## Dictionary making in endangered speech communities

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#### Abstract

#### Abstract text

The present paper discusses a number of problems which are characteristic of lexicographic work in short-term language documentation projects and addresses the following issues: cooperation with the speech community, the selection of a dialect and the challenge to produce a useful piece of work meeting the scientific standards of lexicography in spite of limited resources of time, money and staff and the fact that the indigenous language is not well researched, the linguist does not have a thorough knowledge of the language and the indigenous assistants do not speak the lingua franca fluently. Drawing on her experience with dictionary projects in Western Samoa and Papua New Guinea, the author deals in particular with orthography, the compilation of word lists and the writing of dictionary entries.

#### 1. Introduction

Dictionaries of endangered languages are different from those of major languages in many aspects, and, of course, they themselves are not all of the same kind, but as diverse as ordinary dictionaries are with regard to their size, coverage, and design. The main differences between ordinary dictionary projects and those for endangered languages are that the latter are non-profit enterprises with limited resources of time, money and staff, and that the linguist who is responsible for the project is not a native speaker of the language.

Dictionaries of minority or endangered languages are often compiled by a single person, for instance a teacher or a missionary who live in the community or by linguists or anthropologists regularly visiting the speech community over many years, either as a part or a byproduct of their research projects. Lexicography of this kind only receives acknowledgement from a few specialists, in most cases neither linguists nor the general public takes any notice. This will hopefully change now. Thanks to the growing awareness of the endangeredment of languages and cultures, language documentation projects have now been initiated by research institutions and funding agencies in increasing numbers,<sup>2</sup> and lexicographic work will be part of language documentations though it will not necessarily result in dictionaries.

The present paper<sup>3</sup> focuses on dictionary projects which are part of language documentation projects or are carried out under similar conditions. Such dictionary projects work on not well-researched languages and are limited to rather short periods of time - short in

comparison to projects on major languages which last decades. 4

The staff working on the dictionary team usually consists of a linguist and a few indigenous people of the endangered speech community. While the linguist does not have a thorough knowledge of the language under investigation, the native speakers are not trained in linguistics; and to complicate things, both parties may not be fluent in the lingua franca they share as a means of communication.

In the present paper I want to discuss a number of problematic aspects of making dictionaries for endangered languages in short-term projects: setting the goal of the dictionary project, the time factor, the problem of giving preference to one dialect or variety of language, the orthography, the question of how much grammatical information is necessary, the compilation of word lists and the writing of dictionary entries. I suggest a variety of problem solving strategies, but as my personal experience as a lexicographer is limited to only two languages in the South Pacific, the Polynesian language Samoan and Teop, an Austronesian language spoken in Bougainville, Papua New Guinea<sup>5</sup>, these strategies may not work equally well.

<sup>&</sup>lt;sup>4</sup> Cf. Connell (in press) for an investigation of related topics as the importance of lexicography for minority languages and the use of modern technology.

<sup>&</sup>lt;sup>5</sup> Samoan is not an endangered, unresearched language and the dictionary projects I was involved in were monolingual, but my experiences there helped me to develop strategies to deal with the time problem and to learn to work in a team with indigenous people. Teop, the other hand, is a not well researched endangered language which provides all sorts of orthographical, grammatical and semantic problems. The team working on the documentation consists of Ruth Saovana Spriggs, who speaks Teop as her first language, and Jessika Reinig and Marcia Schwartz and myself; cf. www.mpi.nl/DOBES. I am most grateful to Ruth Saovana Spriggs who introduced me into her language and her speech community and has done all recordings and interviews on which the present version of the Teop-English Dictionary is based.

<sup>&</sup>lt;sup>1</sup> Walker & Wilts (1987) give an interesting account of lexicographers of the North Frisian language spoken in Schlwswig-Holstein, Germany.

<sup>&</sup>lt;sup>2</sup> Cf. gbs bulletin, Mitteilungen der Gesellschaft für bedrohte Sprachen e.V., http://www.uni-koeln.de/gbs.

<sup>&</sup>lt;sup>3</sup> I am thankful to Bruce Connell and Dafydd Gibbon for comments on a preliminary version of the paper.

