findings.”

- “process tracing accounts do not necessarily need to be organised chronologically but rather with regards to theoretical assumptions (George and McKeown 1985: 53). In the example study empirical evidence was arranged to represent the three adoption phases rather than in their chronological order. Process tracing can but does not need to result in a narration of a particular event.”

The key takeaway is that you begin with a theory that explains an outcome, then trace processes to test the theory. The case example (Wiesner, 2013) is an effective illustration of how this works in practice.

4.Participant Observation

See the entry in the Sage Dictionary attached.

Moelker, R. (2009) Being One of the Guys or the Fly on the Wall? Participant Observation of Veteran Bikers. Chapter 10 in the Routledge Handbook

- “The aim of this study into veterans who ride motorcycles is to gain knowledge and understanding about the healing effect of riding. What is it that helps veterans cope better with experiences from the past by involving in an activity that in fact is somewhat dangerous, which sometimes is not understood in wider society and which always implies the presence of other bikers. Narratives can illustrate why veterans connect their battle or conflict experiences with riding a motorcycle.”
- Paul Willis (2010) defines ethnography in the most clear and simple manner: “‘Ethno’ is people, ‘graphy’ is writing, so ethnography is writing about people.’
- “Kinetic ethnography requires that the demarcation line between involvement and detachment be crossed by being liminal yourself, by participation in what goes on. Kinetic ethnography requires the ethnographer to be on the move, and to undertake the journey him/herself.”
- “When one gets to these destinations, it is impossible to take out a survey form that people can fill in. Bikers don’t respond well to quantitative methods and distrust them.”
- “Observations and interviews were taken wherever possible. On parking lots (the one at the Pentagon held 1 million roaring bikes), during refuelling, in club houses, in churches, schools, hospitals, memorial sites, biker rallies, camping sites and in private homes.”
- Field notes: “‘In a way, your research journal will become the centre of gravity of your whole project’ (Zemliansky 2012). In this journal the researcher can note down interview and research questions, descriptions of artefacts, notes to self, ideal, searchlight hypothesis as well as meta-cognitive reflections.”
- Balancing involvement and detachment: “The ethnographer needs to be involved personally in order to use participant observation, whilst maintaining an adequate balance of involvement and detachment (Elias 2007).”
- “The homological level is one of three levels of sociocultural analysis that Willis distinguishes. 4 It focuses on the production of meaning by the interaction with material objects, cultural items that are bestowed with meaning.”
- See Table 10.1, Participant Observation type chart (Spradley, 1980) for types of observation, levels of involvement, and limitations (p. 111)

- **Thick description:** “*Verstehen* or thick description is really a method that we had to use to understand the behaviours and intentions of our motorcycling veterans. Merely objective observation, if observation can be objective, would be thin description. Thus, observing that some bikers wear the ‘1%’ sign, a diamond shaped green-on-white embroidered ‘1%’ is relevant as it describes what people are wearing, but it does not tell us why they are wearing it and what meaning they bestow on it. One of our key questions on the honour code was designed to find out where the veterans stand on the issue of societal integration or alienation. A simple open-ended question like ‘what do you think of/feel about the “1%” symbol’ triggered a world of significant responses that explained the respondent’s place in the social network, his world view, his position towards other groupings and the meaning that he bestowed on this seemingly trivial piece of garment that is only two or three square centimetres but the key to the webs of significance.”
- Ethics and informed consent: “The reason why the American Anthropological Association is opposed to anthropologists working in Human Terrain Teams is that the information is used for tactical military decisions and political ends of (mostly) Western powers (The Network of Concerned Anthropologists, 2009).”
- “The balance between involvement and detachment is skewed to the involvement side by the methods that make part of kinetic ethnography. It is necessary to gain entry and to win trust, but there is more to the methodology that causes the skewed balance. The fact that bodies and especially the motorcycle of the researchers are research tools implies that they are physically involved in the situation. Campfire interviews, field notes, thick description and informed consent are methodologies that ethnographers will use to get close to their subjects. This does mean that the researchers run the risk of losing detached observation, and they will have to safeguard themselves from going native.”

Note the close connections between participant observation, ethnographic research, and thick description for explanatory purposes. See the use of the terms in the Sage Dictionary but note that actual applications vary.

