Dictionary-Making Process with 'Simultaneous Feedback' from the Target Users to the Compilers

Gilles-Maurice DE SCHRYVER and Daan J. PRINSLOO, Gent, Belgium and Pretoria, South Africa

Abstract

Since dictionaries are ultimately judged by their target users, there is an urgency to provide for the target users' needs. In order to determine such needs more accurately, it has become common practice to submit users of a dictionary to a series of tests. Unfortunately, in most cases such feedback comes too late because it can at best be considered for implementation in the revised edition of the dictionary. In this article it is argued that feedback from the target users should be obtained while compilation is still in progress. This dictionary-making process is therefore referred to as 'Simultaneous Feedback' and can be understood as entailing a method in terms of which the release of several small-scale parallel dictionaries triggers off feedback that is instantly channelled back into the compilation process of a main dictionary. Following a theoretical presentation of the new concept, its feasibility is illustrated with reference to the creation of Cilubà–Dutch and Sepêdi–English dictionaries.

1. Introduction

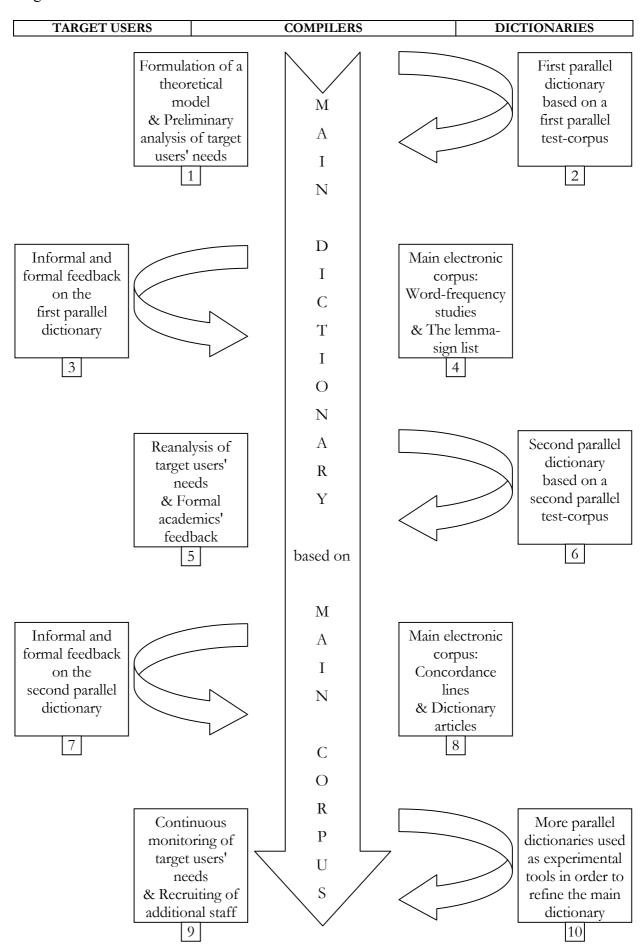
Since the lexicographer is constantly striving to enhance the quality of a dictionary, the active implementation of the target users' needs has become all-important in modern-day lexicography, cf. e.g. [Wiegand 1998] and [Van der Merwe-Fouché 1999]. It is however not easy for the compiler to determine exactly what these needs are. Recently, dictionary users have been subjected to various tests meant to monitor what they actually get out of their dictionaries. [Atkins 1998a] and [Bogaards 1998] are excellent examples of the sincere efforts currently being made to research dictionary use. The problem however is that such research is, in general, carried out at a stage when the dictionaries are already completed and published. Feedback from the target users can therefore only be implemented in forthcoming editions of these dictionaries. Formulated differently, it means that the feedback obtained in this way comes too late.

In this article it is argued that feedback from the target users, indispensable in the compilation of any present-day dictionary, should be obtained while the compilation of the dictionary is still in progress. This can be achieved by launching several small-scale parallel dictionaries from which informal as well as formal target user feedback is instantly channelled back into the compilation process of a main dictionary. Such simultaneous feedback is not only invaluable in the compilation of the macrostructure but also provides useful information for improvement on the microstructural level.