#### 2. Setting the goal

When writing a dictionary for an endangered language, it is not enough to just say we want to document the lexicon of the language for future generations and generate a dictionary automatically from a text corpus. Rather, as with any other dictionary project, one has to identify the prospective users of the dictionary and what they will use the dictionary for. Being compiled in close cooperation with the speech community, the dictionary should serve the needs and interests of both the speech community and the academic community of linguists, anthropologists etc. Consequently, an electronic database which seems to be the best media for academic purposes must be accompanied by a printed version for speech communities, which do not have access to modern technology.

Only recently linguists have become aware of ethical issues and questions such as: What does a fieldworker, or in our case a language documentation project, owe to the speech community as a proper acknowledgement of their contribution? What are their intellectual property rights? (Newman & Ratliff 2001:9). From this perspective the individual indigenous dictionary makers and the speech community have the right to get copies of the dictionary in a form and of a content they appreciate, and this means for most endangered speech communities of the so-called third world, a printed version of the dictionary. This approach may also have some implications on the selection of words (no taboo words), the macro-structure (strict alphabetical order or nesting), the micro-structure (not too much linguistic information in the entries) and the layout (large print). Conflicts between linguistic standards and userfriendlyness as defined by the indigenous dictionary makers<sup>6</sup> might be solved by producing two editions of the dictionary, one for scientific purposes and one for the speech community. Since no science foundation or research institution can guarantee that an electronic dictionary will be readable in hundred or even more years, I personally would always insist on having a printed version of our dictionary work.

In contrast to bilingual dictionaries of major languages, a dictionary of an endangered language does not serve as a tool for translation or foreign language acquisition, but as a resource for research and as a repository of the language for the speech community<sup>7</sup>. For both purposes it is useful to complement the dictionary with a thesaurus covering the greatest possible variety of semantic fields such as kinship terms, animal and plant names, terms relating to the natural environment, the material culture and the social structure as well as all kinds of activities, states of being and properties. Since compiling thematically organized word lists is an important part of the dictionary project, the work on the thesaurus is integrated in the work on the dictionary and not too time consuming. A thesaurus can be very useful for the development of teaching materials and other language maintenance measures.

#### 3. The selection of the variety of language

The language to be represented by the dictionary may be spoken in more than one variety. Since the lack of time does not allow covering all of them, one dialect has to be given preference over the others. Quite often it is just the dialect of those people who invited the linguists to stay with them; in other cases the representatives of the speech community might make the decision. If the linguist has the opportunity to select a dialect, she or he should consider the following criteria: Which dialect is the most vital one and is used in the greatest range speech situations? Are there children or young people who still use the dialect? Which dialect is the most widespread one? Where do the linguists find the most cooperative people? Where are the best native language experts? And where are the best living conditions? Careful consideration is necessary. The mere fact that one dialect or speech variety is chosen for the compilation of a dictionary can make it the standard of the language which would certainly have some impact on the future development of the language.

Choosing the most vital dialect and giving it the prestige of becoming the dictionary or even the standard language may be the ultimate death sentence for other dialects. On the other hand, the choice of a less vital dialect means that the dictionary and the language documentation would not cover the greatest possible range of speech situations.

#### 4. The time factor

Since the project is constrained by limited resources of money, staff and time, the project must be organized in such a way that even after a very short period the dictionary makers can produce a useful piece of work. Instead of planning a comprehensive dictionary which would take many years to be finished, one should consider to be less ambitious and search for alternatives. There are, as far as I can see, two alternatives, which can be combined: Corpus Based Dictionaries and Thematic Dictionaries. Similar to the dictionaries of Classical Latin or Biblical Hebrew, Corpus Based Dictionaries only contain those words, which occur in a particular corpus of texts. The disadvantage of these dictionaries is that their content solely depends on the topics of the texts and the more or less accidental choice of words of the speaker, but if you have a large corpus of texts, they will certainly contain the most common words of the language. Thematic dictionaries, on the other hand, only cover the words of selected subject areas, such as kinship terminology or house building, but they lack even the most common words because they do not belong to the selected themes. The advantage of Thematic Dictionaries, however, is that within a very short period of time you can produce a little comprehensive dictionary which meets scientific standards and is interesting for people of the speech community as well as for academics of various