5. Interviews and Focus Groups

Sage Dictionary:

- “**Focus group** interviews or conversations bring together a group of people to discuss a particular topic or range of issues, and are commonly found in media and communication studies, evaluation research, and organizational research. Focus groups are used both as a stand-alone method of generating data and in combination with other methods. Their successful use requires careful planning (including strategies for recruiting participants, logistics of recording data, and so on), thoughtfully prepared questions (with special attention paid to phrasing and sequencing), skillful moderation of the discussion, and thorough analysis of the data.” Schwandt, Thomas A. The SAGE Dictionary of Qualitative Inquiry (p. 122). SAGE Publications.
- **Interviewing:** “Behind every interview there is a working model or logic informing one’s understanding of the parties to an interview and the interview process.” (Schwandt, 2014, 170)

- “The conventional model or logic regards the interview process as a means of gaining direct access to an interviewee’s experience. The interview is a behavioral event—that is, verbal behavior, a verbal exchange, or pattern of verbal interaction. The interviewee is regarded as a passive vessel of answers for the kind of factual and experiential questions put to her or him by the interviewer. Using the logic of stimulus-response (question and answer), the interviewer aims to ask the right questions so as to elicit responses in the form of authentic feelings and meanings of the interviewee.”
- “An alternative model or logic regards interviewing as a particular kind of discursive, narrative, or linguistic event or practice unfolding in a specific sociopolitical context.* In this event, interviewer and respondent are regarded as agents active in the co-construction of the content of the interview (hence, the interview is referred to as the active interview).”

* See Holstein and Gubrium (1995) *The Active Interview*. Sage. I used active interviews for peacekeeping research. I wanted to learn about use of contact skills including mediation, negotiation, and go-between communication, but the soldiers I was interviewing weren’t familiar with the language or concepts, so it was necessary to ask unstructured, open-ended questions as part of a conversation about what they did, and then fit this into an analytical framework. I faced the same situation gathering data about local perceptions of third-party intervention in conflict in Sierra Leone in 2001. The active interview can be unstructured or semi-structured (see below).

Moore, B. In Depth Interviewing, Chapter 11 in the Routledge Handbook

The example case involves interviews with the only Black American WACs stationed overseas during WWII.

- Categories and types of interviews: Structure, unstructured, and semi-structured.
“Interviews can be separated into three broad categories: structured, unstructured, or semi-structured. The structured interview is a quantitative method that is usually used in surveys. Such interviews are formal and consist of pre-established, closed-end questions.”
- “... unstructured interviews are used in qualitative studies. They are informal and consist of open-ended questions which allow respondents to elaborate on a topic. There are no pre-established questions with pre-set responses; nor is there a preexisting framework. Unstructured interviews give researchers the flexibility to ask unplanned questions during the interview and to probe respondents for clarification (McCracken 1988; Fontana and Frey 2000).
- “The semi-structured interview contains both structured and unstructured questions; however it is more flexible than the structured interview but not as amorphous as the unstructured interview.”
- Interviews can be conducted one-on-one, by telephone, or in focus groups (p. 118) Each involves an informed consent protocol.
- Methodological steps: review scholarly literature, design an interview protocol, administer a pre-test to refine questions, identify interviewees, find a venue to conduct the interviews, obtain informed consent, pass the process through research ethics.

- **When should you use in-depth interviews?** “In-depth interviews are best used when explanations are required... The in-depth interview is also the most appropriate form of data collection in phenomenological research as the primary objective is to learn how subjects perceive an event... Researchers using the grounded theory approach rely greatly on the in-depth interview. .. In-depth interviews have also proven to be a valuable method of data collection for case studies. Finally, ethnographic studies also depend upon in-depth interviews.”
- **Limitations of interviews:** Memories may not be accurate; people have poor recall of interior events (e.g. what they thought...), data from interviews may not be generalizable, volunteers for a study introduce selection bias,
- “The military differs from other social institutions given its mission of national defense. By necessity, levels of security are high which often pose unique challenges for qualitative researchers. Military personnel sacrifice some of their civil liberties by joining the armed forces and the freedom of speech is one of them. Therefore, in order to interview military personnel, researchers must follow military protocol, seeking permission...”

