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Reproduction and Preservation of Linguistic Knowledge: Linguistics' Response to Language Endangerment

Nikolaus P. Himmelmann

Institut für Allgemeine Sprachwissenschaft, Westfälische Wilhelms-Universität Münster, D-48143 Münster, Germany; email: nikolaus.himmelmann@uni-muenster.de

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Abstract

In responding to the globally accelerating rate at which linguistic varieties are disappearing, structural linguistics is confronted with a number of challenges for which it is ill-equipped because of limitations in its basic conceptualization of linguistic knowledge. In addition to providing a brief history of the recent promotion of language endangerment to a major concern of the discipline as a whole, this article discusses three such challenges: (a) new demands on linguistic fieldwork practices, (b) rhetorical tensions arising from the need to address a multiplicity of audiences; (c) the limits of the traditional descriptive trilogy and its replacement by the concept of language documentation. On a theoretical level, these challenges are all linked to the problem that the structuralist conception of linguistic structures lacks adequate grounding in the social realities of the speech community, a problem that has accompanied linguistic structuralism since its inception.

INTRODUCTION

Reproduction is not a term or concept that has much currency in linguistics because most branches of modern linguistics investigate linguistic behavior and knowledge almost exclusively in abstract structural or cognitive terms. Consequently, the replication of linguistic knowledge in a given community is generally discussed in terms of acquisition, transmission, or inheritance. That is, children acquire the language(s) of their parents; a variety is intergenerationally transmitted; and structural features, differences in register, and conversational routines are inherited from older generations. Linguistic knowledge is thus likened to some kind of object that is passed down through generations and is not seen as something that is socially constructed and reproduced.

For most research areas of concern to core linguistics, e.g., grammatical theory or typology, it is not clear to what extent the disregard for social aspects of language structure and use compromises research goals and outcomes. However, this disregard is indeed harmful to a number of topic areas. One of these areas is large-scale language endangerment, which has become a topic of major concern for mainstream structural linguistics since the early 1990s. After briefly recounting in the next section the (re)discovery of this topic, this article reviews the following three major challenges that emerged when linguists started to address the fact that linguistic varieties are currently disappearing at a vastly accelerated rate.

First, work on endangered languages generally involves fieldwork. Anthropology and other social sciences have been critically reviewing the ethics of their fieldwork practices since the middle of the twentieth century, but structural linguistics largely ignored ethical issues until fieldwork on endangered languages finally forced the issue, as further discussed in Language Maintenance and Fieldwork Ethics, below.

Second, attempts to articulate the challenge of language endangerment—both for the field of linguistics itself and the general publicinvolve a number of themes and concepts, which are double-edged when considered from the point of view of noncore linguistic audiences, in particular communities where an endangered variety is still in use. This is further discussed in Rhetorical Challenges.

Third, confronting the challenge of language endangerment raises the issue of whether the traditional model for describing languages, which focuses on structures and neglects actual practices, is adequate for a long-term documentation of endangered languages. This issue is discussed in Multifunctional Long-Term Documentation.

For all three topics, the challenges faced by structural linguistics apparently arise from the need to speak to, and address concerns of, noncore linguistic audiences. But it would be wrong to consider these challenges merely communicative challenges relating to the strategic representation and promotion of the field within academia and the wider public. Instead, they reflect the essentially a-social conceptualization of linguistic knowledge within mainstream structural linguistics, which has delegated to the subfield of sociolinguistics (broadly conceived, including anthropological linguistics) the investigation of all social aspects of language structure and use. In putting language endangerment on the mainstream agenda, structural linguistics has added another issue to the growing list of items that second guess the wisdom of excluding from its core agenda almost all regard for the ways in which linguistic knowledge is socially constructed and reproduced, as briefly discussed in the final section.

To appreciate the dynamics of the professional discourse on language endangerment detailed in the following sections, it is useful to note that the primary agents in highlighting language endangerment as a key issue in the field in the 1990s were not sociolinguists specializing in the topics of language shift and language maintenance but rather were typologically oriented core linguists interested in crosslinguistic comparisons, some of these also involved in fieldwork on minority languages (historical detail is provided in the following

section). Because I belong to the latter camp, this review reflects the views of a typologically oriented structuralist linguist with only superficial knowledge of the work being done under the label of sociolinguistics.