2. Theoretical framework of Simultaneous Feedback

A schematic representation of the theoretical framework of Simultaneous Feedback is shown in Figure 1.

Figure 1: Theoretical framework of Simultaneous Feedback



In Figure 1 one recognises the three primary constituents of any dictionary compilation process, viz. target users, compilers and dictionaries. The framework itself should be read from left to right, and from top to bottom – [1] through [10]. The compilers' central task is the compilation of a main dictionary – depicted by the central arrow in Figure 1. The first component in Figure 1 is also the first task. That is, the formulation of a theoretically motivated model for the structure and contents of the dictionary to be compiled, must be followed by a preliminary analysis of the needs of the potential target users – [1]. It is of paramount importance that, from this initial stage onwards, information concerning these target users' needs be gathered through informal and formal consultations with the future target users. As such, feedback is simultaneously introduced right from the very start.

Since any modern dictionary is to derive its data from a corpus, the compilers have to build and query an electronic corpus for the specific language(s) first. As a result, the compilers cannot start the compilation of the main dictionary – the central arrow in Figure 1 – right away and are moreover confronted with the prospect of an extremely time-consuming undertaking. In order to overcome this deadlock, the main dictionary project is instantly complemented with a series of small and inexpensive parallel dictionary projects – [2], [6], [10], etc. These parallel projects have basically the same structure, contents and target users as the main project and are to derive their data from small-scale parallel test-corpora. From the release of the first parallel dictionary onwards, informal and formal feedback is received from the parallel projects and channelled back into the time-consuming main project – [3], [7], etc. From that instant, the compilation of the main dictionary becomes a true work in progress with simultaneous feedback from the target users to the compilers.

The parallel projects are thus used as experimental tools to test a plethora of strategies in order to refine the presentation of the information in the main project under construction. Once a structured main corpus has been built, word-frequency studies can be done to assist the lexicographers in the compilation of the lemma-sign list of the main dictionary – [4]. Subsequently, concordance lines, also derived from the main corpus, supplement and confirm the compilers' intuition in the compilation of the main dictionary articles – [8]. Until completion of the main project the parallel projects continue to elicit feedback – [5], [9], etc. All this simultaneous feedback ultimately enables the compilers to select the most appropriate blend of lexicographic procedures to ensure the most effective retrieval of information by the target users in the main dictionary. Hence, within the framework of Simultaneous Feedback, we cannot agree with the claim that "Lexicography is not a terrain in which you can experiment from one day to the next" [Lombard 1994, 211]. On the contrary, complying with the target users' needs means doing just that!

Thus far this theoretical framework, which can be considered as the backbone of any potential dictionary project, has successfully been applied in compiling a pocket-size bilingual Cilubà–Dutch dictionary, and is currently being used for the creation of a large Sepêdi–English dictionary.

Due to space restrictions we can unfortunately not expound on every component of the framework. Instead, for each of the two dictionary projects, we will focus on one very specific aspect. For the Cilubà–Dutch dictionary this aspect will be the lemmatisation of nouns on the macrostructural level, and for the Sepêdi–English dictionary we shall look into the microstructural handling of a new grammatical convention.

3. Compiling a Cilubà–Dutch dictionary and the concept of Simultaneous Feedback

3.1. Formulation of the problem underlying the Cilubà case study

As far as the lexicographical treatment of nouns in Bantu languages is concerned, the dilemma has always been "How does one successfully lemmatise nouns?" – since both singularity and plurality are indicated by prefixes, cf. [Prinsloo/de Schryver 1999]. According to [Bennett 1986, 4] such "arrangement difficulties, however, are no worse than those facing the lexicographer in, for example, a Slavic language, where prefixes are almost as great a problem as in Bantu". Yet, answering the modern-day metalexicographic call, the arrangement should first and foremost answer the target users' needs.

