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## 7. Ethnographic Methods

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### 1. Introduction

In the very first paragraph of his introduction to the first volume of his "Völkerpsychologie" Wilhelm Wundt expresses his hope that future psychologists will become more aware of the importance of "Völkerpsychologie" as an indispensable source for psychological epistemology ("... zu hoffen ist [...] daß sich die Psychologen der Bedeutung der Völkerpsychologie als einer unentbehrlichen Erkenntnisquelle mehr bewußt werden als dies gegenwärtig der Fall ist" (Wundt, 1900: vi)). And two paragraphs later he states his conviction that linguistics is more and more heading towards becoming thoroughly absorbed in the psychological aspect of linguistic problems ("Innerhalb der Jahre ... hat sich mir ... die Überzeugung aufgedrängt, daß die Sprachwissenschaft von sich aus in wachsendem Maß einer gründlichen Vertiefung in die psychologische Seite der Sprachprobleme zugeführt werde" (Wundt, 1900: viii)). As to this latter conviction, Wundt was right. However, – for various reasons (Oelze, 1991) – his hopes with respect to the influence of his "Völkerpsychologie" remained unfulfilled for a long time. Ethnographers and anthropologists as well as linguists and psychologists largely ignored this work – as they ignored related ideas of other pioneers

in the cross-cultural study of language and cognition (Berry & Dasen, 1974: 2–12; Klineberg, 1980; Lonner & Triandis, 1980; Trommsdorff, 1977). The founder of modern cultural anthropology, Bronislaw Malinowski (1922, 1923), who studied with Wundt in Leipzig, was certainly influenced by his empiricism, but he rather took up psychoanalytic debates (Senft, 1999; Firth, 1957). However, Malinowski, who introduced the "participant observer" method into the field of ethnography (1922: 24 f.), also made an early plea for researching the socialization and the language acquisition of children in non-European cultures (Malinowski, 1923: 318 ff.; Goodwin, 1997). That language, culture and cognition were finally understood as interdependent domains of one interdiscipline again was an achievement that accompanied the rise of psycholinguistics and the development of the "cross-cultural psychology" subdiscipline. Representatives of this subdiscipline – mainly followers of Jean Piaget's and Bärbel Inhelder's Geneve school (1966), Gustav Jahoda (1984), some of Jerome Bruner's (1983) associates at the Center of Cognitive Studies at Harvard University such as Patricia Greenfield (1989), and Michael Cole (1974, 1977, 1982), Sylvia Scribner (1977) and their coworkers took the interdependence between language, culture and cognition for granted. They were convinced that psychological hypotheses – especially hypotheses in developmental psychology – proposed in researching populations within one culture and one language community could only claim to be general and universal if they were tested in intercultural research. In psycholinguistics the interest in this new interdiscipline was made manifest probably most prominently

with the "Field Manual for cross-cultural study of the acquisition of communicative competence" edited by Dan Slobin and written by Susan Ervin-Tripp, John Gumperz, Dan Slobin, Keith Kernan, Claudia Mitchell and Brian Stross. Although the manual exists in xeroxed versions only, it started the field of "The Crosslinguistic Study of Language Acquisition" (Slobin, 1985a,b; 1992; 1997a,b) for which Malinowski made such a strong plea. Studies in this new field in developmental psycholinguistics favoured and still use the comparative method – the method Wundt propagated so much (Oelze, 1991: 34, 59). Cross cultural psychologists, researchers of developmental pragmatics and language socialization, anthropological linguists and cognitive anthropologists have been dealing with psycholinguistic issues, too. They have also taken up some of the basic ideas of Wundt and Malinowski in developing their methods for data gathering. In what follows the ethnographic methods developed within these various sub-disciplines are briefly presented and discussed. These methods are of relevance for psycholinguistics in general because they add the cross-linguistic and cross-cultural perspective in the study of language and cognition and shed some light on the question of how the human language capacity copes with the huge variety of natural languages.