THE (RE)DISCOVERY OF LANGUAGE ENDANGERMENT AS A TOPIC OF CONCERN FOR LINGUISTS

Many of the thousands of linguistic varieties still in use all over the world will disappear in the next decades. This fact is usually communicated in terms of "languages" with statements such as "at the rate things are going-the coming century will see either the death or the doom of 90% of mankind's languages" (Krauss 1992, p. 7), but this is also true for innumerable dialects and special registers. That linguistic varieties become obsolete is a natural process in the sense that it has happened at all times and in all places. As such it has been a perhaps not central but well-established topic in linguistic research under the headings of language death or language obsolescence (Dorian 1981, 1989; Dressler 1972, 1988; Dressler & Wodak 1977; Gal 1979; Sasse 1992). Scholars widely agree that the speed and pervasiveness of language obsolescence have dramatically increased in the twentieth century. The realization of this fact poses a number of challenges for linguistics and has made language endangerment a topic of major concern for the discipline at large. To understand and contextualize better the way these challenges have been addressed within linguistics, it is useful to recount briefly the history of how language endangerment became a central issue in linguistics in the 1990s.

The trigger for a series of events that led to the establishment of language endangerment as a major topic of concern in mainstream linguistics was a short presentation by Johannes Bechert to the section on universals and typology at the fourteenth International Congress of Linguists in East Berlin in 1987. This presentation on universals research and ethnocentrism, later published as Bechert

(1990), starts with a quote from Mühlhäusler's (1985) review of Schmidt (1985), which likens the prospect that 200 of Australia's 250 Aboriginal languages still spoken at the time European colonization began will have disappeared by the end of the twentieth century to "the largescale destruction of natural gene pools such as that in the tropical rain forests" and predicts that languages "and the philosophies and world views encoded in them, are increasingly becoming a vanishing resource" (Mühlhäusler 1985, p. 1005). If that is indeed the case, Bechert asks, why is it that linguists in general are not concerned about this imminent loss of a major part of their empirical basis, and he cites the example of biologists who at the time had already been very successful in making the large-scale extinction of biological species a well-established topic of concern to the public.

An immediate reaction to this presentation was a motion drafted by Christian Lehmann, which was presented to the business meeting of the Comité International Permanent des Linguistes (CIPL) at the same conference. This motion, signed by more than 200 of the linguists present, urged the committee to take action with the goal of bringing the issue of language endangerment to the attention of professional linguists and the general public. It did this primarily in two ways. First, it made language endangerment one of the two central themes of its fifteenth International Congress of Linguists in Quebec in 1992, and it continues to hold panels on endangered languages at every congress. Second, it commissioned a volume taking stock of the extent of language endangerment in all parts of the world. This volume, published as Robins & Uhlenbeck (1991), was put together in collaboration with Stephen Wurm, at the time president of the Conseil International de la Philosophie et des Sciences Humaines (CIPSH), a suborganization of UNESCO, which also published a part of the collection in its journal Diogènes (1991). Thus endangered languages became part of the UNESCO agenda, resulting inter alia in the inauguration of an Endangered Languages Program in 1993

(http://portal.unesco.org/culture/en/ev.php-URL_ID=8270&URL_DO=DO_TOPIC&URL_SECTION=201.html).

In the wake of these events, many professional organizations of linguists took measures to promote the issue of language endangerment. Most importantly perhaps, the 1991 annual meeting of the Linguistic Society of America (LSA) included a symposium on Endangered Languages organized by Kenneth Hale, major contributions to which were published a year later in the field's leading journal Language (Hale et al. 1992). Another major event was the creation of a committee on endangered languages by the DGfS, the German linguistic society, which in 1993 organized the first summer school dedicated to the topic and engineered the first major funding initiative in the field, the Dokumentation bedrohter Sprachen (DoBeS) program of the Volkswagen Foundation inaugurated in 1999. In the same year, the project Endangered Languages of the Pacific Rim (http://www.elpr.bun.kyoto**u.ac.jp/index_e.html**) started in Japan. By the year 2000, language endangerment was firmly established as an active field of research in linguistics as evidenced by the usual indicators such as regular and manifold conferences, a steady stream of articles and books, new societies and funds dedicated to the documentation and maintenance of endangered languages, and a special mailing list.1