3.2. Collecting feedback for the Cilubà case study

When it comes to the macrostructural treatment of nouns, the preliminary analysis seemed to indicate that the target users preferred nouns to be entered as singulars, followed by the gender. The two poles of the gender seemed sufficient to enable the users to form, when applicable, the plural. This arrangement was instantly implemented in a first parallel dictionary, the *Lexicon Cilubà–Nederlands* [de Schryver/Kabuta 1997], henceforth LCN. As a case in point the nouns in (1), taken from LCN, can be considered.

- (1a) bidyà [8/8 ◀ -dyà] cf syn nshìma
- (1b) kabèji [12/13; dim dibèji] papiertje; ~ kàà bwanga (dokters)voorschrift
- (1c) mupùùyà [3/4] 1 adem; ademhaling; 2 geur

Here the genders 8/8, 12/13 and 3/4 were thought to enable the target users to infer the plural forms – *bidyà*, *tubèji* and *mipùùyà* respectively.

On the day LCN (the first parallel project) was released, a series of Informal Files were opened and were meant to track every possible remark concerning the lexicon and its use. As far as dictionary users are concerned, we are convinced that these files represent a rare firsthand insight into target users' (initial) opinions regarding a dictionary's release and its subsequent use. It should be stressed that all these various opinions were recorded in our capacity as natural participant observers among learners of Cilubà at the Department of African Languages and Cultures in the University of Ghent.

Besides informal feedback, its formal counterpart was also collected and subsequently contrasted with the informal feedback. From the manifold standardised methods that are available to obtain formal feedback we opted for questionnaires through a mail survey. The Questionnaire itself was four pages long and was packed with fifty questions covering all the various aspects of LCN, as well as some potential future endeavours. In spite of this large number of questions – with many of them even subdivided into sub-questions – nearly all respondents tried their hands at every single question.

3.3. Analysing feedback for the Cilubà case study

In the Questionnaire, seven questions focused specifically on nouns, of which four dealt with the lemmatisation of nouns on the macrostructural level. The latter four, with the answers by each competence level (elementary, intermediate and advanced) expressed in %, are shown in Figure 2.

In Q23 the target users were first reminded of the lemmatisation approach utilised in LCN (an approach implemented following the preliminary analysis). We then sought to learn whether or not this approach (now that it had been implemented and that the target users had had the chance to familiarise themselves with the outcome) was indeed what the target users needed. The results revealed that for only 58% of the elementary learners LCN's approach corresponded to the way they would like to look up nouns. For intermediate and advanced learners, LCN was on the right track as respectively 93% and 91% of them marked LCN's approach as conforming to their need. Since 25% of the elementary learners opted for both singulars and plurals, whilst none of the more advanced learners did, this suggested a certain unfamiliarity with the noun class system among beginners. The target users' need is thus: For intermediate and advanced learners one can safely lemmatise nouns under their singulars as long as provision is made for irregular plurals, but for elementary learners additional guidance on the noun class system will have to be provided for if this is to be a successful approach. Alternatively, one might even have to consider lemmatising both singulars and plurals for inexperienced users.

In Q24 we wished to know where the target users want to find irregular plural forms. At first glance the results seem just a jumble, but when one considers the large number of respondents who added "under both", a certain logic appears. Moreover, one target user (rightly) observed that cross-references should link plurals and singulars. Hence, the target users' need is: Irregular plural nouns must both be mentioned within the article of their singular forms and be lemmatised under their proper alphabetical position, whilst cross-references should link both forms.

In Q25 we sought to learn whether target users need gender information, and if so, in which format. What is extremely interesting here are not the options ticked off, but the option not one single target user chose, namely that class numbers as well as nominal prefixes are redundant. The results show that roughly half of the elementary and intermediate learners and nearly all the advanced learners opt for class numbers. The target users' need is thus: Noun gender information is crucial and should, for advanced learners, preferably be coded using class numbers, whilst elementary and intermediate learners might desire to receive some additional guidance.

