HOW TO OBTAIN MATERIAL FOR ANALYSIS – AN OVERVIEW

Those who wish to carry out empirical research must put four questions to themselves:

(a) What research question am I trying to answer?
(b) What analysis will provide a useful response to the question?
(c) To conduct this analysis what data do I need and from whom?
(d) What are the practical steps to obtain and record these data?

This inventory (from Burgoyne 1994: 195) may be used for purposes of orientation and organization in this chapter, which is concerned with suggestions as to how the third question may be answered. When the research question has been formulated and the research strategy established, it remains an open question as to how to obtain the material one wishes to analyse. In the first place researchers should have clearly in their minds the function of the text (corpus) in the context of the investigation, and the decisions about selection that have to be made. These factors relate directly to the question of what a text is and will be dealt with in 3.1 (below). The second section of this chapter (3.2) offers a compressed overview of the different techniques available for the selection of material for analysis. The fourth of the questions given above is presented and discussed in Part 2 of this book in relation to the individual methods and procedures.

3.1 WHAT DECISIONS HAVE TO BE MADE?

If one has more than a single text which one wishes to analyse for content, text-syntactic interconnectedness (cohesion), construction of meaning (coherence) and function, then the starting point is the same for all researchers. They are confronted with the question of what texts they should collect and which, of those collected, they should analyse. One relies then either (a) on the texts generated by the researcher to answer the research question, (b) on the collected material, or (c) on a combination of both. In the first case we are concerned with a reactive research design and in the second with a non-reactive procedure.

Investigations that are so arranged that the researcher, through his or her collection technique, excludes all influence on the data collected are still comparatively rare in the social sciences. Typical examples would be investigations that obtain their material from official statistics, secondary analyses or studies that use already available texts, rather than those collected for research purposes. Examples of the latter are published texts (newspaper articles, television broadcasts, and so on) or internal papers such as documents from organizations.[1] Even rarer are investigations in which the advantages of both procedures are combined together in a targeted way. This rarity is only understandable because of the demands involved, since the advantages are clear if material not influenced by the researcher is compared with data that arose in response to targeted questions.

The decision whether one should investigate texts stimulated by the researcher or pre-existing texts (or a combination of both types) is rarely the first decision to be taken. On the contrary, it depends quite essentially on the status of the research material. This means that the question of how texts are to be selected is first determined by whether the texts stand alone in the investigation or whether they represent something, and are seen as an expression of or for this.

Figure 3.1 distinguishes three fundamentally different functions that texts may have as research material. This differentiation refers to the different functions texts can have in the selection process: (1) Texts may themselves be the object of research. Such is the case when, from the researcher's viewpoint, there is nothing else 'behind' the text, that is, when the features of the text itself are of interest to the research; (2.1) Texts may be approached as utterances, as manifest components of communication, in order to be able to make some statement about the selected groups of people who produced the text. In this case the selected texts serve as an index in the analysis of phenomena for which individuals are seen as feature-bearers; (2.2) Texts may be approached as a manifest reflection of communication and constitute an aid or an indicator to make it possible to analyse the communication (or communicative situation) that is documented in this form. Each of these approaches depends on a different research question and requires quite different modes of text selection.
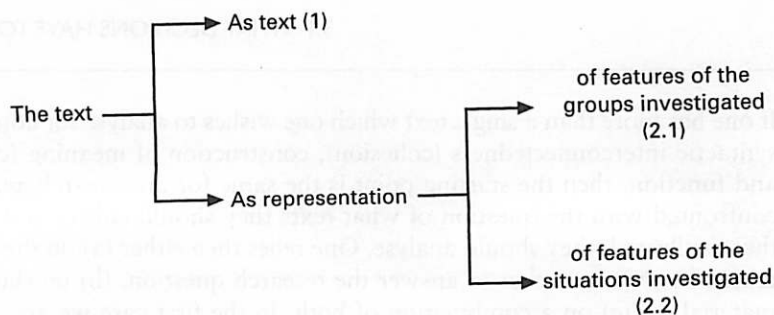

FIGURE 3.1 Functions of text material

The first type of material is the concern of all investigations that seek to draw conclusions exclusively about the texts themselves (see function 1) and that make no link to the extralinguistic reality.[2] Examples of this are found in investigations of the statistical structure of texts, immediate constituent analyses or descriptive grammatical studies. Here the samples that are selected for research are texts. In all such investigations the object of study has been relatively clearly defined. If the study is not restricted to a single text then a sample must be taken from the universe of available texts and the population can be relatively easily determined according to the research question. Since in these studies neither the situational context nor the text-generating actors are systematically considered, they do not belong in the field of social research. In what follows, therefore, we shall give no further attention to this branch of text analysis.

If texts are investigated as utterances of particular groups of people (as in 2.1), the selection must of course begin with the groups concerned – as data-collection units. The analysis of spoken (and transcribed) or written communicative extracts serves the purpose of investigating what has been formulated in the research question. If, for example, the researcher is interested in investigating the attribution style of diplomats – and examining it with a comparative group (such as television foreign correspondents) – a selection of diplomats (and foreign correspondents) must first be made. Then situations must be found where the question can be investigated and to which the researcher has access. This short sketch of the selection procedure already makes it clear that in studies of this type it is not texts that serve as the primary selection criterion (or collection units). This becomes even clearer in text analyses that are concerned with the evaluation of interviews or responses to open questions. In such cases the selection would have been made in advance by virtue of the choice of interviewee.