In terms of its uptake within the profession, the 1987 motion was thus considerably more successful than a very similar one dating from 1962, when more than 50 Scandinavian linguists urged their national UNESCO committees to demand that the General Assembly of UNESCO take measures to protect the rapidly increasing number of languages in danger of

disappearing. The call was drafted by Swedish linguist Pierre Naert and published under the title of "Pour la défense des langues des minorités" in the journal *Europa Ethnica* (1962).

Kloss (1969, pp. 287–304) provides an extended critique of the parallelization with nature conservation, which guides this call in the same way as it does the more recent campaigning for the preservation of endangered languages (see also England 2002, p. 142). When pointing to the relatively greater success biologists have had in focusing public and political attention on the issue of species extinction, which appears in most linguistic writing on language endangerment, ignored is the fact that the more widespread concern for species extinction may have been engineered in part by business interests (agro-chemical industry, genetic engineering). To date, no similar business interests have supported linguists' concerns regarding accelerating language shift.

Naert's call led to the establishment of a society [the Association internationale pour la défense des langues et cultures menacées (AIDLCM)] but seems to have had little impact within the profession. Specifically, both the motion itself as well as the AIDLCM have been completely ignored in the recent flurry of language endangerment-related activities. It thus seems most likely that the rediscovery of the topic of language endangerment in the late 1980s would not have been so successful if the topic had not been in the air at the time, as it were. Of importance in this regard were ongoing discussions among fieldworking linguists who were forced to reflect on the relevance and implications of their work for the communities speaking endangered varieties, as further discussed in the next section.

LANGUAGE MAINTENANCE AND FIELDWORK ETHICS

The issue of language endangerment has had probably its most profound impact on structural linguistics with regard to fieldwork practices. Unlike anthropology and other social sciences, where ethical issues pertaining to the

¹Tasaku Tsunoda maintains an online resource, Bibliography on Language Endangerment and Language Revitalization (http://www.tooyoo.l.u-tokyo.ac.jp/BibLE/). The Online Resources For Endangered Languages (OREL) provide "links to web resources on revitalising or documenting endangered languages, including links on language endangerment and revitalisation, technology and techniques, ethical issues, and funding sources" (OREL 2008).

relation between researchers and the people studied have been a concern for decades,2 linguistics, for most of the twentieth century, conceived of linguistic fieldwork as something that was of no particular concern to the people being studied. Most important, it was widely held by fieldworking linguists that linguistic fieldwork was neutral in that regard. Fieldwork, that is, could cause no harm, but it also would not provide any particular benefit to anyone outside academia.3 Specifically, the outcomes of linguistic fieldwork were seen to be of no particular interest to the speakers (unless they also happened to be linguists), and hence no obligations existed with regard to sharing these results with them. Inasmuch as obligations were felt to be involved at all, they pertained to remunerations for the time invested by speakers in talking to the linguist.

This view of fieldwork, I believe, is closely linked to the essentially a-social conceptualization of language in structural linguistics. In descriptive, grammar-oriented fieldwork, one does not have to deal with speech communities; instead, it is largely sufficient to tap the linguistic knowledge of one or two speakers. In actual practice, and unlike anthropologists, linguists rarely spent extended periods of time in a community. Inasmuch as fieldwork actually involved getting close to the speech community-Bloomfield's fieldwork on Tagalog happened in his office at the University of Illinois—it often consisted in taking the main informants out of the noisy environment of their homes and villages and working with them in a guest house, trailer, or hotel nearby.