In Q28 we wanted to know the target users' opinions about the 'stem tradition'. Their judgement is extremely scathing concerning this approach, as 67% of the elementary, 87% of the intermediate and no fewer than 91% of the advanced learners consider this tradition to be much too complicated. Hence, the target users' need is: Under no circumstances should nouns be lemmatised according to the 'stem tradition'.

These four target users' needs (derived from the analysis of the Questionnaire) corresponded with the data in the Informal Files. It was therefore obvious that we required

Figure 2: Q23, Q24, Q25 and Q28 from the LCN Questionnaire, including the stratified responses

LCN QUE	RESU	JLTS	(in %)		
Question	Ans		Level		
	□ suggested by us	added by target user 🗆	elem.	int.	adv.
23. In the <i>Lexicon</i> nouns are entered under	□ solely as singular		11	7	9
their singular. Some plurals, however, had	as singular, with prov	vision for some plurals	58	93	91
to be provided for. How would you like to	□ always both as singul	ar and plural	25		_
look up nouns?	□ other:				
		(no answer)	6		
24. In your view, where should irregular	□ within the article of the	heir singular	28	40	27
plural forms be presented?	under their plural (as	a separate headword)	28	20	27
	□ other:				
		under both	39	33	36
		(no answer)	6	7	9
25. In the <i>Lexicon</i> the class numbers for	□ class numbers handie	58	40	82	
singular and plural are given. Instead of	nominal prefixes han	31	60	9	
'numbers' one could use the 'nominal	numbers' one could use the 'nominal class numbers & nominal prefixes redundant				_
prefixes' themselves. According to you,	refixes' themselves. According to you,				
are:	ı	use both, e.g. 1 «mu-» □	6		9
		(no answer)	6		
28. One could also enter nouns under	□ extremely user-friend	lly	11	7	
their stem. In this way one would for	□ much too complicated	d	67	87	91
instance find muntu, bantu, buntu, cintu,	□ other:				
bintu and kantu under -ntu. This would	the Lexicon wo	ould become too large	6		_
be:	better: l	ooth as stem and noun	6		_
	interesting to add the	e stem under the noun	6		_
	it re	veals lexical relations		7	9
		(no answer)	6		_

a way to solve a much-desired additional guidance on the noun class system for elementary learners (and to a lesser extent also for intermediate learners). This requirement was instantly implemented in a second parallel dictionary, the *Beknopt woordenboek Cilubà–Nederlands* [de Schryver/Kabuta 1998], henceforth BCN. In BCN every page on the left-hand side displays an inserted text at the bottom which lists the most important affixes, as shown in (2).

(2) Even Repetitive Inserted Text (ERIT) in BCN

Affix.	1pe	1pm	2pe	2pm	1	2	3	4	5	6	7	8	11	12	13	14	15	16	17	18
NP	mu-	ba-	mu-	ba-	mu-	ba-	mu-	mi-	di-	ma-	ci-	bi-	lu-	ka-	tu-	bu-	ku-	pa-	ku-	mu-
SC	"N-	tu-	"u-	nu-	ù/"à-	bà-	"ù-	''ì-	dì-	"à-	cì-	bì-	lù-	kà-	tù-	bù-	kù-	pà-	kù-	mù-
OC	-N-	-tù-	-ku-	-nù-	-mu-	-bà-	-"ù-	-"ì-	-dì-	-"à-	-cì-	-bì-	-lù-	-kà-	-tù-	-bù-	-kù-	-pà-	-kù-	-mù-
PP	u-	`bà-	u-	`bà-	u-	`bà-	`ù-	`ì-	`dì-	`à-	`cì-	`bì-	`lù-	`kà-	`tù-	`bù-	`kù-	`pà-	`kù-	`mù-
OM	cì-	katù-	kù-	kanù-	kà-	kabà-	kaù-	kaì-	kadì-	kaà-	kacì-	kabì-	kalù-	kakà-	katù-	kabù-	kakù-	kapà-	kakù-	kamù

With this repetitive inserted text we intended to provide all the target users with an easy access to the noun class system (and its grammatical implications). The tabulated affixes are straightforward. Taking the canonical form of the nominal prefixes for both participants and classes as a point of departure, the table then lists the subject concords, followed by the object concords and the pronominal prefixes, and ends with the morphemes used to form negative tenses. In other words, the 100 tabulated items synthesise the core of the Cilubà concordance system at a single glance.