The third type (introduced in 2.2) implies that the texts used for analysis do not 'attach' to particular persons who represent something, but rather that the transcribed communication serves as a depiction of some situation or topic area indicated by the research question as an object of study. In this situation, the population must be defined specifically – that area about which the investigation seeks to draw some conclusion. Then a selection of meetings would have to be made, or situations would have to be identified (and a selection made), in which the themes that are the subject of the research are discussed. Now meetings are the units of collection and the recordings are the units of investigation.

Once it has been decided what role the text plays in the study, four further decisions have to be taken in order to arrive at material that can ultimately be analysed:

(a) *From what material do I make the selection?* The first stage in the selection process consists of identifying precisely that set of material from which the selection must be made for the concrete research task out of the basically incalculable set of spoken and written pieces of communication – that is from the universe of possible texts. In social research, however, we have to

    identify the groups or situations for the investigation of which texts are to be used. In this first stage – to use the language of sampling theory – it is a matter of identifying the population.

(b) *What do I select from this?* If the potential groups or situations have been identified and it has been discovered that these cannot be investigated in their population, there follows a second selection in which the sample is defined or the selection is made according to other criteria. For the definition of units of collection there is a range of possibilities, which will be further discussed below.

(c) *How much of this selection do I analyse?* Once the population has been defined and the selection made, the researchers can now proceed to define the texts for analysis – or to generate them if, for example, they are conducting interviews and transcribing the recordings. This newly created corpus of texts is often too large to be fully assessed. By means of further sampling, therefore, sections or locations within the collected material are selected for assessment. This problem does not arise if appropriate arrangements are made before the material is collected.

(d) *What are my units of analysis?* The smallest units used in the analyses may differ widely: syntagmatic locations, sentences, units of talk, themes or changes of theme, single words, signs and so on. Since in text analysis it is always relevant categories within a text that are analysed, the unit of analysis is that unit which seems, to an observer, to be relevant for the particular text as a unit to be investigated. For this there are three minimum requirements: units of analysis must (a) be theoretically justified, (b) be unambiguously defined, and (c) not overlap. For example, if one is investigating the relationship between 'critical life events' and 'emotional disturbances', not only must both concepts be precisely defined, but it must also be possible to decide for every relevant textual passage whether it is to be allocated to either or neither of the two concepts, and whether it is an indication for one (and for which one) of the theoretical constructs. (For further discussion of the unit of analysis, see Altmann 1996.)

These four decisions have two essential foundations: the chosen theoretical approach and the concrete question that guides the research. This is illustrated by three examples that differ as widely as possible (see Table 3.1). If one relates this framework to the differentiation of textual functions given above, the results are as follows.

    Studies I and III are examples of the investigation of situations. Different though they may be, in the selection of their textual material, the authors both proceed from the question concerning which texts might portray the situations or episodes (social change, reports of dreams) they are investigating.

    Study II investigates a particular group of people or the modes of behaviour and resistance strategies of a precisely defined group and therefore, as a first step, proceeds to the selection of individuals from this group. Then the decision is taken to conduct interviews, that is, the selected people will be used as text producers. Next the transcripts are scanned for themes, and these are finally analysed. This example (Study II) could, of course, be viewed differently if we

Table 3.1   The four selection decisions

4 selections	Example I	Example II	Example III
(1) From what material do I make the selection?	From newspapers: the *New York Times* and the *Los Angeles Times*	Pregnant women who take cocaine	From the tragedies of Aeschylos, Sophocles and Euripides
(2) What do I select from this?	The title pages for the years 1890 to1989	60 pregnant women who report taking cocaine	All text locations in which an actor describes a dream
(3) How much of this selection do I analyse?	A random sample (stratified multi-stage cluster sample) each of 10 sentences on 10 days of each year	The complete transcribed interviews	In every case the complete textual passage
(4) What are my units of analysis?	Selected words and word classes (e.g. 'ritual words', 'change words')	Themes that occur in the interviews	In every case the complete textual passage
Author:	Danielson & Lasorsa (1997)	Kearny et al. (1995)	Devereux (1976)
Research question:	What great social and political changes in American society are reflected in influential daily newspapers?	What mechanisms are being used by pregnant women to overcome this situation?	Are the dreams written by authors for actors in drama psychologically credible?
Function of the text:	'daily newspaper as a convenient repository of socially relevant symbols' (1997: 114)	Verbal utterances and an index for the use of … by …	Test of the psychoanalytic interpretability or authenticity of the dream character
Approach:	Content analysis	Grounded theory	Psychoanalytically oriented literary analysis

place the emphasis on the situation investigated and study this as an example of particularly difficult personal circumstances. (This resembles the investigation of the psychological aspects of difficult decisions, if one is studying people who are giving up smoking or who are confronted with the question of whether they should undergo a surgical operation.) The results are then seen as a phenomenon that is capable of generalization. The findings about a particular group in one situation or another are less important: the main factor is the value of the investigation as a contribution to the theoretical explanation of a complex situation. But this leads us on to the topic of case studies which will be discussed below (see 3.2.4).