This basic approach was challenged by work with communities speaking an endangered variety, especially where community and researcher(s) were part of the same larger political and socioeconomic setting as in the case of indigenous communities in Australia and northern America. Individual speakers and representative bodies of the communities began to ask what the purpose of linguistic research actually was and how it could help them in their struggle to maintain their cultural and linguistic identity. Perhaps the most intensive and coherent debate about the answers to these questions took place in Australia, where linguistic fieldwork has been a main concern of linguistic research since the 1960s. Organizations of Aborigines such as the Aboriginal Languages Association started to articulate community expectations regarding language-related research projects, and a large number of PhD students working on grammatical descriptions as topics of their theses were directly confronted with these issues and expectations in the late 1970s and early 1980s.

It is thus not by chance that the most profound and radical discussion of ethical issues in linguistic fieldwork is Wilkins' (1992, 2000) report and reflection on his work in Arrernte communities in central Australia, starting in 1982. In 1983, Wilkins and fellow graduate students at the Australian National University drafted the "Statement of Professional Ethics for Linguists Doing Research in Aboriginal Communities" in response to a statement of linguistic rights of Aboriginal and Islander communities prepared by the Aboriginal Languages Association (Wilkins 1992, p. 174). The Australian Linguistic Society adopted a statement of ethics in 1989 (http://www.als.asn.au/Policies), and the Applied Linguistics Association of Australia followed with their "Statement of Good Practice" in 1997 (http://www.latrobe.edu. au/alaa/goodprac.htm). To date, these two bodies appear to be the only professional organizations of linguists that have their own codes of ethics.4

In the 1990s, the rising concern about language endangerment prominently included the

²On its Web site (http://www.aaanet.org/stmts/ethstmnt. htm), for example, the American Anthropological Society documents statements on ethics dating from 1948 onward.

³ One possible exception are situations in which use of an officially forbidden variety is actively prosecuted and punished by government agencies (e.g., use of Kurmanci and other minority languages in Turkey), and hence fieldwork on this variety may be dangerous for both the participating speaker(s) and the researcher(s).

⁴Musgrave & Thieberger (2006, p. 2) also provide copies of the 1984 and 1989 statements in an appendix.

call for linguists to engage in fieldwork on endangered varieties. A broader segment of the profession was consequently forced to engage with the problem of what constitutes responsible linguistic fieldwork. This process was helped by the fact that a related discussion, centering on the notions of advocacy and empowerment, emerged among sociolinguists working with minority groups in Europe and North America. The most comprehensive statement of the relevant issues and positions may be found in Cameron et al. (1992), which discusses language-related fieldwork issues in sociolinguistics, anthropology, and sociology.5 Works specifically concerning fieldwork in endangered language communities include, Wilkins (1992, 2000), England (1992), Craig (1992), McLaughlin & Sall (2001), Florey (2001), Grinevald (2003), Hill (2006, pp. 119– 27), Mosel (2006), and Musgrave & Thieberger (2006).

Control and obligation are the core issues in this debate: Who participates in choosing research topic and methods? Who determines the overall and the daily work flow and time schedule? Who controls the dissemination of results? Which obligations do researchers have vis-àvis their collaborators and the speech community? Do these obligations extend beyond matters directly related to the research objective? Beyond language-related matters? These issues are complex and do not allow for straightforward and universally applicable answers. But the following tenets and observations may be widely shared.

Individual speakers and the community at large should be involved in the design of the research project and the work flow as much and as early as possible. That is, fieldwork projects should be designed essentially as cooperative enterprises between equal parties. Although almost certainly rendering the fieldwork

- process more time consuming and potentially significantly more complicated, a collaborative design also tends to make it much more profitable and productive, as already noted by Wilkins (1992, pp. 183–86; see also McLaughlin & Sall 2001, Mosel 2006).
- Speakers and communities should have a say with regard to the dissemination of research results, in particular where and whenever they could be affected by it. This aspect has recently attained increased importance and attention in the context of the establishment of multimedia archives for materials on endangered languages. Determining restrictions on access to such materials and answering questions about ownership and the protection of intellectual property rights have turned out to be core problems inhibiting dissemination. All major archives have codes of conduct and ethical guidelines.6
- Work in communities where an endangered variety is in use includes the obligation to contribute to the maintenance of this variety inasmuch as this is wanted by the community. This may involve obligations not directly related to the research goal at hand (e.g., producing an alphabet primer in a project concerned with discourse structures; see Hinton & Hale 2001 and Grenoble & Whaley 2006 for more examples and extensive discussion). Fieldwork in countries with many endangered varieties may also have to respond to a demand to participate in training local researchers and in setting up and maintaining local documentation and language maintenance

⁵Issue 13.2 of the journal *Language & Communication* contains a succinct summary of the argument (Cameron et al. 1993) with peer review.