6. Ethnographic Research

- See also ethnography, fieldwork, and interviews.
- Ethnographic method: “This is the collection of methods for generating and analyzing qualitative data that are grounded in a commitment to firsthand experience and examination of some particular social or cultural phenomena. The primary method is participant observation, but related methods include informal, unstructured forms of interviewing; collection and analysis of various kinds of documents, visual materials, and artifacts; photography; collection of oral histories, and so on. This extensive collection of methods is often referred to more generically as qualitative research methods.”
(Schwandt, 2014, 96)

For a short introduction to ethnography, see Alex Stewart (1998) *The Ethnographer’s Method*. (Sage). From the series editor’s perspective, all qualitative research is an ethnographic process (i.e. writing about people). “Generally, the field-worker—whether trained in cultural anthropology, sociology, political science, or another social science—seeks to develop insights about a targeted culture by practicing some form of participant observation. It is the convention to report research results in an ethnographic volume, article, or report. Of course, this tidy explanation masks the fact that ethnographies can differ dramatically from one another in theoretical orientation, scope, technique of data collection, degree of quantitative analysis, and audience, among many other dimensions by which research might be coded. Although it may be appealing to announce that ethnographies exhibit a great diversity of forms, we ought also to worry that a lack of attention to standards could create a situation in which any form is given ethnographic legitimacy.”

How do we know if it is good ethnography? “First, the ethnographic product must be faithful to the truth, or successful in its “depiction”. Second, the ethnography must communicate

conclusions that can be shown to “transcend” the perspectives of the individual researcher. Finally, the ethnography must generate understandings that are “applicable” to the study of human behavior in other research settings.”

Ethnographic methods have increasingly been mobilized to study institutions – ways of organizing social behaviour. Dorothy Smith (2006) *Institutional Ethnography as Practice* (Rowman Littlefield) describes the challenge: “institutional ethnography is committed to discovering beyond any one individual’s experience including the researcher’s own and putting into words supplemented in some instances by diagrams or maps what she or he discovers about how people’s activities are coordinated.” The focus in this sort of research is the way in which the institution or organization works. In order to understand the institution or organization in all its dimensions, the institutional ethnographer will use interviews, participant observation, and text-based analysis. Smith’s collection includes a chapter on each. Part II of the collection addresses analysis of institutional ethnographic data, and part III describes proposal-writing and reporting.

As someone who has done institutional ethnography related to professional military education, I would describe an iterative process in which I have begun with texts, proceeded to interviews and observation, and returned to texts.

7. Analysis for patterns

Rietjens, S. (2014) *Qualitative Data Analysis: Seeing the patterns in the fog of civil-military interaction*. Chapter 12 in the *Routledge Handbook*.

- Rietjens notes an increase in research on interactions: “They conduct interviews with military, humanitarian or host nation actors, make detailed observations during field trips or study scores of meeting minutes and project data. Together these data provide a source of well-grounded, rich descriptions and explanations of processes in identifiable local contexts. Using such data enables researchers to unravel the chronological flow and see which events led to which consequences and derive fruitful explanations. In addition, it facilitates understanding of the context within which decisions and actions take place (Myers 2009). And, as Miles and Huberman (1994) argue, good qualitative data are more likely to lead to serendipitous findings and to new integrations.”
- This technique is very similar, perhaps indistinguishable from common approaches to grounded theory: thick description → analysis through coding and pattern seeking → theorization about cause and effect → generalization.
- But there are criticisms of ad hoc qualitative search for patterns: “the analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion, let alone the presentation of unreliable or invalid conclusions to scientific or policy-making audiences. How can we be sure that an ‘earthy’, ‘undeniable’, ‘serendipitous’ finding is not in fact wrong? (Miles 1979: 590)
- “Following Miles and Huberman (1994) [Rietjens addresses] three steps in the data analysis process. Data reduction, the first step, refers to the process of selecting, focusing, simplifying, abstracting and transforming the data that appear in written-up

field notes or transcriptions. The second step concerns data display. This helps researchers to organize and compress information. The third and final step of the data analysis process is drawing and verifying conclusions.