## 2. Cross-cultural psychology

"Psychology elaborated in our environment, which is characterized by a certain culture and a certain language, remains essentially conjectural as long as the necessary cross-cultural material has not been gathered as a control" (Piaget, 1974: 309). With this programmatic statement Piaget – who developed his theory of the child's cognitive development by researching children in Geneva only – emphasized the need for cross-cultural studies in psychology. Some of his students like Pierre Dasen (1974) started in the late 1960s to test his predictions with respect to the sequential order of specific stages in the development of knowledge. Carrying out Piaget's experiments and tests in other European and non-European cultures they found that these stages do occur in the same order, but not at the same ages, and that systematic cultural differences appear in the rate of development (Berry, Dasen & Witkin, 1982). The psychol-

ogists used Piaget's classic experimental designs, materials and tests – like the Piaget (Permanent) Object Scale, the tasks of 'combinations' and 'permutations', verbal logical tests, classification and seriation tasks, tasks to test spatial concepts like orders, rotation and horizontality and tasks to test the concepts of conservation of quantity, weight, volume and length – sometimes in slightly modified versions, together with more or less standardized paper-and-pencil tests and interviews (Dasen, 1974).

To allow for the cross-cultural comparison of their results researchers must ensure not only the functional equivalence of the compared behavior settings, but also the conceptual equivalence of the meaning their research instruments have for the compared groups and the metric equivalence of the results, the data, of comparisons (see Trommsdorff, 1977: 243 ff.). This is the general problem for all ethnographic methods applied in the cognitive sciences. There is no such thing as a "culture-free (or culture-fair) test". Thus, the major problem of cross-cultural comparative research is "ascertaining the culture-specific (emic) and cross-cultural (etic) validity" at the same time (Trommsdorff, 1977: 245). In other words, the problem is "how to describe behaviour in terms which are meaningful to members of a particular culture (an *emic* approach...) while at the same time to validly compare behaviour in that culture with behaviour in another or all other cultures (the *etic* aim...)" (Berry & Dasen, 1974: 17). Moreover, field research just cannot be compared to a laboratory setting: it is extremely difficult, if not impossible, to control independent variables in the field, "one must usually sacrifice some generalizability to gain control, or sacrifice some control to gain generalizability" (Berry & Dasen, 1974: 20).

Although researchers in the Geneva tradition were completely aware of these methodological problems (Segall, Dasen & Berry et al., 1990: 48 ff.), American cross-cultural psychologists like Michael Cole and his associates (1971, 1974, 1977, 1982) criticized their approach within the Piagetian tradition. For Cole it is a general mistake to transfer a psychological cognitive theory which originated within a Western cultural tradition to non-Western cultures, because this entails the risk of experimental ethnocentrism. Comparing results of various psychological experiments with observations of people's everyday beha-

viator often reveals that "people who have difficulty with a particular task in the laboratory may spontaneously use the skill of interest in their everyday activities" (Rogoff, Gauvain & Ellis, 1984: 539). Thus, instead of keeping the tests, tasks and experiments constant in different cultures Cole and others propose to alter the tasks and experiments until they are culturally appropriate (see also Greenfield, Brazelton & Childs, 1989). Believing in the psychic unity of mankind, they "situate the psychological experiment as one of many contexts in which to sample behavior. This approach to "behavior in context" leads [them] to question the generality of inferences from experiments that are not corroborated by non-experimental data" (Cole & Scribner, 1982: 4; but see also Berry, Dasen & Witkin, 1982: 19). Consequently, they understand their cross-cultural psychological approach as "experimental anthropology" or "unorthodox ethnography" (Lonner & Triandis, 1980: 8; see also Schlegel, 1994) and investigate cognitive skills embedded in cultural contexts. Cole and his associates illustrate this approach and methodology in their famous study of the Kpelle of Liberia which researches the influence of schooling and literacy on Kpelle ways of thinking (Cole, Gay & Glick et al., 1971). They first studied the classification of natural world-objects in the Kpelle noun system in order to relate the linguistic categories of the speech community to other verbal and non-verbal behaviors. They interviewed their consultants with the basic question "(name of object) is a what?", discussed the answers in groups, and summarized their findings in a chart. Then they introduced the "sentence-substitution method": The consultants had to make up sentences with words within this chart and were then asked which other words could be used in this sentence. Then the psychologists did a free-association experiment, in which they asked their consultants questions like "What do you think of when I say (name of an object)?" Finally the consultants were confronted with a number of sorting tasks. The elicited data revealed that semantic classes serve as one means of organizing verbal behavior, that the Kpelle use taxonomic class relationship to structure their verbal behavior, but that the use of this kind of structuring is neither universal nor obligatory for the situations that were studied. To find out whether such organization affect the way in which subjects learn something new, the re-