Figure 3.2 depicts a summary of the decisions that have to be taken in order to proceed from the research question to the units of analysis and to be able to begin work on texts. The logic of this sequence in no way reflects the temporal succession that must be realized in all types of investigation. All of these decisions must, however, be made in the course of an empirical study. The individual 'modes of investigation' are distinguished here according to the viewpoint that governs the selection of the texts that form the material for their investigation.
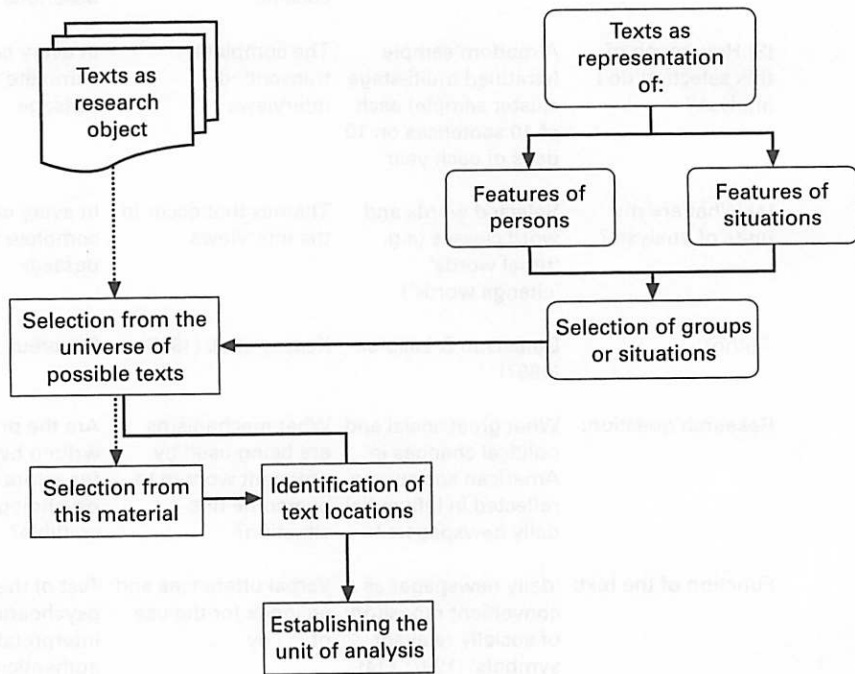
FIGURE 3.2   How does one find analysable material?

3.2 HOW CAN MATERIAL FOR ANALYSIS BE SELECTED?

The purpose of this section is to provide guidance as to how the question about the selection of material may be answered. What procedures are available for making a selection from the universe of possible texts? How can one then make a further selection from this material? What considerations must be borne in mind in identifying the passages for analysis?

To avoid possible disappointments, two restrictions need to be made: (a) the answers to these questions can be given only in a general way since they are closely bound up with the particular research question, and (b) establishing the unit of analysis is not dealt with. This is because that task is always dependent on the (theory-driven) decision about the method or mode of analysis to be

used. These questions, therefore, can be handled only with reference to concrete examples or precise presentations of particular methods. We shall therefore compensate for the gaps in this section in the detailed discussion of individual methods in Part 2 of the book.

Figure 3.3 gives an overview of the most common among the different procedures that may be used in social research to select material. Later in this chapter these forms of selection will be outlined, but the individual types of sampling are described only in the Glossary. Here we focus on the significance of the different selection modes for text analyses. Statistical procedures are presented in a number of specialist textbooks, such as that of Sirkin (1995),[3] and sampling procedures are discussed in more detail by Sudman (1976) and Maisel & Persell (1996).

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Statements
about the ─────────▶ 1. Sample
population

                        1.1              ─▶ random sample
                        probabilistic    ─▶ stratified sample
                                         ─▶ multi-stage sample
                                         ─▶ cluster sample

                        1.2 non-         ─▶ quota sample
                        probabilistic    ─▶ ad hoc sample

Text
selection ─────────▶ 2. Theoretical sample
          ─────────▶ 3. 'Strong' theoretical assumptions
          ─────────▶ 4. Case study
          ─────────▶ 5. 'Go fishing'
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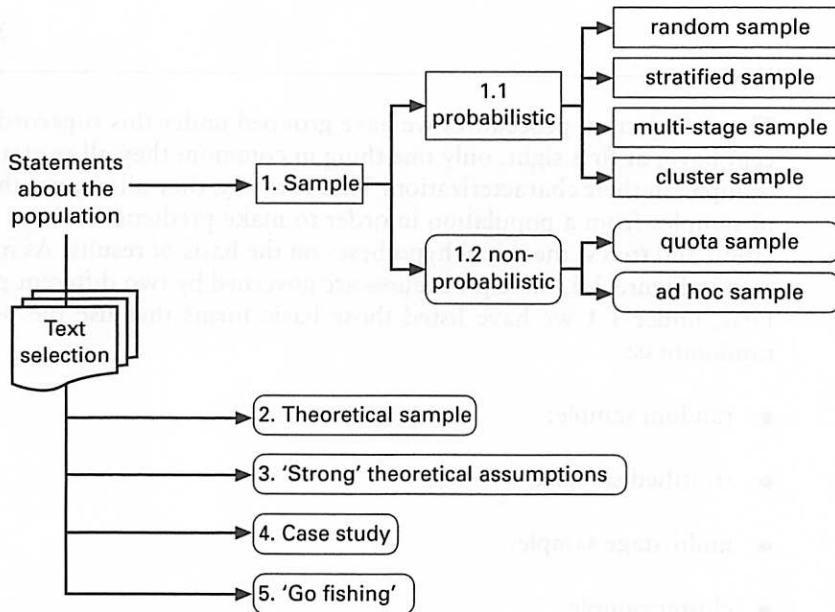
FIGURE 3.3   Modes of procedure in text selection

From Figure 3.3 it is clear that the possible ways of arriving at analysable material may be subdivided into two broad groups. All forms of selection given under **sample** (1) are strategies for collecting material for investigation which can be used to make predictions about a population. By definition they proceed on the basis that the decision about investigating by sample has already been taken. The second group comprises the four remaining procedures (2–5) shown in Figure 3.3. These procedures are denied the possibility of making predictions about the population if this has not been fully investigated. In addition (depending on the epistemological school or tradition), they are denied the chance of testing assumptions and hypotheses.