The first dictionary I was asked to organize was a monolingual Samoan dictionary for the Ministry of Youth, Sports and Culture in Western Samoa in 1994, which was funded by the Australian South Pacific Cultural Fund with 10 000 Australian dollars. How could we, i.e. a staff member of the ministry and I as his consultant produce a

<sup>&</sup>lt;sup>6</sup> As Hausmann (1989:5, 14) remarks, there is always the danger of scientific lexicographers loosing sight of the practical aspects and userfriendliness of dictionaries because scientists do not think practical.

<sup>&</sup>lt;sup>7</sup> Cf. Sperlich, Wolfgang B. (ed.) 1997: 1.

monolingual dictionary with these scarce resources? Necessity is the mother of invention: our first project was a little booklet on Samoan architecture and furniture (Mosel and Fulu 1997) and was later to be followed by similar mini-dictionaries on food, boat building, fishing and other culturally important practices (cf. 7.4).

Any kind of dictionary project will benefit from training one or more locals to help with the work. If they are literate, they can learn to write their own word lists and dictionary entries, if they are not, they can perhaps record lists of words and their translations or the explanations of their meaning in the indigenous language by interviewing other people. Literate locals can later continue with their own dictionary work (Fulu 1997).

#### 5. Orthographical matters

Most endangered languages are not written languages or do not have a standardized orthography. If the native speakers who assist the linguist are literate in another language, the linguist should ask them to cooperate in developing a standardized orthography which can be easily written on a computer. The decision of which orthography is to be used should be arrived at by workshops with the native dictionary makers. As the standardization of the orthography is often a political matter, it can be difficult, but it must not held up the compilation and production of the dictionary by never ending debates. While the linguists should always keep in mind that there is no such thing as the perfect orthography and not insist on their suggestions when the indigenous dictionary makers take a different view, the latter should understand that not having a standardized orthography, but alternative spellings for numerous words will make the compilation of the dictionary cumbersome.

Sometimes, however, alternative spellings cannot be avoided. In Teop, for instance, vowel length is distinctive and long vowels are distinguished from their short counterparts by repeating the vowel letter, e.g. na a tense marker and naa 'I'. Since the phonology of Teop has not been investigated in detail yet, we are often not sure how variation in vowel length is to be interpreted. In such cases we give the spelling variant just after the head word, whereas in example sentences we rely on the intuitions of the indigenous dictionary makers and often have the vowel spelled in different ways.

From the point of view of many linguists it might appear unreasonable or even irresponsible not to do a thorough phonological analysis before starting the work on the dictionary. However, it should not be forgotten that the work on the dictionary of an endangered language and culture is under severe time pressure as old people who can give us the most valuable information die one after the other. With regard to the cultural aspects of our work, vowel length is a negligible problem.

#### 6. Grammatical information

Unless it is accompanied by a grammar, the dictionary should at least contain as much information on the grammar in the front matter as is necessary to fully understand the abbreviations used in the dictionary entries such as for instance those used for the different parts of speech and their subclasses (cf. below the section on dictionary entries).

## 7. Writing wordlists

The first step in actually writing the dictionary is making lists of words which are to become head words or run-ons in dictionary entries. There are three methods:

- 1. Translating word lists in the lingua franca into the indigenous language as is suggested at least for the basic vocabulary in most field manuals
- 2. Extracting words from a text corpus.
- Eliciting words by techniques which encourage the dictionary helpers to produce word lists without translation.

# 7.1. The flaws of translating prefabricated word lists

In many fieldwork manuals<sup>9</sup> you find word lists in English (or some other European language) which are supposed to help you collect the basic vocabulary by translating the English words into the indigenous language. For two reasons this method has to be used with caution: Wordlists based on European languages will not be representative for the lexicon of the indigenous language and miss all culturally specific concepts some of which may also be basic. On the other hand, the list may contain words which do not have a translation equivalent in the indigenous language. Even items of the most "basic vocabulary" like 'eat', 'drink' and 'sit' (Swadesh 1972) may be missing (Goddard 2000).