⁶Most digital archives for materials on endangered languages are joined in the Digital Endangered Languages and Musics Archives Network (DELAMAN, http:// www.delaman.org/). Relevant examples for statements on ethics, intellectual property rights, etc., can be found on many of the sites of individual archives listed there.

- structures (England 1992, 2007; Florey & Himmelmann 2008).
- The major problem for responsible field-work is the fact that more often than not it is difficult if not impossible to identify the relevant parties with whom researchers could enter into mutually binding agreements. Specifically, who has the right and the authority to represent the community in these matters? What happens when there are multiple and conflicting claims in this regard?
- Another frequent problem pertains to ensuring informed consent by speakers and communities who, because they lack familiarity with western academia and media and the global impact and accessibility of the Internet, cannot seriously gauge the possible impact of a given research goal or dissemination option (e.g., allowing a recording to be freely available in an archive accessible via the Internet).

RHETORICAL CHALLENGES

One major challenge in the attempt to raise awareness about language endangerment pertains to the fact that multiple and very heterogeneous audiences need to be addressed, including linguistic scholars and students, the major academic funding bodies, the general public, speakers of endangered varieties and their communities, government agencies, and international policy-making agencies such as UNESCO. These audiences have widely diverging and, in part, contradictory expectations and interests. Consequently, campaigns addressed to one audience run into the danger of alienating another (Hill 2002, Errington 2003).

The major tensions arising here pertain to themes and rhetorical figures deemed to be effective with respect to funding bodies, government and policy-making agencies, and the wider (western) public, but which may be counterproductive when overheard by local groups and speakers. As England (2002, p. 141) notes, the term endangered language itself is felt by

some speakers to contribute to the marginalization of those languages. Furthermore, as discussed by Hill (2002, pp. 121–23), the rhetoric of endangered language advocacy often involves reference to the idea that the disappearance of a language constitutes a loss for all of humankind. Although this notion is true when seen from a general humanistic (and, in particular, a linguist's) point of view, such an assertion may be perceived by speakers and communities as dispossessing them of their heritage language, which in many communities is seen as the locally created and maintained core pillar of their identity.

A related theme, called "hypervalorization" by Hill (2002, p. 123), pertains to the idea that every language is a unique and "priceless treasure" bearing witness to the beauty of the human mind. Although this is again true when seen from the point of view of a linguistic connoisseur, speakers and local communities may perceive this as transforming their linguistic practices into commodities in a "rarefied linguistic marketplace . . . inaccessible to ordinary speakers" (Hill 2002, p. 125). Furthermore, as Dorian (2002) notes, the features of a given variety that, from a speaker's point of view, are most distinctive and effective in a given linguistic ecology may not be particularly rare in cross-linguistic perspective and hence may not be of special interest to the professional linguist.

Perhaps the clearest example of the contradictions arising in the global conversation about language endangerment is the following paradox emerging in the context of competition for funding. In this context, increased endangeredness becomes something positive because, more often than not, funding is channeled toward what are judged to be the most endangered varieties. This is a defensible position when seen purely from a data-gathering point of view: Try to obtain as much data as possible for this variety as long as there are still speakers around. This practice is obviously counterproductive and demoralizing when seen from the points of view of speakers and communities struggling to maintain their heritage language.

The preceding points may be largely addressed by paying more attention to rhetorical packaging and adjusting the themes accordingly (see Hill 2002, p. 129, for some suggestions). In this regard it will be useful for linguists "to think about lessons that cultural anthropologists have already learned about multiplying meanings and interpretations of research and writing outside an academic ingroup" (Errington 2003, p. 723). There is still considerable resistance to confronting such lessons, as shown, for example, by Chafe's (2003) rejoinder to Hill's challenges. Chafe's counterarguments are largely convincing from a purely professional point of view, but they completely neglect the possibility of a differing point of view taken by a nonacademic speaker of a minority variety.