searchers made the subjects perform experiments that use the concept-discrimination technique and they did free-recall memory experiments in various situations and contexts. To study the interrelationship between culture, logic and thinking the psychologists analyzed a Kpelle court case, strategies in playing the famous Malan game, and responses to verbal syllogisms (see also Scribner, 1977), riddles, and to solving problems with respect to conjunctive and disjunctive concepts. The ideas of the general approach of "experimental anthropology", the methods developed and used, and the insights gained are described in detail in Cole, Gay and Glick et al. (1971) and in Cole and Scribner (1974).

### 3. From the cross-cultural to the cross-linguistic study of language acquisition

Confronted with Chomsky's (1965) notion of "Universal Grammar" and his idea of an innate "Language Acquisition Device" American psycholinguists understood the importance of collecting language acquisition data from non-Indo-European languages to reveal developmental universals and language-specific developmental patterns (see Slobin, 1985; Bowerman, 1981). At the University of California at Berkeley Dan Slobin, in collaboration with linguists and anthropologists (see Chapter 1 above), started to develop methods for the "collection of comparable cross-linguistic and cross-cultural data on the acquisition of communicative competence" (Slobin, 1967: ix). The scientists produced a "Field Manual" consisting of a general introduction, three main parts and five appendices. The manual "presented an admirable eclectic view of the range of phenomena that should be studied, a summary of existing research techniques, and specific suggestions for the conduct of cross-cultural research on language development" (Bowerman, 1981: 95). Part I presents 14 major research tasks for recording and eliciting speech data of children in various situations over a period of 12 months of field research. These data had to cover information on the children's motor development, their linguistic development with respect to phonology, vocabulary, and grammar, their communicative development and insights in the community's linguistic belief system. A core sample of 24 children

between the ages of six months and 13 years, their mothers and some other adults in the speech community served as subjects for the studies. Part II presents methodological factors – basically a list of important issues to keep in mind with respect to the aims of the planned contrastive analyses, to the recording apparatus and techniques, and to native consultants, assistants and interpreters. Part III presents some theoretical considerations and possible subsidiary studies with respect to phonology, grammar, semantics, the social setting of linguistic behavior, and usage and styles. Five appendices contain examples of specific tests and procedures like model sentences for elicited imitations, comprehension tests, elicitation techniques, the transcription of tapes, techniques for studying multilingualism (e. g., a picture vocabulary test, a word association test, etc.), an age calculation chart, the International Phonetic Alphabet, and relevant references to language acquisition studies. 12 dissertations on the acquisition of various languages emerged from this manual (Slobin, 1985: 4f.). However, they illustrate once more the methodological problem of cross-cultural research: The “researchers encountered a number of unanticipated difficulties in following the research design in the field situation. Experiments could not be successfully administered and carried out because this type of activity was culturally inappropriate in the societies under study. Researchers found, moreover, that the speech samples they recorded could be collected only in what they admitted were culturally inappropriate situations” (Schieffelin, 1979b: 75; see also Bowerman, 1981: 107ff.; Berry, 1980: 7). Realizing that “different types of languages pose different types of acquisition problems” (Slobin, 1985: 4) Slobin, “attending to the acquisition of linguistic form itself” (Slobin, 1990: 233), developed a “cross-linguistic” approach. “This approach is based on the empirical finding ... that patterns of grammatical development are strikingly similar in widely differing cultural settings; and on the psychological conviction that the course of language development is determined by biological and cognitive factors that are common to our species. Thus [Slobin has] made use of linguistic diversity as a kind of “natural experiment” in which the world presents children with different tasks to solve. In this laboratory ... one can tease out the strategies that children use in constructing grammar” (Slobin, 1990:

233). The results of this approach are documented in the by now five volumes edited by Slobin and titled “The crosslinguistic study of language acquisition”. Contributors to these volumes are “asked to approach [their] particular language “as a case study in a potential crosslinguistic typology of acquisitional problems”, considering those data which “contribute to an issue of general theoretical concern in developmental psycholinguistics” (Slobin, 1985: 18). All authors follow the framework with the guiding questions presented in Slobin (1985: 19f.). Moreover, Dan Slobin, in collaboration with Ruth Berman, initiated a crosslinguistic developmental study on different ways of relating events in narrative. To get a “better understanding of the complex of linguistic, cognitive and communicative abilities that underlie the human ability to capture and convey events in words” (Berman & Slobin, 1994: ix) the psycholinguists elicited narratives in 3-, 4-, 5-, and 9-year old children and in adults in five languages (English, German, Spanish, Hebrew, and Turkish) with Mercer Mayer’s (1969) storybook without words titled “Frog, where are you”. The “frog story” – first used by Bamberg (1985) – consists of 24 pictures that form a story accessible to children. The data elicited with this booklet are analyzed with respect to “the ‘filtering’ of experience through language for purposes of speaking; ... the ‘packaging’ of event descriptions into larger units for purposes of narrating; and ... the cognitive and psycholinguistic development that leads to mature ‘filtering’ and ‘packaging’” (Berman & Slobin, 1994: 9). In the meantime many other researchers elicited and analyzed data with the “frog story” and the sample of crosslinguistic data and research results on how events are related verbally is continuously growing. Parallel to Slobin’s cross-linguistic approach as an alternative to the cross-cultural approach propagated in the 1967 “Field Manual”, Elinor Ochs and Bambi Schieffelin developed a more holistic way “to deal with the various aspects of the development of communicative competence and language socialization in a unified manner”. They refer to their approach as “Developmental Pragmatics” and “Language Socialization Research” (Ochs & Schieffelin, 1979; Schieffelin & Ochs, 1986). Before discussing this approach, it remains to be noted that there are also a few cross-language studies of speech perception (see e.g.

Strange, 1995); they have to cope with similar methodological problems as the cross-linguistic studies of language acquisition.

#### 4. Developmental pragmatics and language socialization research

Their criticism of the studies based on the "Field Manual" (Slobin, 1967), the insight that "all societies do not rely on the very same set of language socializing procedures" (Ochs, 1986: 6), and the realization that "acquisition of language and acquisition of culture are natural contexts for each other and should be studied as such" (Schieffelin, 1979a: 14) motivated Ochs and Schieffelin to develop a new paradigm for the study of language and culture development: Developmental pragmatics "tends to focus on children's competence in constructing discourse... The relevant features of context utilized in developmental pragmatic research... include prior and subsequent discourse..., and interlocutor's understanding of social identities, knowledge and goals... These features are linked to specific linguistic structures in order to assess children's functional competence in language. Language socialization builds on this rich understanding of children's discourse at the microanalytic level... language socialization has as a goal the linking of microanalytic analyses of children's discourse to more general ethnographic accounts of cultural beliefs and practices of the families, social groups, or communities into which children are socialized" (Schieffelin & Ochs, 1986: 168). To study how the acquisition of language and of culture influence each other, the linguists examined how language is used in the researched speech communities "to express relationships and cultural meanings in interactions involving children and adults" (Schieffelin & Ochs, 1986: 183). Influenced by Geertz's concept of "thick descriptions" (Geertz, 1973: 6), they developed the following methods for data collection and for transcription: Schieffelin (1979a) did all her work with Kaluli children in Papua New Guinea monolingually. For a year she systematically studied three 2- to 3-year olds in three situations within their families in which the children regularly participated, and she made additional observations in other interactional contexts. She thus tape-recorded spontaneous, naturalistic interactions between these children and their mothers, sib-