More dangerous than this are, however, the psychological aspects of the translation method. The indigenous interviewees might feel very embarrassed when they are asked to translate a word they do not understand, or even worse, a word which they cannot translate because they forgot the indigenous equivalent.

Words which have been elicited by translation always need to be counterchecked by translating them later back into English or by explaining their meaning. The meaning of the indigenous word may be broader or narrower than its English counterpart, and the words in either language may be polysemous in different ways so that their meanings only partly overlap.

#### 7.2. Extracting word lists from a text corpus

This method has the advantage that it provides the words in a natural context which can also be used as an example in the dictionary. As the sense of the word in this context is often not its only sense, this method has to be

<sup>&</sup>lt;sup>8</sup> I have not practiced this method myself, as the Samoans and Teops I work with are literate.

<sup>&</sup>lt;sup>9</sup> Cf. Kibrik 1977: 103-123, Samarin XXX, Vaux and Cooper37-49. A remarkable exception is Beekman 1975.

complemented by asking native speakers for other examples for the use of the word. As Mithun (2001:38) observes, "a substantial proportion of the most interesting vocabulary emerges only in spontaneous speech, in what speakers themselves choose to say in different contexts." Consequently, the text material collected in the documentation project should cover a wide range of different speech situations. Wherever possible, the linguist should let the indigenous people make part of the recordings by themselves without him- or herself present in order to avoid foreigner talk (Mosel 1984:13).

#### 7.3. Active Eliciting

The method of extracting wordlists from a text corpus should be combined with a method I would like to call Active Eliciting and which can be employed for all sorts of linguistic data, not just word lists. Active Eliciting means that the language helper is asked to create his or her own set of data without translating words or sentences. After having explained what they are interested in, the linguists ask the language helpers to find words for narrowly defined subject areas such as the names of the plants they grow in the garden, types of houses, colours etc. As for activities, you might, for instance, ask them what they do when preparing a meal ('get some water', 'wash the vegetables', 'make a fire' etc.), or you give them a basic word of a particular semantic field, for example the speech act verb 'say', and ask them to search for similar words ('whisper', 'murmur', 'shout', 'ask',

Active Eliciting lets language helpers actively participate in the dictionary work and understand what is being done so that they can identify themselves with the project and eventually, if they are interested, join the team of dictionary makers after some practice.

#### 7.4. Alphabetical vs. thematic approach

Since the entries of the dictionary are alphabetically ordered, many people, Europeans as well as speakers of non-European languages, think that the writing of a dictionary and hence the writing of word lists starts with the letter A. In fact many dictionary projects used this alphabetical approach and some of them were never finished, but stopped somewhere in the middle of the alphabet. A dictionary covering only the letters A to K (like a famous dictionary for Classical Arabic) is not a very useful book. In the case of endangered languages for which we do not have any dictionary yet, the alphabetical approach is disastrous if for whatever reasons the dictionary work comes to an end. A dictionary which stops at the letter K will lack many frequently used words of the language and will not cover a single subject area of the culture. Furthermore, it is unrealistic to plan a comprehensive dictionary to be finished in less than ten years.

The alternative to the alphabetic approach is the thematic approach which was already mentioned above in the section on the time factor. This approach will be most efficient not only for the compilation of word lists, but also for the writing of dictionary entries. After having selected a few subject areas and compiled the word lists,

the entries for each subject area can be written in turn. <sup>10</sup> When compared to the alphabetical approach, the thematic approach has a number of advantages:

The project can produce a useful piece of work with in a very short time. A little dictionary comprising just one subject area or sub domain such as the names of winds or the types of houses and their parts is more useful than a 'dictionary' only comprising words starting with the letter A, as it could, for instance, be a resource for primary school teachers or ethnographers. Secondly, having produced a useful piece of work also raises the motivation of indigenous lexicographers to help with the production of another little dictionary.