This distinction is reasonable in so far as it accords with at least two

important viewpoints. First, many researchers (and therefore also journals) who rely on 'classical' criteria still assume that generalization can only be achieved through empirical research that is – in terms of sampling theory – watertight. The modes of selection in the first group correspond in essence to these criteria. Second, and apart from this methodological viewpoint, the distinction also draws a line between the functions, given at the beginning of this chapter, that texts may fulfil in social research. If one wishes to make generalized statements about groups (or individuals as bearers of particular features), one cannot avoid investigating a representative sample. If the texts to be investigated are supposed to represent particular situations then the researcher will use one of the other four procedures – and if necessary, the last, which we have called 'go fishing'.

3.2.1 Sample

The six selection procedures we have grouped under this superordinate concept have, at first sight, only one thing in common: they all contain the term 'sample' in their characterization. That is to say, they all require the drawing of samples from a population in order to make predictions about this population and to test the initial hypotheses on the basis of results. As may also be seen in Figure 3.3, these procedures are governed by two different principles.[4] First, under 1.1 we have listed those basic forms that use the principle of randomness:

- random sample;

- stratified sample;

- multi-stage sample;

- cluster sample.

It is a precondition of probability sampling that every element in the population has a known non-zero probability of selection. This condition is the best starting point for the representativity of a study. It is a concern of the probabilistic type of procedure that any subjective bias should be excluded by means of some external criterion, such as random numbers.

Second, the category 2.2 includes two modes of selection where the sampling is non-probabilistic:

- quota sample;

- ad hoc sample.

These non-probabilistic procedures attempt, in various differently accepted ways, to de-subjectivize the control of information selection. As simple selection

guidelines they, of course, offer no advice on the matter of how the target population is to be defined.

All these types of sampling are normally associated with so-called 'quantitative' social research. In its strict form this is concerned first with the following basic assumption or justification: hypotheses are predictions that relate to a particular population. In other words, they claim no general validity but have a particular area of validity. Research hypotheses are tested on particular objects of investigation that are representative of the population in question. From this approach three assumptions emerge: (a) hypotheses can only be tested by those investigations that are either designed as censuses or that target a representative sample; (b) the question of how the target population (texts, groups, situations) is to be defined arises from the assumptions that drive the particular research; and (c) it is only possible to make statements about the particular population through controlled sampling (as opposed to arbitrary selection).

If one wishes to make statements about a particular population, data must be collected from all of those cases that relate to the research question. Since researchers rarely have or seek the opportunity to cover a population in its entirety, they must be satisfied with a reduced sub-section. Whether a census is possible depends in the first place on the research question and then on the possibility of access. If one seeks to examine changes in the style of a scholarly journal then one has a limited set (for example, fifteen years' issues of a particular journal) which can indeed be fully investigated. If it is a matter of dealing with typical verbal reactions to an election result that occur in conversations among regulars in a public house in a small village, it is relatively easy to organize this as a census. If one seeks to examine the ways in which doctors talk to patients in the out patients' department of a particular hospital, then one must be careful not to choose untypical times. (This requires particular assumptions, such as during an influenza epidemic the situation is different from that experienced in a normal holiday period.) Both examples – the pub and the hospital – may be used to make statements about the area investigated, for which one has complete data; but they cannot be used to make statements that generalize beyond the particular village or outpatients' department. The researcher will not be able to avoid sampling if, for example, a particular piece of research sets out to analyse the language of creative artists. A further example of an investigation focussing on samples is the analysis of the content of the *New York Times'* and the *Los Angeles Times'* title pages over the past 100 years (Danielson & Lasorsa 1997), which seeks to describe the symbolic representation of social change.[5]

In general it may be said that the more precisely the question is framed from a temporal and thematic point of view, and the more exactly the contents are defined, the easier it will be to make a census – assuming that one has access to the material. Of course generalizability falls with increasing precision. For example, an analysis of the latent sense of a promotional brochure from a particular company will permit conclusions to be drawn about that company (perhaps about its customer relations or its publicly presented self-image), but such a case provides no possibilities for more generalizable research results.

The logic of all sample-oriented investigations has the following features: empirical work begins with *identification of the population*. Which population is relevant is clear from the research question and the assumptions with which one starts. Then, from this population, a *sample* (as a reduced image of the population) is taken for *investigation*. The researchers select particular cases, and each case stands for a multiplicity of others and therefore represents a series of further cases. From the results of the analysis of this sample, *conclusions* are drawn about the population. The desired goal in this is clear: generalization. And this is, according to classical beliefs, only possible with conclusions that are guaranteed by means of probability theory (see 'inference', in Glossary). Such conclusions are only achieved with the modes of selection listed under 1.1 in Figure 3.3, that is probability samples.

In this strict sense all the selection procedures described below are also unscientific if the results based on them are generalized. Investigations conceived in this way yield no statements about populations. Here we are dealing with procedures that may be used for exploratory studies, they serve for hypothesis development or the clarification of concepts. Looked at in another way these modes of investigation are appropriate for ideas or where there is uncertainty. For that reason they are often relegated to the realm of pilot studies. Not all social scientists treat them as pre- or unscientific, apart from the last-named: 'go fishing' (see 3.2.5). How this is assessed depends on the answer given to a central question in this connection: can these procedures yield results that make possible some generalization?