Just as was the case with the first parallel dictionary, the release of the second parallel dictionary instantly triggered off feedback. As far as the macrostructural treatment of nouns is concerned, the analysis of this feedback quickly indicated that virtually all target users were satisfied with BCN's approach. The main dictionary therefore incorporates this approach, and as such, one of the long-standing lemmatisation problems in Bantu languages – namely "How does one successfully lemmatise nouns?" – was 'solved' by those for whom the dictionary is intended.

4. Compiling a Sepêdi–English dictionary and the concept of Simultaneous Feedback

In evaluating the feedback for the Cilubà case study in the previous paragraph, the emphasis was on one specific problematic aspect on the macrostructural level. In this paragraph the feedback obtained from the target users will be analysed in respect of one particular microstructural aspect, namely the creation of a digestible convention for communicating a complicated grammatical structure to the users.

4.1. Formulation of the problem underlying the Sepêdi case study

Consider the situation where an inexperienced learner reads a Sepêdi novel and is confronted by the to him/her unknown word *thuše*. Since circumflexes are not indicated in literary works, a total of eleven possible meanings could be conveyed, as shown in (3).

ga ba thuše	'they are <u>not helping</u> '	(Indicative)
ge ba sa thuše	' <u>if/while</u> they are <u>not helping</u> '	(Situative)
ba ba sa thušego	'those who do not help'	(Relative)
gore ba thušê	'so that they must help'	(Subjunctive)
gore ba se thušê	'so that they must not help'	(Subjunctive)
go se thušê	'not to help'	(Infinitive)
ba thuše	'they (usually) help'	(Habitual)
ba se thuše	'they (usually) do not help'	(Habitual)
ba se thušê	'they then did not help'	(Consecutive)
ba thušê!	'help them!'	(Imperative)
se thušê!	'don't help!'	(Imperative)
	ge ba sa thuše ba ba sa thušego gore ba thuše gore ba se thuše go se thuše ba thuše ba se thuše ba se thuše ba thuše ba thuše	ge ba sa thuše ba ba sa thušego gore ba thušê gore ba se thušê go se thušê ba thuše ba thuše 'iso that they must help' go se thušê 'iso that they must not help' 'inot to help' ba thuše ba se thuše 'they (usually) help' ba se thušê 'they (usually) do not help' ba thušê! 'inot to help' 'they (usually) do not help' 'they then did not help' 'thelp them!'

Without proper lexicographical treatment or proper guidance the user will be lost. (S)he won't even be able to ascertain whether the word has a positive or a negative meaning. The real challenge is to formulate a convention which will be <u>short and compact</u>, be reasonably <u>user friendly</u>, enable the users to clearly <u>distinguish between positive and negative</u> meanings, and act as a <u>bridge</u> for the inexperienced users to the <u>mini-grammar</u> and detailed grammatical discussion of the verb in grammar books.

Firstly, instances of where the verb ends in $-\hat{e}$ should not only be included in a dictionary but should also be distinguished from those cases where the verb ends in -e. Secondly, positive and negative forms with similar endings are to be separated.

For verbs ending in -e (3a, 3b, 3c, 3g and 3h) the convention given in (4) can be designed.

(4) thuše help; $\sim go$, ga/sa/se (..) \sim not help

The lexical lemma and its lemmatic address provide for the positive form of the Habitual (3g), while the second part caters for the multiword lexical items by including and treating various sublemmata. This section of the article contains the lexical items *thušego* (3c), *ga thuše* (3a), *sa thuše* (3b) and *se thuše* (3h) included as grouped lemmata, cf. [Hausmann/Wiegand 1989, 349]. [Wiegand 1989, 391] and [Wolski 1989, 364] categorised sublemmata grouped into an article headed by another lemma as either niched or nested lemmata. The *thuše* article displays the occurrence of nested lemmata. This nest includes the sublemma with the relative suffix *-go*. That the verb stem can either directly follow the *ga*, *sa* or *se* or be separated from it by other words is provided for by the brackets and periods.