Whether you work over a longer period in the community or only come once a year for a short time, you can never be sure that you can always work with the same people. The thematic approach gives you the opportunity to finish the work on one subject area or sub domain with one team, which will be easier and result in more consistent work as when you work on one subject with different people. Also the chances that important words are not forgotten are better. Another advantage of the thematic approach us that indigenous dictionary makers can work on their special field of interest and interview experts on certain subject areas (e.g. fishing, architecture, healing, etc.), which certainly reinforces their motivation.

Since time and financial resources are limited, the project has to set priorities and decide which subject areas they want to work on first. Two criteria seem to be a useful guide for the selection of the first subject areas: Which subject areas do the native speakers think are most important for their culture? Which subject areas are most suitable for the lexicographical training of indigenous dictionary makers?

The most suitable subject areas are those in which the meaning of the words is easy to explain by the native speakers and easy to understand by the non-native linguist, for example subject areas of the material culture such as clothing or food preparation rather than theology or traditional law.

#### 7.5. Purism

(eds.) 2000).

With regard to the selection of headwords, the indigenous dictionary makers may be purists and puritans and wish to exclude borrowed or obscene words. As for borrowed words, I would try to convince them that those which are adapted to the structure of the language belong to the language and consequently should have their place in the dictionary. Otherwise the dictionary would not represent the living language as it is used by the people. Obscene and other taboo words are a more difficult issue. Perhaps the speech community would agree to include them in a special scientific edition of the dictionary.

<sup>&</sup>lt;sup>10</sup> This method was successfully employed for a monolingual Samonan students' dictionary which was written by a group of Samoan teachers under my supervision. On 150 pages it covers terms of about 20 subjects which were part of the curriculum of year 7 and 8, for example words related the natural environment, certain plants and animals, shark and bonito fishing, house building, social science, mathmatics and science (Mosel & So'o

#### 8. Writing dictionary entries

When it comes to writing the dictionary entries the problems of having to deal with a not well research language become most obvious. We already mentioned the orthographical problems. Other problems, as far as we experience them in our Teop dictionary project, relate to word boundaries, classification of word classes and the productivity of derivational processes. As these problems are certainly not uncommon in other projects on not well-researched languages, we will describe them here with examples from the Teop dictionary project and present our solutions for discussion.

#### 8.1. Word classes

In nearly all modern dictionaries the headword is followed by an abbreviation which indicates the so-called part of speech or lexical class of the headword, e.g. n. for noun, v. for verb, and adj. for adjective. Thus in an English-German dictionary you find: chicken n. 'Huhn'. But this practice is problematic in case of the Teop dictionary.

Teop is a language in which words that correspond to nouns, verbs and adjectives in English are not inflected. Whether distributional criteria, collocational restrictions or derivational morphology are sufficient to set up lexical classes which could justifiably be called nouns, verbs and adjectives is not clear yet. Noun phrases, verb complexes and adjectival phrases, however, can be identified because they are marked by particular functional particles<sup>11</sup> such as articles and tense, aspect and mood markers.<sup>12</sup>

Because of this uncertainty of classification, we decided to use the abbreviations v., n., and adj. not in the traditional sense of lexical classes, but as labels for syntactic functions. Thus

moon 1. n., 'woman'. 2. v. '(be, become) a woman'.

has to be read: the word *moon* means 'woman' when it occurs as the head of a noun phrase, and '(be or become) a woman' when it occurs as the head of a verb phrase; whereby the semantic components 'be' or 'become' can be ascribed to the semantics of particular tense, aspect and mood particles.

Another problem is reduplication and derivation by affixes. Since we do not know, to what extend the processes are productive, we list them all in the entries of the simplex as run-ons. Fortunately, the number of affixes is small (not more than five), otherwise nesting would have resulted in very long entries and have a negative impact on the userfirendliness of the dictionary. Words derived by prefixes are also included as a headword without grammatical information or translation, but with a cross-reference to the simplex.

### 8.2. The definition or translation

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The traditional division of dictionaries into monolingual and bilingual dictionaries does not need to be strictly observed in dictionaries of endangered languages, because they are not primarily used for translation. In fact, for many head words a translation into a European language is not sufficient, because it won't capture the concept of the indigenous language. In these cases a translation should be accompanied by a definition which, if space does not matter, can be given in the indigenous language first and then be translated. Such bilingual definitions would

- preserve the interpretation of the meaning by the native speakers; which in case of misunderstandings on the part of the linguist may be most valuable in the future,
- show the semantics of the headword and its relations to other words of the language as understood by native speakers, and
- make the dictionary a resource for further linguistic and anthropological research and for teaching materials.