Apart from the rhetorical problems arising from the multiplicity of audiences, there is a somewhat deeper and more principled issue at stake here that again relates to the inability of structural linguistics to address adequately the social nature of linguistic knowledge. The fundamental issue is that the endangerment discourse of professional linguists is geared at individual languages conceived of as objects that are transmitted within well-defined communities. However, what actually is at stake are complex linguistic ecologies with fuzzy external boundaries and intricate and overlapping internal groupings. This point has been made most emphatically in the work of Mühlhäusler (1992, 1996), and it is of utmost importance for all serious attempts to reverse language shift (Fishman 1991; 2001; 2002, p. 147), but it also underlies the theme of "enumeration" discussed by Hill (2002, p. 127) and her commentators and the attempts to "factorize" assessments of language vitality.

One good example of the latter is a UNESCO (2003) document entitled "Language Vitality and Endangerment," put together by an ad hoc expert group on endangered languages and finalized in March 2003. In a section called "Assessing Language Endangerment and Urgency for Documentation," the document lists the following nine major evalu-

ative factors of language vitality, all but one accompanied by an assessment grid in the form of a grading scale:

- Factor 1. Intergenerational language transmission (scale)
- Factor 2. Absolute number of speakers (real numbers)
- Factor 3. Proportion of speakers within the total population (scale)
- Factor 4. Trends in existing language domains (scale)
- Factor 5. Response to new domains and media (scale)
- Factor 6. Materials for language education and literacy (scale)
- Factor 7. Governmental and institutional language attitudes and policies, including official status and use (scale)
- Factor 8. Community members' attitudes toward their own language (scale)
- Factor 9. Amount and quality of documentation (scale)

Apart from obvious and superficial inconsistencies such as the fact that amount and quality of documentation (factor 9) is irrelevant for assessing language vitality, the major shortcoming of these kinds of lists is that they misleadingly presume to systematize and factorize realities that, in fact, are too complex for such a factorization. In the list above, for example, transmission (factor 1) and use of a variety in different domains (factor 4) appear to be unrelated matters. But the two actually systematically belong together because use of a variety in interactions with children is but one of the existing language domains.

The list also mixes causes and symptoms for decreasing vitality. Strictly speaking, reductions in the number and quality of usage domains (here somewhat arbitrarily distributed across factors 1, 4, and 5) are symptoms, and hence the major diagnostics, for decreasing vitality. The other factors (except 9) may be argued to contribute to the causes for such reductions and hence endangerment, but they are at best contributing factors of widely diverging relevance. Speaker number and proportions (factors 2 and 3), for example, have no necessary

relation to language endangerment because, in fact, there are several examples of smallish minority groups that have maintained their traditional varieties (e.g., the Arizona Tewa; see Kroskrity 1993). The most important causes for language shift, i.e., socioeconomic factors, are conspicuously absent from the above list, probably because they are difficult to factorize.

As explicitly argued in Himmelmann (2008) and perhaps best illustrated in the detailed case study by Kulick (1992), typologizing endangerment scenarios, instead of attempting to factorize language vitality, would be a more appropriate approach. In a scenario approach, language endangerment is seen as the result of a specific and complex constellation of varied factors, some of which may be conducive to language shift and others to language maintenance. The scenario approach thus explicitly focuses on the fact that endangered varieties generally belong to complex linguistic ecologies and cannot be adequately addressed in terms of grading scales targeting a single, easily isolated variety in a well-defined community.

MULTIFUNCTIONAL LONG-TERM DOCUMENTATION

When confronted with the global extent of current language endangerment, the first and most widespread reaction among linguists was to emphasize the need for descriptive work on varieties for whom speakers are still available. The primary model for this urgently needed descriptive work was the structuralist model of language description, which in its classic form consists of a trilogy: a grammar, a dictionary, and a text collection. These three parts are not equal in several ways, including the time needed to compile them (here dictionaries far outrank grammars and text collections) and the status they have as academic achievements (only grammars have recently been accorded again some prestige within the core linguistic community, after an almost total disregard for descriptive work in linguistics during the second half of the twentieth century). Because of these inequalities, descriptive efforts came to focus almost exclusively on grammars during the twentieth century (see Himmelmann 1996 for a brief history of relevant developments).