lings, relatives and other villagers. While tape-recording she also took detailed contextual notes on the situation, the participants, nonverbal behaviour, etc. in her diary (see also Braunwald & Brislin, 1979). With the assistance of the children's mothers she then transcribed and translated the tapes, integrating these contextual notes into the transcription. A few months later she listened to the tapes and checked the transcription with another consultant. His comments were used to further enrich and extend the information provided by the mothers. These transcriptions with their "thick descriptions" formed the basis for her anthropological linguistic analyses. Ochs (1988) did a similar study on Samoa. She researched six 1½- to 3-year old children for several months, but she also studied children in classroom settings and did an adult-speech study. In gathering her data she used tape- and video-recorders, field notes, and photographs. All material gathered was then transformed into complex and extremely rich transcriptions (Ochs, 1979) that contextualized both ethnographic and linguistic information. On the basis of these transcriptions the researchers' data analyses showed that "conversational activities involving small children vary in ways that systematically relate to cultural beliefs, values, and social order. [...] What a child says and how he or she says it will be influenced by local cultural processes" (Schieffelin & Ochs, 1986: 183).

#### 5. Cognitive anthropology

In the late 1950s and early 1960s cultural, psychological, and linguistic anthropologists in America redefined their object of research: "A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members [...] Culture does not exist of things, people, behavior, or emotions, but in the forms of organizations of the things in the mind of the people" (Goodenough, 1957: 167f.). With this definition of 'culture' as 'cognition' the founders of what was first called the "New Ethnography", then "Ethnoscience", later "Ethnosemantics" and finally "Cognitive Anthropology" (from here onwards abbreviated as CA) established a new interdisciplinary that tries to "study the cultures of others from the inside" (Casson, 1994: 61), thus avoiding ethnocentric biases in its investiga-

tions. Under the influence of anthropological linguistics and the linguistic relativity hypothesis (Lucy, 1997) the “real thrust of ethnoscience has been the realm of semantics” (Keesing, 1972: 306). The pioneers of CA first studied certain semantic domains like, e. g., kinship. The terms found for such a domain within a language constitute a “folk classification”. This classification is described with a so-called “componential analysis” in which the meaning of the terms is represented through a set of semantic oppositions (Duranti, 1997: 108 ff.). Other studies researched taxonomies that represent, e. g., folk botanical and zoological knowledge in various cultures. By the 1970s these classification studies were criticized as “far too simplistic” (Keesing, 1972: 314). However, influenced by Chomsky’s (1965) ideas of a universal grammar, a new focus of interest on “the interface between cultural knowledge and basic psychological factors developed within CA” (Casson, 1994: 66). This new focus is manifested in Berlin and Kay’s (1969) comparative study on “Basic Color Terms” that claims to “reveal universal constraints of patterning” in a semantic domain” which had previously been thought to be randomly structured” (Duranti, 1997: 115). In this study the researchers use the Munsell set of 320 color chips, present them to consultants and ask them to provide the basic color term for each chip. Despite the importance Berlin and Kay’s 1969 study and subsequent work had for CA, their approach was heavily criticized by researchers that argued from a more relativist position and criticized the methodology of data gathering: “Color terms in a given culture do not mean Munsell chips” (Duranti, 1997: 161; see also Senft, 1987; Saunders & van Brakel, 1997). And indeed, more recent research in CA deals with conceptual categories and semantic domains from a more relativist point of view again (see Casson, 1994; Dougherty, 1985; Quinn & Holland 1987). The remainder of this section presents one of these projects within modern CA, namely the domain-centered approach and the methods of the former “Cognitive Anthropology Research Group” now the department of “Language and Cognition” of the Max-Planck-Institute for Psycholinguistics in Nijmegen. The aim of this group of researchers with its director Stephen Levinson is to further research into the relationships between language, culture and cognition by conducting fieldwork on leading issues of