A good example for the usefulness of bilingual definitions are animal and plant names. A dictionary which only gives their translations would not show the taxonomy of animal and plant names in the indigenous language and culture, and the semantic relations between generic and specific terms would not be explained. In Samoan, for instance, *atu* 'tuna', *malie* 'shark', *tafolā* 'whale', and *laumei* 'turtle' belong to same kind of animals which is called *i'a*. A bilingual dictionary would only give the translation of 'turtle', but not explain that it belongs to the class of *i'a*, which is mostly translated as 'fish', but is defined as "animal living in salt or sweet water, giving birth to living off-spring or laying eggs" in the monolingual dictionary (Mosel & So'o 2000:19).

Another area where translations often are not sufficient to render the meaning of a word are emotions. One example we came across when writing the Teop-English dictionary was the word *buruburusu*, which expesses the feeling s.o. has when he sees or touches s.th. strange or frightening (like a toad or a snake) and when this causes goose pimples and makes his body. hair stand up. There is no single English word which would express all these aspects of *buruburusu*.

As already mentioned, a severe handicap of lexicography for endangered languages is the time factor. One reason why writing a good dictionary takes so much time is that writing translations and definitions is so time consuming. Therefore, the lexicographers might be forced to be selective with regards to the number of head words they translate or define or the amount of information they give.

Since our Teop-English dictionary has to be completed in 2005 (we started to work regularly on the dictionary in 2000), we decided not to give the translations or the scientific names of plants and animals in the dictionary, but only indicate to which species they belong and give their characteristics. For example: "a hard wood tree growing near the coast whose timber is used for carving canoes". We hope that sometimes in the near future a

<sup>&</sup>lt;sup>11</sup> Mosel 1999a, 1999b.

<sup>&</sup>lt;sup>12</sup> Cf. Broschart (1997) on Tongan which concincingly showed that Tongan does not distinguish between nouns and verbs, or Dixon (1977) on the lack of a distinctive class of adjectives in many languages of the world.

<sup>&</sup>lt;sup>13</sup> O le meaola e nofo i le sami ma le vai. O isi e tautu'ufua a o ni isi i'a e fanafanau.

ethno-biologist can do field work and identify plant and animal names.

#### **8.3.** Illustrative sentences

In spite of the limited time, each sense of a head word should be illustrated by at least one example. Preferably the example sentences are not made up, but come from recorded texts. They should illustrate the grammatical constructions of the word and contain frequently occurring collocations.

#### 8.4. Idioms and proverbs

As far as the limited time permits, lexicalized phrases and patterns of expression should be included in the dictionary, because the native speaker's linguistic competence does not only encompass the phonology, grammar and lexicon, but also the phraseology of a language <sup>14</sup>. One might also wish to include idioms and proverbs, because they reflect the culture of a speech community more than every other kind of linguistic unit or phenomenon, but the explanation of their meaning and use can be difficult and time consuming.

#### 8.5. Etymology

Although many linguists are interested in the history of languages, the etymology of words needs to be neglected. Since the documentation of an endangered language as a living language has the priority, the reconstruction of its history has to wait.

#### 9. Conclusion

Compiling a dictionary of a not well-researched language means making compromises. The first dictionary of an endangered language will not be a perfect dictionary. But as long as the dictionary makers are aware of their problems and explicitly state in the front matter what kinds of problems they had to put up with and what kind of compromises or solutions they decided on, the dictionary can become a good resource for future research and language maintenance measures.