Hence, the call for salvage work on endangered languages appearing frequently around 1990 was, in the first instance, a call for writing descriptive grammars, the empirical pillar of all crosslinguistic research. But very soon it became clear that an exclusive focus on grammatical description was not tenable for both practical and theoretical reasons. One reason is because, once again, there are tensions between the interests and goals of speech communities and professionals. Although grammars are highly valued among linguists, they have little practical value for speakers and speech communities, especially when written in an international language unknown to them. Hence, the potential value that descriptive grammars may have for language preservation in many communities is purely symbolic in that having a grammar may be of use for raising the status of a given variety.

In literate communities, however, dictionaries and text collections may have practical uses in addition to purely symbolic ones. Among other things, text collections and—provided they include ample exemplification of lexeme uses in context—dictionaries record ways in which a given variety is actually used and thus may become a resource in attempts to stabilize or even reverse an ongoing language shift. But, as Hinton & Weigel (2002) show, with regard to dictionary production, tensions are certain to arise between community expectations and academic standards and goals (see also other contributions in Frawley et al. 2002).

Thus in general all three parts of the structuralist descriptive trilogy are of limited direct practical use for local speakers and communities. Inasmuch as the future of an endangered variety has become a topic of concern within the speech community itself, fieldwork in such a community is now usually confronted with demands to engage in activities directly supporting the vitality of the variety, as discussed above.

Another reason why the structuralist descriptive trilogy is probably not the "best record"7 for an endangered variety pertains to systematic holes that tend to occur in such descriptions. As argued by Grace (1981, 1987) and Pawley (1985, 1993), structuralist descriptions do not capture the specific way of expressing oneself idiomatically in a given variety. That is, even if a truly comprehensive descriptive grammar and dictionary existed for a given variety, one would still not know how actual utterances are formed because the descriptive resources are typically overgenerative—they allow for a number of alternative ways of expressing complex ideas, only one of which happens to be the standard or normal way of rendering a particular idea. For example, the following expressions are all grammatically well-formed and can also be understood by native speakers of English: half past twelve, half before one, twelve and two quarters, eleven plus two hours minus half an hour. But only the first one is the normal, idiomatic way of telling the time.

To capture the standard way of saying things in a given variety, one would have to be able to include a systematic description of speech formulae in the description of a given variety. Although formulaic speech has recently made it from a marginal oddity to a more central concern of mainstream linguistics, involving quite a few different approaches and subdisciplines as documented, for example, in Wray (2002) and Pawley (2007), there is still no standard methodology or theoretical model for incorporating it into structuralist language descriptions.

The lack of an adequate way to address formulaic language is but one of a number of deficiencies of the structuralist model of language description, possibly the most significant one. It generally holds that structuralist descriptions can only be as good as current grammatical theory. Only those categories and structures that can be recognized and represented with the

available theoretical apparatus are described. But there is no guarantee that the apparatus allows for a complete identification of all structural units and regularities. In fact, older descriptions generally lack adequate treatments of some topics of major current interest (e.g., pre-Chomskyan descriptive grammars are usually quite terse with regard to syntactic structures). This is, of course, no problem as long as the variety being described continues to be used and new data can be collected when needed. But when the task is to provide the last ever possible description, the problems of completeness and comprehensiveness take center stage.

Many of these problems can be addressed by redefining and enlarging the role of the text collection in the descriptive trilogy, which had never been clarified and theorized before language endangerment became a major concern in the discipline. One way of doing this is to stick with the trilogy but make text collection a more systematic and comprehensive enterprise, as proposed by Lehmann (2001, 2002, 2003). A more radical proposal, developed and discussed by Himmelmann (1996, 1998, 2006) and from a more anthropological linguistics point of view in Woodbury (1998, 2003), is to separate text collection from the other two components and turn it into a scientific enterprise of its own.