Of course the answer will also depend upon how 'generalization' is defined.[6] In its usual form it is taken to mean *empirical* generalization: a conclusion from observations of a limited set of objects, applicable to the whole class to which the observed objects belong. Here we are dealing with an inductive conclusion that is actually not a conclusion at all but a hypothesis. Apart from this, however, there is also the theoretical or *analytical* generalization. This means that from the results of a study other theoretical assumptions may be made; for example, the findings of an investigation may count as more recent evidence and as an additional enrichment of (theoretical) assumptions that have already been set up, but which were not central to the study. This is one possibility of analytical generalization and it will be illustrated by means of another example: in a study of the linguistic behaviour of diplomats we established that this professional group, when making official statements, gave explanations more rarely than the control group (of foreign correspondents). We initially explained this by means of the assumption that diplomats, by virtue of their profession, are less able to commit themselves. A further analysis then showed that these first findings were not tenable, and that it could be shown that there was no difference between the two professional groups in respect of the frequency of explanations. We did establish, however, that foreign correspondents more frequently invoke persons and personal characteristics as explanations of particular political events. To put this very simply, a hypothesis from social psychological attribution research was again confirmed: the 'general attribution error', according to which external observers tend to attribute events to internal (personal) factors.

3.2.2 Theoretical sampling

This is the name given to a procedure in grounded theory (Glaser & Strauss 1967, Strauss & Corbin 1990) in which, after the analysis of collected cases, it is decided how the data material can be gradually extended.[7] It is a question, therefore, of a deliberate selection that can ensure that categories, topics or concepts considered to be central to the material can be represented sufficiently well (namely, fully or in as much detail) to facilitate the most precise possible analysis. For this, two types of procedure are recommended. First, an attempt is made to collect cases that correspond to the emerging hypotheses and, second, cases are collected that deviate, if possible, from the results so far obtained. In this process one principle of grounded theory is clearly expressed: the removal of the otherwise normal separation of the data-collection and analytical phases. The term 'theoretical sampling' allows one to presume a certain relationship between this type of material selection and traditional forms of sampling. This is not the case however. Since grounded theory seeks to make no statements about a population, it does not come up against the requirement that the material must be a typical sample of some population clearly definable in advance. There are researchers who follow this approach precisely in order to ensure the representativity of the concepts investigated (for example, theoretical terms such as conquest of pain, uncertainty, working routines) and to record the different variants of these concepts.[8] The starting point is the formulation of the research question. This is typically oriented towards a concrete problem (for example, what different organizational measures are there for dealing with drug addicts?) and not towards the search for possible ways of describing some population or the wish to test a hypothesis. From this research question it is decided where the phenomenon can be observed, using what events, what persons and what documents. The central criterion in the selection consists of the greatest possible variation in perspectives, so as to be able to investigate the research question using maximum contrasts or extreme cases. If this causes a narrowing of the field where the investigation is to be conducted, then a start is made with the collection of data which is then (on the basis of immediate analysis) gradually extended.

3.2.3 'Strong' theoretical assumptions

One possible way of steering the selection of material for investigation, without relying on considerations of sampling theory, is provided by 'strong' theoretical assumptions. By this we mean well-founded justifications which guide the selection of material without becoming involved in statistical aspects or questions of representativity. In essence, these modes of selection may occur in two forms: either the researchers determine why selection criteria are unnecessary in principle, or they invoke extra-textual theoretical considerations which they use to guide the selection.

One example of the first variant is provided by Oevermann's approach which is fully dealt with in Chapter 14. 'Objective hermeneutics' seeks to discover latent meaning structures using recordings of interactions. This method is used to analyse structures which have established themselves behind the backs of the actors and which cannot be directly influenced by them. The theoretical assumption is that these structures recur in every detail, that is in every unit of interaction. For this reason there is no need for deliberations about which texts or textual locations should be used in the analysis. An extract is selected at random[9] and the sole condition is that the selected 'scene' should be long enough for a consistent hypothesis about the system under investigation to be derived from it. In practice this could mean, for example, that out of a transcribed interview lasting 90 minutes perhaps eight lines are extracted and analysed.

For the second form of material selection, the reduction by extra-textual theoretical assumptions, we may refer to the 'talkogram' that Titscher and Meyer developed in the context of a study of the language of diplomats. Here we are concerned with a sociometrically oriented procedure (see Moreno 1953) which serves to capture quantitative indicators in the interactions displayed in discursive texts. In addition, as a first step the collected and transcribed episodes (in our case, meetings) are, as it were, 'measured' – that is, the numbers of words for individual speakers and contributions are determined. As a second step, references to persons absent or present, and content references to actual discourse contributions are noted and coded. In this way prominent speakers and contributions to the meetings can then be identified. Finally, on the basis of indicators that measure the density of active and passive references per speaker, 'talkograms' can be drawn for the particular meeting. These show the sociometric status (or 'prominence' of contributions) of individual speakers in the meeting.

The talkogram provides a sensible basis for data selection, particularly when texts are required to serve as a representation of features of the (social interaction) situation. An interaction, it is assumed, is always realized in texts if reference is made to other actors. In this way texts may, for example, concentrate on those textual locations where these kinds of reference are found. Alternatively one may focus on those contributions to which particularly frequent reference is made, since these have apparently shown themselves to be especially 'connectable' and can therefore tell us more about the structure of the interaction system than other contributions. As a further option, however, texts may be selected – on the basis of this quantitative talkogram analysis – for contrastive study. For instance, a study might be made of particularly prominent or non-prominent contributions.

The two examples represent alternative ways of overcoming the problem of reducing an enormous quantity of text to a manageable size for analysis. This is important if the investigator is interested in qualitative types of analysis which cannot be performed by computer programs. For example, with the help of the talkogram we were able, in a substantiated way, to reduce a text quantity of 295 contributions with a total of 81,036 words to 6 contributions and 8,045 words.