For verbs ending in $-\hat{e}$ (3d, 3e, 3f, 3i, 3j and 3k) the convention presented in (5) can be designed on the same principles.

(5) thuš $\hat{\mathbf{e}}(\mathbf{ng})(!)$ help(!); se (..) ~ not help(!)

Finally, conventions (4) and (5) can even be combined to render a short and compact convention which sacrifices a little detail in favour of slightly more user-friendliness, as shown in (6).

(6) thuše, thušê help; ..ga/sa/se..~ not help

The first part of this powerful convention (**thuše**, **thušê** help) has a lemmatic address and conveys the information that a verb ending in -e or -ê has a positive meaning of 'must do something' (3d, 3g and 3j). The second part of this convention (..ga/sa/se..~ not help) introduces the nested lemmata. Their sublemmatic address conveys the information that if a ga, sa or se occurs before thuše or thušê, one is dealing with a negative meaning (3a, 3b, 3c, 3e, 3f, 3h, 3i and 3k).

4.2. Collecting feedback for the Sepêdi case study

In terms of the point of departure of this article, namely that feedback from the target users should be obtained while the compilation of a dictionary is still in progress, Exercises and a Questionnaire were compiled to test, among other aspects, the viability of the ...ga/sa/se..~ convention formulated under (6). The interest of the researchers was focused on the feedback from a group of beginners/learners of Sepêdi. In addition, a group of second language and mother tongue speakers of Sepêdi was also subjected to the Exercises and Questionnaire. Both groups were a random selection of first-year Sepêdi students at the Technikon Pretoria, and both groups used the same dictionary for all the tests, namely *SeDiPro 1.0* [Prinsloo/de Schryver 2000], a first parallel dictionary Sepêdi–English containing 25,000 lemmata.

4.3. Analysing feedback for the Sepêdi case study

Consider (7) as a selection from the phrases testing the viability of the ..ga/sa/se..~ convention, and taken from the Exercises.

- (7a) ga ba thuše moruti yo (not-they-help-reverend-this) 'they do not help this reverend'
- (7b) ba thuše, o se ke wa tšwafa (them-help, you-not-even-you-be lazy) 'help them, you really must not be lazy'

All the students correctly concluded that they were dealing with a negative meaning in (7a) and a positive meaning in (7b). This is significant for the beginners/learners as they had <u>no other means</u> than (6) at their disposal.

In a second round of Exercises the verb *bone* was selected, since apart from the range of positive versus negative meanings in terms of (3), the users had to consider the past tense form, as well as the meaning 'fourth'. Thus three different articles in *SeDiPro 1.0* given as (8).

- (8a) **bonê** fourth
- (8b) **bône** have seen; have experienced; ~**go** which have seen; which have experienced
- (8c) **bône, bônê** must see; must look; **..ga/sa/se..~** not see; not look

The to-be-translated phrases in the Exercises were as shown in (9).

- (9a) ke nyaka gore ba bone taba ye gabotse(I-want-that-they-see-matter-this-very well)'I want them to understand this matter very well'
- (9b) gore ba se di bone (so that-they-not-it-see) 'that they must not see it'

Although (9a) is a relatively difficult sentence for a beginner/learner to decode, as in the case of *thuše* above, the majority of beginners/learners managed to arrive at a positive meaning 'must see/understand'. In the case of (9b), however, almost every student got it wrong with answers ranging from 'have seen', to 'must see' and 'have not seen'. A possible reason for this is that in the case of *bone*, compared to *thuše*, the user was overwhelmed by too many possible meanings in the dictionary, cf. (8). In the case of (9a), in contrast to (9b), the user was assisted by the availability of <u>sufficient context</u> in order to arrive at the correct option.

The observation that beginners/learners are capable of successfully using the ..ga/sa/se..~ convention, was also confirmed by their response to Q17 in the formal *SeDiPro 1.0* Questionnaire which concluded the investigation, cf. Figure 3.