This enterprise, now widely called language documentation as opposed to language description, is no longer based on the structuralist notion of a language system that must be captured in as economical a set of abstract units and rules as possible. Language documentations, instead, focus on observable linguistic behavior and knowledge. The goal is a lasting, multifunctional record of the linguistic practices attested at a given time in a given speech community and the knowledge speakers have about these practices. Multifunctional means that such a data compilation is of use not only for linguists, but also for researchers from other disciplines (anthropology, oral history, etc.), educators and policy makers, and the speech community itself. But this, of course, also means that the documentation contains annotated but otherwise raw data, which must be further processed

⁷David Wilkins organized a workshop with this title at the Max Planck Institute in Nijmegen in 1995.

by each user group before they can serve their specific purposes. Thus language documentations are not purely or even primarily linguistic projects, but interdisciplinary projects, which ideally reach beyond academia and actively involve, and become involved in, the speech community.

That language documentation is not a purely linguistic enterprise does not mean that descriptive techniques and concepts do not have a role to play in it. On the contrary, the transcription and further annotation of recordings, which constitute the major workload in a documentation project, essentially depend on these techniques and concepts. But the role of description is an ancillary one in documentation, i.e., to make a compilation of records of linguistic practices accessible to, and useful for, a broad range of users. It is no longer the main goal as it used to be in the descriptive trilogy.

CONCLUSION

When Saussure was trying to delimit the proper object of study for linguistics, he determined that this object, langue, "n'existe parfaitement que dans la masse" (Saussure 1972 [1916], p. 30). Langue is a socially constructed and attested phenomenon that is realized in individual acts and psychologically manifest only in individual brains (parole). Consequently, in distinguishing langue from parole, one needs to separate, inter alia, "ce qui est social de ce qui est individuel" (Saussure 1972 [1916]). How exactly this separation is to be done and what exactly it means to say that language—as studied in linguistics—is a fait social remain unclear in Saussure's exposition and have never been satisfactorily resolved in mainstream structural linguistics. In fact, starting with Bloomfield's operationalization of the structuralist program, structural linguistics has replaced "social" first with "psychological" and then with "cognitive" in the conceptualization of the supraindividual nature of its object of study, attempting to relate its abstract units, rules, and generalizations to the cognitive endowment of human beings. Concomitantly, as already noted in the

introduction, the investigation of all social aspects of language structure and use was delegated to the subfield of sociolinguistics (broadly conceived).

Although the exclusion of the social has arguably not done fatal damage to its core project, structural linguistics periodically encounters problems resulting from its neglect of social aspects of linguistic knowledge. This review has identified a number of such problems relating to its dealings with language endangerment. But similar problems arise in other areas as well. Thus, for example, the fact that linguistic items and structures tend to diffuse areally also raises doubts about the idea that languages are essential wholes that are handed down across generations (Enfield's 2005 review in this series). Another example is the fact that recent grammatical theory struggles to provide a place for frequency effects of various kinds in its overall model of grammatical knowledge, where it does not have a natural place under the standard assumption that grammar as an abstract system is essentially homogeneous across a speech community (e.g., Bybee 2006; Gahl & Garnsey 2004, 2006; Pierrehumbert 2001; and, for a critical stance, see Newmeyer 2006).

Such periodically emerging problems have occasionally led to calls for abandoning the structural approach in linguistics altogether. But this does not seem to be the most promising venue to take. Instead, the challenge at hand is to maintain structuralist core ideas and concepts that have stood the test of time (e.g., the phoneme, distributional analysis, the distinction between substance and form) and to develop them further so that they explicitly allow for a socially negotiated construction and reproduction of linguistic structures, as perhaps most brilliantly exemplified in the work of Silverstein (e.g., Silverstein 1976a,b; 1986). Useful theoretical grounding for this enterprise is provided by Millikan's philosophy of language (Millikan 2005, especially chapter 2, "In Defense of Public Language"), which puts social functions at the center of the theory and makes reproducibility a core characteristic of linguistic conventions.

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