The term 'case studies' refers to a research strategy rather than a method. This strategy consists of studying a particular phenomenon using one or more objects of investigation in its real context.[10] Case studies are particularly appropriate if the context is unusually rich or complex. A context may be described as complex if a study has more variables than collection units. An investigator conducting a case study is not bound to a particular method; it is rather more typical that case studies are rarely satisfied with a single method of data collection. An explanation for this is that an attempt to analyse a particular case comprehensively (in its context) almost always needs to involve different levels, and these require different methods of data collection.

Case studies aim to analyse a phenomenon very precisely and every unit of investigation as an entity in itself. They also seek to investigate in a very detailed way – as if under a microscope – the relations between variables, using the case in question. Case studies may be implemented in the exploratory phase to provide insight into the research object. They may be used to test hypotheses or for later reinforcement of quantifying studies.

In case studies the units of investigation are not drawn from a defined population. The selection criterion for cases is their particular typology – their membership of the class of problems that are of interest. In that sense this type of investigation pursues quite different goals from those pursued by a study based on representativity, and is an alternative to the drawing of samples. This is the basis of the objections that are raised about the comparability, representativity and generalizability of the results of such studies.[11]

In contrast to what the term perhaps suggests, case studies are normally very expensive since they seek a complete description, a precise understanding and a full explanation of a complex case. From this characterization it may be seen that case studies may be conceived in very different ways and that the concentration on a single case does not mean that only a single 'object' is investigated. In an extreme case there may be a hundred. Even when a large number of individual cases are included in a study of this sort, each individual case study has the status of an independent investigation.

Every kind of case study, as Yin (1984: 29) claims, must take account of five factors in its design:

- the research question;

- the theoretical assumptions;

- the unit(s) of analysis;

- the logical relation between assumptions and data; and

- the criteria for the interpretation of the results.

Particular importance is attached to the third point (already mentioned in several places): the unit of analysis or the 'case' of the case study. What is to be defined as a unit of analysis depends essentially on the precise formulation of the research question. As a further subordinate criterion it must be added that the choice of the unit of investigation is dependent on existing literature or on other investigations which the researcher wishes to use comparatively. Normally a distinction is made between 'single-case studies' and 'multiple-case studies'. In the following characterization of the two forms of investigation the emphasis is on the single-case study, since in this the particular features of the strategy may more readily be presented.

Single-case studies are carried out if one wishes to describe, document and/or analyse a particular extreme or hitherto uninvestigable case (description); and/or one is attempting to use this case to set up hypotheses (exploration); and/or one wishes to use this single-case study to investigate the explanatory power of competing theories. The questions 'how?' and 'why?' are the most typical initial questions in case studies. It is a matter of approaching or apprehending the investigated object in its population, to understand how it 'works'. Many things can constitute a 'case' – an individual, a group, a class of persons, a family or an organization, a community, a particular event, or a class of events, that represent something particular.

The single-case study is oriented towards maintaining the singularity of the social object investigated (Goode & Hatt 1952).[12] It therefore differs from all procedures in which the single-case becomes an item of data that does not reappear as a unit in the assessment. This is because it is always concerned with describing and elaborating the uniqueness of the complex case of which it is typical.

Single-case studies are subject to a great risk. Since they necessarily require a very intensive involvement of the researchers with their case, researchers may easily become subject to the illusion that they know everything (or more than is necessary) about 'their' research object. This false security is best countered by a painstaking methodology (see Chapter 1, section 1 for discussion) and a very detailed research plan. Here Yin (1993) gives appropriate guidance.

From the four different possible functions of single-case studies we may derive their possible uses (see von Aleman & Ortlieb 1975: 162ff. for discussion):

(a) *Illustration*: quite often one finds in social science publications general claims (that is generalizations) which may be illustrated by material from a single case. Such cases then illustrate what is being claimed, but they cannot prove it.

(b) *Hypothesis development*: this is the principal function normally ascribed to single-case studies. Either this procedure takes on an important role (as exploration) in the preliminary study or else single-case studies already carried out (by others) are subjected to a secondary analysis in order to arrive at one's own research hypothesis.

(c) *Testing of hypotheses*: if one holds the view that even one deviant case is sufficient to refute regularity set up as a social law, then an assumption may be tested by means of a 'deviant case analysis'. One should therefore take a

proven hypothesis, look for a case where it should apply, and investigate this in detail. If the assumption does not prove to be true then it is refuted, but if the results of the single case match the hypothesis, it continues to be valid. To be able, in the context of a single-case study, to test a hypothesis that underlies the investigation, random sampling is necessary. In case studies this is not done by sampling a number of objects, but by sampling different episodes (that are necessarily remote in time from each other) within the single case. If the case consists of a single person (as in biographical studies), then different behaviour samples need to be taken: for example reactions on the part of the person investigated to different professional situations. If the case is an organization then the samples to be investigated may consist of different competitive situations and the firm's reaction to these). The precise definition of the samples is of course dependent on the research question that underlies the case study. But it is always necessary to define a 'baseline', to describe a norm, and to be able to distinguish from those situations where the effect of an independent variable can and should be investigated. In the specialist methodological literature there are accounts of experimental designs which have been developed for this purpose. A further example is provided by studies where a special case is extracted from the population studied (perhaps by questionnaire) and investigated in greater detail to check the conclusions that were drawn from the statistical analysis.