L. 2 O	17 0	1 0 D · D	100		. 1	1 1.	41	4 · · · · · 1	
Figure 3. C	I / Trom	the SeDiPro	/ // (Juestionnaire	inci	เมเสเทธ	tne s	arannea r	esnonses
i iguic 5. Q	1 / 110111	me bebu 10	1.0	Zucstrommuni	, 11101	iuuiiis	uic 5	manifica i	Coponico

SeDiPro 1.0 QUESTIONN	RESULT	Γ S (in %)		
Ouestion	Answer	Target group		
~		learner	speaker	
17. In the dictionary you will find:				
phele, phelê must live, must stay alive;ga/sa/se~ not	correct explanation	100	20	
live, not stay alive	wrong or no explanation	_	80	
Could you explain in your own words what this				
convention means?				

The results clearly show that all the beginners/learners answered this question correctly, while as many as 80% of the second language and mother tongue speakers of Sepêdi were unable to answer it, or answered it incorrectly. The latter group also generally failed to answer Q13 and Q30, as can be seen from Figure 4.

The inability of second language and mother tongue speakers to comprehend standard dictionary conventions such as '/', '~' or '=' is of great concern to the compilers of Sepêdi dictionaries. Failure to answer these questions can be attributed to a presumed <u>lack of dictionary culture</u>.

Figure 4: Q13 and Q30 from the SeDiPro 1.0 Questionnaire, including the stratified responses

SeDiPro 1.0 QUESTION	RESUL	Γ S (in %)			
Question		Answer	Target group		
~			learner	speaker	
13. In many dictionaries the headword is replaced by a	a.				
tilde (~) within an article. This is also done in the		correct word \Box	86	_	
dictionary you used. In the dictionary you will find:		wrong or no word	14	100	
ntoma bite me; ∼ tsêbê tell me a secret	b.				
a. Which word does the tilde (~) replace here?		correct expression	71	20	
b. How do you say 'tell me a secret' in Sepêdi?		wrong or no expression	29	80	
30. When you see something like this:	a.	correct suggestion	43	10	
feela = fêla		wrong or no suggestion	57	90	
a. Do you know what you should do?	b.	correct suggestion □	43		
b. Do you know why this was done like this?		wrong or no suggestion	57	100	

From a metalexicographic perspective, this had already been pointed out by e.g. [Gouws 1999, 7, 11], while [Atkins 1998b, 3] observed that "the speakers of African languages have not in their formative years had access to dictionaries of the richness and complexity of those currently available for European languages. They have not had the chance to internalize the structure and objectives of a good dictionary, monolingual, bilingual or trilingual".

The failure of second language and mother tongue speakers of Sepêdi to interpret the ..ga/sa/se..~ convention in the first parallel dictionary however does not pose real problems for the continued utilisation of the convention in the main project. This convention proved to be a useful if not vital decoding tool for the beginner/learner of Sepêdi which is not needed by the second language or mother tongue speaker since (s)he is familiar with the grammatical rules of the language. Yet, on a different level, and probably much more important, the ..ga/sa/se..~ feedback triggered the first manifest recording of a serious lack of dictionary culture. Therefore, while the second parallel dictionary is being compiled, important efforts are directed towards the explicit and systematic teaching of dictionary skills in the classroom, as e.g. suggested by [Chi 1998, 566]. Formulated differently, while the main dictionary is being compiled, the future users are simultaneously being trained in using it, as early feedback indicated that there is a great need for this.

5. Concluding remarks

Simultaneous Feedback is a dictionary-making process which, through the launching of parallel dictionaries, enables the instant implementation of the target users' needs. These parallel dictionaries moreover answer an urgent desideratum, in that the target users can instantly be provided with lexica – while awaiting an unabridged electronic-corpus based main dictionary.