#### 10. References

- Beekman, John. 1975. Eliciting Vocabulary, Meaning and Collocation. In Healey, Alan. *Language Learner's Field Guide* (pp. 361-386). Ukarumpa (Papua New Guinea): Summer Institute of Linguistics.
- Broschart, Jürgen. 1997. Why Tongan does it differently: Categorial distinctions in a language without nouns and verbs. In *Linguistic Typology* 1 (pp.123-165).
- Connell, B. (in press). Lexicography, Linguistics, and Minority Languages. In *Journal of the Anthropological Society of Oxford*.
- Dixon, Robert M.W. 1977. Where have all the adjectives gone? In *Studies in Language* 1:19-80. Amsterdam, Philadelphia: John Benjamins.

- Fulu, Mose. 1997. *O le mafuaala o upu o taumafa. O le tusi faamatala upu o le gagana Samoa*. Apia (Western Samoa): Ministry of Youth, Sports and Culture.
- Goddard, Cliff. 2001. Lexico-Semantic Universals. In *Linguistic Typology*. Vol. 5 (pp. 1-65). Berlin, New York: Mouton de Gruyter.
- Hausmann, F.J. (1989). Die gesellschaftlichen Aufgaben der Lexikographie in Geschichte und Gegenwart. (pp. 1-19). In Hausmann, F.J., O. Reichmann, H.E. Wiegand, L. Zgusta. (1989). Wörterbücher, dictionaries, dictionnaies. Ein internationales Handbuch zur Lexikographie. Handbücher zur Sprachund Kommunikationswissenschaft, 5.1. Berlin, New York: de Gruyter.
- Kibrik, A.E. 1977. *The Methodology of Field Linguistics*. The Hague, Paris: Mouton.
- Mithun, Marianne. 2001. Who shapes the record: the speaker and the linguist. In Newman, Paul & Martha Ratliff (eds). *Linguistic Fieldwork* (pp. 34-54). Cambridge: Cambridge University Press.
- Mosel, La'i Ulrike & Fulu, Mose (1997) *O le fale*. Apia (Western Samoa): Ministry of Youth, Sports and Culture. Apia.
- Mosel, La'i Ulrike & So'o, Ainslie (eds.) (2000). *Utugagana. O le tusi fa'amatala 'upu fa'apitoa mo tamaiti ā'oga o le Tausaga 7 & 8 o Sāmoa.* Apia: Department of Education.
- Mosel, Ulrike (1984). *Tolai Syntax and its Historical Development*. Pacific Linguistics B-92. Canberra: The Australian National University.
- Mosel, Ulrike & Spriggs, Ruth (1999a). Gender in Teop (Bougainville, Papua New Guinea). In Unterbeck, Barbara & Rissanen (eds.). *Gender in Grammar and Cognition* (pp. 321-349). Berlin, Mouton de Gruyter.
- Mosel, Ulrike & Spriggs, Ruth Saovana (1999b). Negation in Teop. In Hovdhaugen, Even & Mosel, Ulrike. *Negation in Oceanic Languages* (pp. 45-56). München, Newcastle:Lincom Europa.
- Newman, Paul & Ratliff, Martha 2001. Introduction. In Newman, Paul & Martha Ratliff (eds). *Linguistic Fieldwork* (pp. 1-14). Cambridge: Cambridge University Press.
- Pawley, Andrew K. (1993). A language which defies description by ordinary means. In Foley, William A. (ed.) *The Role of Theory in Language Description* (pp. 87-129). Berlin: Mouton de Gruyter.
- Pawley, Andrew K. Grammarian's lexicon, lexicographer's lexicon: Worlds apart. In Svartvik, Jan (ed.) *Words KVHAA Konferenser* 36 (pp. 189-211). Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Samarin, William, J. (1967). Field Linguistics. A Guide to Linguistic Fieldwork. New York, etc: Holt, Rinehart, and Winston.
- Sperlich, Wolfgang B. ed. (1997). *Tohi Vagahau Niue*. *Niue Language Dictionary*. Niuean-English with English-Niuean Finderlist.
- Vaux, Bert & Justin Cooper. (1999). *Introduction into Linguistic Field methods*. München, Newcastle: Lincom Europa.
- Walker, A.G.H. & O. Wilts (1987). Who writes a North Frisian Dictionary for whom and why? In *International Journal of the Sociology of Language* 64 (pp. 107-120).

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<sup>&</sup>lt;sup>14</sup> Pawley 1993, 1996.