(d) *Prediction*: it is rather contentious whether one can derive predictions from a single case. But it is done, for example, in all job interviews and tests: from the previous history of a person decisions are made about behaviour patterns that might be expected in particular situations.

Multiple-case studies refers to a form of investigation in the context of which several case studies are carried out. Every case is in itself a complete study. Such multiple-case studies are not designed to achieve representativity of results by an increase in the number of cases. Researchers who use this kind of design are interested in theoretical rather than statistical generalizations.

On the number of cases involved, in general, it may be said that if two cases are included the investigation becomes a comparison. If many cases are included in the study then it is directed towards the elaboration of a system of classification or it serves as a replication. In replication studies it is possible to make predictions from one case for the next case and either assume a similar outcome or predict different results in the subsequent case(s). From this brief description it is already clear that case studies of this type require a very well-developed theoretical framework.

The case study strategy has been described here rather extensively because in our opinion it constitutes the alternative to strictly sampling-oriented methods of data selection.[13] Whatever the case, and this should be clear from this exposition, case studies are not an undertaking that one can embark on in a carefree manner and one is not liberated from all precise methodological procedures: 'the typical atheoretic statement "Let's collect information about everything" does not work, and the investigator without descriptive theory will soon encounter enormous problems in limiting the scope of the study' (Yin 1993: 21). This requirement differs from the final mode of procedure to be handled here.

The expression 'go fishing' here designates a procedure in which researchers attempt to arrive at their data more or less at random, or at least with no precise plan. This data set is then assessed without answering (or being able to answer) the question of how typical the collected cases are, what they are typical of, or what the spectrum of differences reveal. We have chosen the term 'go fishing' because this form of data collection is comparable to casting a net: if one knows the fishing grounds then one will catch something. When the net is pulled in the catch can be examined. In addition, approaches such as the 'self-selected sample' and the 'convenience or haphazard sample' (Maisel & Persell 1996: 4) can be regarded as 'going fishing'.

The procedure has at least two major disadvantages: unfortunately, in the social sciences, it is not always easy or even possible to distinguish unambiguously between an old boot and an edible fish. Here the statement of Silverman (1993: 82) seems apposite: 'Social life, unlike foreign films, does not come with subtitles attached.' The second objection is that in any case it remains unclear what the data represent.

An example of this procedure is to be found in the approach of Brown & Kreps (1993: 53) where 'organizational stories are collected and subjected to a narrative analysis'. They advise the investigator only 'to gather relevant organizational stories from individuals representing different areas and levels of the organization, as well as from members of the organization's relevant environment'. Where does this lead? 'These stories enable the researcher to identify and examine different problems confronting the organization.' It is uncontested that this procedure may yield interesting results. The only question is whether these results are of interest to the investigator or to the members of the organization, and whether 'interest' is the same as 'relevant to the research'. The difficulties begin with the fact that there are no criteria for the identification of 'relevant' stories, and they end with the fact that it remains unclear which problems of the organization are being addressed here. If one wished to proceed in a precise manner, one ought to take a sample from the organizational stories and analyse that. Here a totally unsystematic selection is made from persons in the organization (as carriers of the stories) and from the 'relevant' environment.

Werner & Bernard (1994) begin their study with the assertion: 'for many cultural anthropologists, the term "ethnographic sampling" is an oxymoron'. At the end they advance four recommendations about what should be borne in mind in this kind of sampling. They arrive at these on the basis of an analysis of which collection of stories underlie the work of Kluckhohn (1944). This study comes under the heading 'go fishing' precisely because the authors arrive at the following assertion about Kluckhohn's choice of interview subjects: 'he interviewed those he could'. It therefore emerges, in the opinion of Werner & Bernard, that the study – informative though it may be – admits of no statistically based generalizations. Furthermore it remains unclear what is to be regarded as typical of the investigated system ('Navajo witchcraft').

Further examples of this kind of 'wild data collection' are provided by investigations where texts are lifted, sampled and then analysed more or less haphazardly from a huge corpus, irrespective of why it was set up. One illustration of this is to be found in Keppler's (1994) conversation analysis study of table talk in families. The report on the database (1994: 33) begins with the claim that 'this investigation is based on a rich corpus of *tape recordings*. In detail, we are concerned in the recordings [. . .] with *table conversations* from families and groups living together with a total duration of more than 100 hours' (italics in original). We are told nothing about the selection of the families: there are no details about the corpus in question (which derived from a different research project). 'This material was partially transcribed in the named project and referred to for the analysis of individual communicative genres' (1994: 34). How the selection came about is not explained. The presentation of the database ends with the statement (1994: 44): 'We cannot explain all of this here sufficiently and exhaustively. Moreover, it is not necessary to do so. For it is [. . .] a matter of using significant examples to arrive at informative interpretations that can be confirmed, differentiated and extended through further examples.' The problem is always the same: if there is a mention of 'significant' examples or 'typical' stories, it is always unclear in this mode of operation how the researcher defined the 'typical' about which the statements are ultimately made. Studies of this kind are exclusively inductive and therefore lead to bold generalizations. And since research must aim at generalization, these investigations cannot restrict themselves to the interpretation of revealing examples but also formulate 'certain hypothetical consequences for the mode of cohesion in modern families' (Keppler 1994: 269).