- [Rietjens makes the point several times that effective analysis requires good research design and a data collection plan. Other authors point out that this is an iterative process, i.e. your first forays into design and collection won't have the advantage of insights that you gain from them, so you may have to revisit your design and collection strategies.]
- Key design decisions are: (1) conceptual framework [your theoretical entry point – sometimes the intersection of several related bodies of theory] (2) defining the case, which encompasses the nature and size of the unit of analysis. (3) choice of instrumentation, e.g. method of recording data, shorthand devices for observing and recording events or interactions, coding criteria, note-taking vs recording interviews, etc. (4) linking qualitative and quantitative measures (what will you count, and how; why is it useful), (5) selecting computer software for analysis, and (6) getting through research ethics.
- Data reduction: “Coding is the process that qualitative researchers use to reduce and focus the great amount of raw data. A coding process moves in a stepwise fashion progressively from unsorted data to the development of more refined categories and concepts (Hahn 2008).” [sometimes called open coding, or categorical coding, i.e. grouping]
- “After identifying a number of substantive categories, the next step is to refine and differentiate the categories resulting from open coding. Strauss and Corbin (1998) suggest doing a more formal coding for identifying and classifying links between these categories. They label this axial coding. When qualitative researchers code axially, they intend to answer questions such as why, where, when, how, and with what results and in doing so they uncover relationships among categories.”
- “Axial coding is sometimes criticized as forcing a structure on the data instead of discovering what emerges. For this reason, Glaser (1978) suggested a list of basic codes as a step following open coding. He grouped these into coding families that can be used as tools for advancing an understanding of the material. Table 12.1 illustrates these coding families. The right column includes civil–military interaction examples.”

Table 12.1 Coding families applied to examples of civil–military interaction (adapted from Glaser 1978: 75–82; Flick 2009: 315)

<i>Coding families</i>	<i>Concepts</i>	<i>Examples</i>
Six Cs family	Causes, contexts, contingencies, consequences, covariances, conditions	Causes of civil–military interaction, operational context
Process family	Stages, phases, phasings, transitions, passages, careers, chains, sequences	Different phases in the civil–military interaction process such as partner selection or transfer
Degree family	Extent, level, intensity, range, amount, continuum, statistical average, standard deviation	Intensity of interaction
Type family	Types, classes, genres, prototypes, styles, kinds	Types of interaction (e.g. de-confliction or joint activities)
Strategy family	Strategies, tactics, techniques, mechanisms, management	Strategies for dealing with civil–military interaction
Interactive family	Interaction, mutual effects, interdependence, reciprocity, asymmetries, rituals	Dealing with asymmetric resources (e.g. the large numbers of military personnel versus low numbers of civilians)
Identity self-family	Identity, self-image, self-concept, self-evaluation, social worth, transformations of self	Different actor perspectives on interaction (e.g. local perspective versus military perspective)
Cutting point family	Boundary, critical juncture, cutting point, turning point, tolerance levels, point of no return	New level in the interaction e.g. due to increased resource allocation
Cultural family	Social norms, social values, social beliefs	Different social values between civil and military partners
Consensus family	Contracts, agreements, definitions of the situation, uniformity, conformity, conflict	Making of agreements between military and civilian actors

From

Routledge Handbook, p.135

- “The third main type of coding, selective coding, is the process of integrating and refining categories (Strauss and Corbin 1998). Here the researcher looks for further examples and evidence for relevant categories. Selective coding allocates specificities to the theory and enables the researcher to make use of explanatory statements such as ‘under these conditions’, ‘then’ and ‘when this set of events occur’ (Strauss and Corbin 1998). Finally, the theory is formulated in greater detail and again checked against the

data. The procedure of interpreting data, like the integration of additional material, ends at the point where saturation has been reached. This means that further coding or enrichment of categories no longer provides or promises new knowledge (Flick 2009). Yin (2009) refers to this as analytical saturation, which he contrasts with statistical generalization. Statistical generalization refers to inferences made about a population based on empirical data collected about a sample from that population. Analytical generalization uses a previously developed theory as a template to compare the empirical results.”