common interest to anthropology, psychology and linguistics in a number of non-Indo-European languages and cultures. (Levinson, 1996; Pederson, Danziger, Wilkins et al., 1998; Senft, 1995). The group tries to investigate questions of possible interdependencies between language, culture and cognition empirically via the following stratagem: “(a) first, pick a conceptual domain; (b) second, find two or more languages which contrast in the semantic treatment of that domain (i. e., where very different semantic parameters are employed); (c) third, develop non-linguistic tasks which will behaviourally reveal the conceptual parameters utilized to solve them; (d) compare the linguistic and non-linguistic representation systems as revealed by (b) and (c), and assess whether there is any correlation between linguistic and non-linguistic codings in the same domain” (Brown & Levinson, 1993: 1). The first domain the group has been picking is the domain of “space”. To research this domain the group developed methods to build a comparative data base through parallel field research in different languages and cultures. In developing these methods the group accepted that “the best alternative to the true experiment is unquestionably an appropriate quasi-experimental design” (Brown & Sechrest, 1980: 316). Most of the developed methods make use of ‘interactive games’ (Cole, 1977: 470) which are used to elicit task-oriented verbal descriptions in native speakers of the language under study. These games involve a ‘director’ consultant who is allowed to see a certain stimulus, and a ‘matcher’ who is not. The players are sitting side by side with a screen separating them so that they cannot see each other’s stimuli. The orientation of the players is taken note of, and the field researcher instructs the players what to do in their own language – all instructions are standardized. Moreover, the field researcher encourages the players to interact verbally, especially if they think they have difficulties to understand each other. On the basis of the verbal descriptions given by the ‘director’ in the game, the ‘matcher’ is asked to reproduce three-dimensional models involving familiar objects with intrinsic orientations, like a human statuette in various body poses and mini-landscapes inhabited by model farm animals, as well as unfamiliar and abstract objects. Some games also involve the matching of photographs on the basis of verbal descriptions; these photographs systematically cover certain spatial

oppositions. Thus, the “photo-object-game”, for example, is played with three-dimensional plastic toys and photos depicting a certain spatial configuration of these toys. The director describes the photo, and on the basis of this description the matcher uses the toys to rearrange the spatial configuration. The “wooden-man-game” requires that the director, on the basis of photos or on the basis of a wooden human statuette with flexible angles, describes certain body-poses. The matcher has to adjust his or her statuette in such a way that the resulting body pose matches the description. In the “Tinkertoy-games” (see Cole, 1977: 469) the matcher – with the help of a building system for children – has to build a number of three-dimensional configurational and non-configurational constructions on the basis of the director’s description which itself is based either on the same object or on a photo of the object to be constructed. The “photo-photo-game” consists of four series of  $2 \times 12$  photographs; here the matcher has to select one photo on the basis of the director’s description. The photos depict certain localizations and configurations of objects with and without intrinsic features (like men vs. trees and balls) in four directions on the horizontal plane. Moreover, the set contains a number of distractor photos, so it did not become too obvious for the players to hypothesize about what we were after with the game. These four games were designed to elicit descriptions of spatial arrays and configurations. With games like these corpora of contextually anchored yet complex interactive texts were elicited that incorporate many examples of spatial language. These corpora constitute the group’s comparative data base for the research on verbal reference to space in different languages and cultures (see Senft, 1994, 2001). Analyses of these data revealed fundamental differences in how the researched languages refer to space. Speakers of Indo-European languages prefer the use of body coordinates to describe arrangements of objects, but other languages like, e. g., the Australian Aboriginal language Guugu Yimidjirr (Haviland, 1993) prefer systems anchored as cardinal direction terms (see also Senft, 1997). The group then investigated “whether variation in linguistic use corresponded to variation in cognition. To do this the group has exploited the sensitivity of the various spatial reference systems to rotation. If something is to the left and I turn around,

it is now to the right, but if I conceive of it as to the east, then turn around, it remains to the east” (Lucy, 1997: 301). Using a number of such tasks (Senft, 1994: 421 ff., 2001: 527 ff.) the group found that “speakers of different languages respond in ways congruent with their verbal practices” (Lucy, 1997: 301). Thus, languages – probably together with other cultural phenomena – seem to influence the choice and the kind of conceptual parameters their speakers use to solve non-verbal problems within the domain “space”. It seems that studies like the one presented here finally contribute to making Wilhelm Wundt’s hopes for the future of psycholinguistics come true.

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