In what circumstances is it appropriate and reasonable to 'go fishing'? The first condition is that one should be aware that one is casting a net that may be either narrow- or wide-meshed. This implies, to relate this image to Hempel's (1952: 36) claims, that it consists of knots and connecting lines that may be formed by concepts and assumptions. The investigator therefore catches what these concepts are capable of catching. The label 'relevant' (cf. Brown & Kreps 1993, above) is too vague and provides too wide-meshed a net. The second condition for adopting this kind of procedure is that the investigator should be aware of the limited value of the results achieved with this kind of data collection. From this it follows that this form of collection is a reasonable, and perhaps the only possible, way of narrowing a field of investigation in order to make a preliminary study. This can then lead to assumptions which await further testing or lead directly to a follow-up study. In the latter case the researcher proceeds in such a way that material is first collected and assessed with very few prior assumptions. The collection of material is complete when nothing further is discovered, when information on the matters of interest dries up, and when both patterns (or repetitions) and differences (or differing types) begin to appear. Then one has data and interpretations that will facilitate a more detailed investigation. Werner & Bernard (1994) show how important it is to chart the material collection precisely and to document it in the form of tables. Only in this way is it possible for the investigator to gain an overview of the material and communicate it to other researchers, to remain aware of the limits of the study and to retain at least partial control of any subjective bias.

The procedure does have one big advantage: one is spared the development of an elaborate research plan. Of course, this advantage normally catches up with the investigator and, in the course of the analysis, turns into the disadvantage that one does not know how to assess the texts. The question of which assessment procedure or method is suitable, if one has no precise initial questions and no systematically gathered material, can hardly be given a satisfactory or – from the researcher's viewpoint – helpful answer. In the final assessment, what is fitting for this kind of study is the **metaphor** often used for the characterization of statistical investigations: 'a jungle of data, a desert of concepts'.
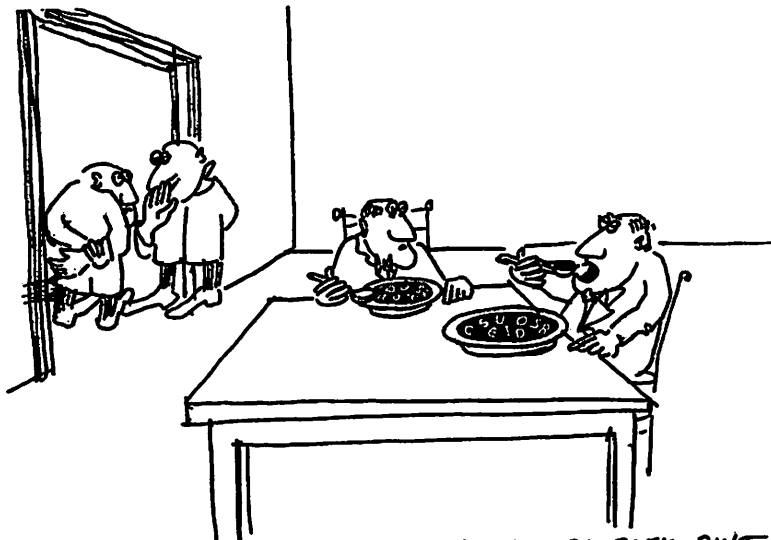
THEY THINK THEY'VE CRACKED THE GENERALISATION PROBLEM JUST BECAUSE EVERYTHING CAN TURN UP IN A BOWL OF ALPHABET SOUP

NOTES

1 Certain principles for the design of investigations that rely on the analysis of internal documents from organizations are described in Forster (1994). The question of the kind of reality that is displayed in documents is discussed in Atkinson & Coffey (1997).
2 Here the term 'text' is used in a different way from elsewhere in this book.
3 A more detailed treatment would have to consider the more specialized procedures. Here we refer to a single study, which deals with a topic that is important in the present context and that will be discussed below: generalization. The article by Cook (1993) describes 'quasi-sampling' as a way of being able to make causal connections, i.e. to generalize.
4 Brief definitions of the types of sampling listed here are given in the Glossary.
5 This study is shown in Table 3.1.
6 A fuller discussion of this topic is in the article by Firestone (1993).
7 The approach is presented in more detail below (see Part 2, Chapter 2).

8   An example is given in Table 3.1 above, from the study by Kearny et al. 1995.

9   One exception is the investigation of a newly arising interaction system, such as for instance a first contact: 'We are aware, therefore, that in a trivial sense in the analysis of interactions with no previous history, the true beginning – the opening sequence in Schegloff's terms – must also form the beginning of the interaction scene to be analysed' (Oevermann et al. 1979: 434).

10 This cannot be taken for granted since context is by no means included in all research. One need only think of questionnaire studies or laboratory experiments.

11 This research strategy has a long tradition in psychology and sociology. Here are two examples from contemporary social research, which are dealt with in more detail elsewhere in this book: one of the specific characteristics of grounded theory is to proceed from a single case as a discrete unit of investigation. A further example consists of studies within the framework of 'objective hermeneutics', which investigates familiar interaction sequences. From this, Oevermann develops a description and an analysis of the relational structure of a particular family in its 'objective' population, i.e. the structure that exists independently of the motifs and features of individual family members. The use of case studies in a special area of research, organization research, is described in an article by Hartley (1994).

12 This 'entirety' is always an intellectual construct. In the classical study of Goode & Hatt (1952) four criteria are set up with the help of which one may attempt to analyse a case in its entirety: (a) breadth of information (through extensive data and material collection); (b) abstraction (ignore the single-case and analyse links to the environment; (c) set up indices and types (to discover to what class of phenomena the single-case belongs, and what versions of reality it is typical of; (d) record the temporal dimension (single-case studies reveal their significance when they not only make statements fixed in time but when they record and analyse temporal changes).

13 For this reason we must again refer to additional literature: the articles by Tellis (1997a, 1997b) give a good overview. We also suggest Hakim's (1992) book because with the help of these readings case studies may be evaluated in comparison with other research strategies.