- Data Display. Data display is the next step in the data analysis process. Its goal is to systematically present information in a visual format. This should assist researchers to further organize and compress their information. For many qualitative researchers, however, the typical mode of display takes the form of extended, unreduced text, usually in the form of written-up field notes. Often this is a weak and cumbersome form of display (Miles and Huberman 1994) and hard on analysts because it is dispersed over many pages and is not easy to see as a whole.” Big chunks of text = bad data display
- “According to Miles and Huberman (1994) good displays can take various different forms, but generally fall into two major families: matrices and networks. A matrix is essentially the crossing of two lists, set up as rows and columns....time-ordered matrices to display time-linked data and role-ordered matrices that sort data in rows and columns that have been gathered from or about a certain set of “role occupants” with data that reflect their views.
- “Networks make up the second major family of displays. A network is a collection of nodes or points connected with lines and is generally helpful when a study focuses on more than a few variables at a time. A well-known type of network display includes context charts. These charts map in graphic form the interrelationships among the roles and actors that make up the context of individual behaviour. Also causal networks are very common. These network displays contain the most important independent and dependent variables and the relationships among them.” (137) [example of network display below]

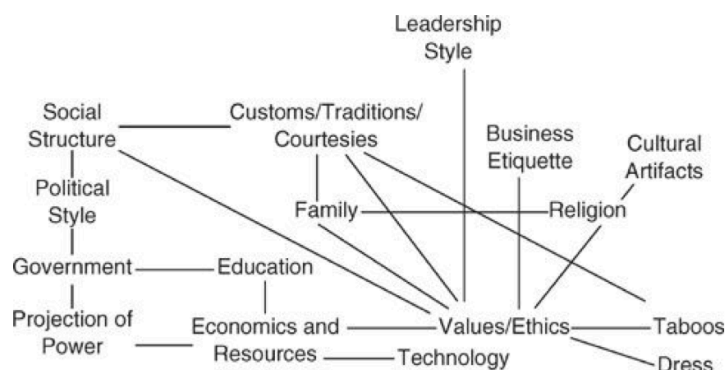


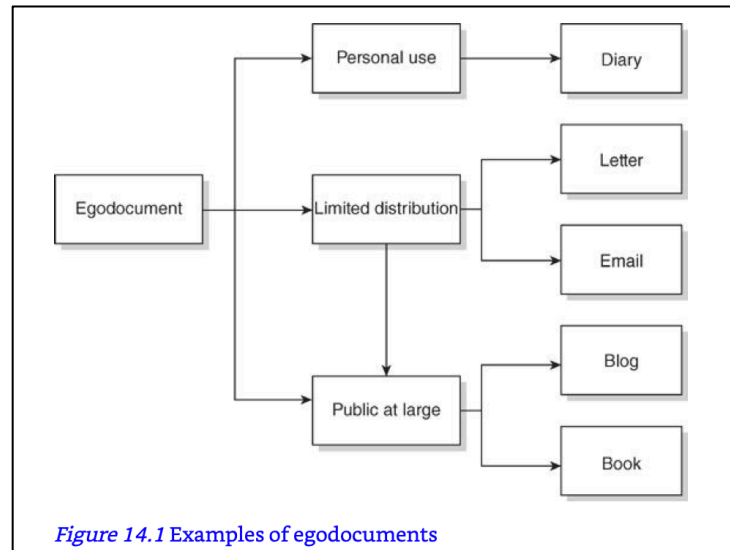
Figure 12.2 Network display of core cultural attributes (Rentsch et al. 2009)

- Drawing Conclusions. “Having displayed the data, the final step of the analysis process is drawing and verifying conclusions. Many different tactics can be discerned to generate meaning and draw conclusions from a particular configuration of data in a display. An often-used tactic is **noting patterns or themes** (Ryan and Bernard 2000). This can be very productive when the number of cases and/or the data overload is severe. The tactic seems rather easy to apply but it is important to see added evidence of the same pattern (**‘recurring regularities’**, as Guba (1978) puts it) and to remain open to unexpected findings when they appear (see also Yin’s (2009) **‘pattern matching’**). Tactics that are closely linked to noting patterns or themes and that are rather concrete and descriptive include seeing **plausibility, clustering, making metaphors** and **counting** (Miles and Huberman 1994). With regard to counting Miles and Huberman state that counting tends to get ignored in qualitative research.”
- Reasons for counting in qualitative data analysis: (1) looking at distributions rapidly enables the researcher to notice the general drift of the data and to see the outliers. (2) counting can facilitate the verification of a hunch or hypothesis (3) protects against bias.
- Verifying conclusions: When a researcher has drawn conclusions it is necessary to verify whether they are valid, repeatable and right. There are numerous examples of qualitative studies that tell a wonderful and powerful story but do not match the data and are in fact wrong. Tactics for testing or confirming findings are extensively treated in qualitative research handbooks (e.g. Flick 2009; Myers 2009; Miles and Huberman 1994). Some examples of these tactics include:
 - Checking representativeness
 - Checking researcher effects
 - Triangulation
 - Getting feedback from informants
- Evaluation: How do we know how “good” a qualitative study is?
 - “Objectivity/confirmability of qualitative work: the question here is whether the conclusions depend on the subjects and conditions of the inquiry rather than on the inquirer.
 - “Reliability/dependability/auditability: the underlying problem is to what extent the study is consistent, reasonably stable over time and across researchers and methods.
 - “Internal validity/credibility/authenticity: the questions raised here include whether the findings of the study make sense and are credible to the readers and to the people that have been studied.
 - “External validity/transferability/fittingness: this issue addresses the generalization of the findings: to what extent are they transferable to other contexts?
 - “Utilization/application/action orientation: even if findings are valid and transferable, the question remains what the study does for its participants (both researchers and researched) and customers. This issue closely links to ethical questions such as who benefits from the study and who may be harmed.”

8. Use of ego documents

Kleinreesink, E. (2014) Researching 'the most dangerous of all sources' – egodocuments. Chapter 14 in the Routledge Handbook of Research Methods in Military Studies.

- "The term 'egodocument' refers to 'a text in which an author writes about his or her own acts, thoughts and feelings' (Dekker 2002: 14). Until the middle of the twentieth century, ego-documents as source were regarded by historians as 'extremely unreliable' and 'simply useless' (Dekker 2002: 21). Dutch historian Romein even dubbed them 'the most dangerous of all sources' (Romein in Dekker 2002: 19).



- "A medical researcher uses military egodocuments to study post-traumatic stress disorder and smoking in military personnel (Robinson 2012), a sociologist uses them to study military strategy (King 2010), and a historian reads egodocuments to look at changing ideas about the relationship between body and mind (Harari 2008).
- "one of the disadvantages of studying egodocuments. Because there is no direct contact between the author of the text and the researcher, a detailed probing of the narrative is impossible (Woodward 2008: 380). Of course, content analysis could be complemented by other research methods such as interviews..."
- Uncertain veracity is another drawback of egodocuments (p. 156)
- What to study in ego-documents:
 - o Paratext – "elements that surround a text. These elements include book covers, forewords and acknowledgments in the narrow sense to book reviews and interviews with the author in the broader sense. Paratext is most useful for studying the relationship between authors and their publics."
 - o Images – "Images present a special case of paratext. Military egodocuments (memoirs, blogs or emails) are often accompanied by photographs. Ninety-four per cent of contemporary Afghanistan memoirs have photographs or other images such as maps."
 - o The text itself – "characteristics of the 'text' like its main themes or the plot are subjects of investigation. Classical military egodocument studies such as Hynes'

The Soldiers' Tale , and Fussell's The Great War and Modern Memory delve more deeply into common, often universal, themes that military authors write about, such as fear, comradeship, honour and disillusionment. These universal military themes are good and recognisable starting points for comparative studies between, for instance, countries or time periods."

- Plot: "Plot is another global text element. Most Western stories are told and written in the form of an Aristotelian plot. This means a narrative in which the hero of the story makes a journey...There are many theories that can be used to study plot structure. These theories range from plotting the positive or negative value of the story in time (Gergen and Gergen 1988), to Friedman's highly structured and detailed, but easy to use 14 basic plot types (Friedman 1955)."
- Words: "Third, at a deeper level, the words that make up the text can also be studied. With the advent of digital documents and improved optical character recognition software, it has become possible to study texts on the level of words. Qualitative data analysis software, such as ATLAS.ti and NVivo, have standard word frequency query options available, which can be used to identify important themes or concepts."
- Comment: egodocuments might often be combined with other data collection methods, treating the egodocuments as primary sources. Kleinreesink provides useful caveats about how to treat these documents.