The feasibility of this new dictionary-making process was illustrated with two case studies taken from two different bilingual dictionary projects. The Cilubà case study indicated how two parallel dictionaries enabled the lexicographers to pinpoint and implement the target users' needs as far as a specific macrostructural treatment is concerned. The Sepêdi case study focused on a microstructural topic, and concluded that the suggested convention is a feasible one. At the same time the latter study brought to the fore that the teaching of dictionary skills should be considered part and parcel of the dictionary-making process.

We trust that these two small illustrations give an insight into the truly overwhelming possibilities offered by Simultaneous Feedback. Indeed, simultaneously channelling feedback from parallel projects into the main project provides lexicographers with the means to integrate all criticism into the very compilation methodology itself. We are consequently convinced that the concept of Simultaneous Feedback successfully provides present-day lexicographers with an inexpensive flying start and a tool for producing dictionaries compiled according to the latest trends and most modern approaches in lexicography.

References

[Atkins 1998a] **B.T. Sue Atkins** (Ed.): *Using Dictionaries, Studies of dictionary use by language learners and translators*, (Tübingen: Max Niemeyer Verlag) 1998

[Atkins 1998b] **B.T. Sue Atkins**: Some discussion points arising from Afrilex-Salex'98, (Unpublished course evaluation document, University of Pretoria) 1998

[Bennett 1986] **Patrick R. Bennett**: "Grammar in the Lexicon: Two Bantu Cases", in: *Journal of African Languages and Linguistics 8/1* 1986: 1-30

[Bogaards 1998] **Paul Bogaards**: "Scanning Long Entries in Learner's Dictionaries", in: Thierry Fontenelle *et al.* 1998: 555-63

[Chi 1998] **Man Lai Amy Chi**: "Teaching Dictionary Skills in the Classroom", in: Thierry Fontenelle *et al.* 1998: 565-77

[de Schryver/Kabuta 1997] **Gilles-Maurice de Schryver** and **Ngo S. Kabuta**: *Lexicon Cilubà–Nederlands*, (Ghent: Recall) 1997

[de Schryver/Kabuta 1998] **Gilles-Maurice de Schryver** and **Ngo S. Kabuta**: *Beknopt woordenboek Cilubà–Nederlands & Kalombodi-mfùndilu kàà Cilubà (Spellingsgids Cilubà)*, (Ghent: Recall) 1998

- [Fontenelle et al. 1998] **Thierry Fontenelle** et al. (Eds.): Actes Euralex'98 Proceedings, (Liège: University of Liège) 1998
- [Gouws 1999] **Rufus H. Gouws**: *Die maatskaplike gerigtheid van die metaleksikografie in 'n meertalige samelewing*, (Stellenbosch: Universiteit van Stellenbosch Drukkery) 1999
- [Hausmann/Wiegand 1989] **Franz J. Hausmann** and **Herbert E. Wiegand**: "Component Parts and Structures of General Monolingual Dictionaries: A Survey", in: Franz J. Hausmann *et al.* 1989-1991: 328-60
- [Hausmann et al. 1989-1991] Franz J. Hausmann et al. (Eds.): Wörterbücher / Dictionaries / Dictionnaires, Ein internationales Handbuch zur Lexikografie / An International Encyclopedia of Lexicography / Encyclopédie internationale de lexicographie, (Berlin: Walter de Gruyter) 1989-1991
- [Lombard 1994] **Frikkie J. Lombard**: "Lexicographer, Linguist and Dictionary User: An Uneasy Triangle?", in: *Lexikos 4* 1994: 204-14
- [Prinsloo/de Schryver 1999] **D.J. Prinsloo** and **Gilles-Maurice de Schryver**: "The Lemmatization of Nouns in African Languages with Special Reference to Sepedi and Cilubà", in: *South African Journal of African Languages 19/4* 1999: 258-75
- [Prinsloo/de Schryver 2000] **D.J. Prinsloo** and **Gilles-Maurice de Schryver** (Eds.): *SeDiPro 1.0, First Parallel Dictionary Sepêdi–English*, (Pretoria: University of Pretoria) 2000
- [Van der Merwe-Fouché 1999] **Michele Van der Merwe-Fouché**: The User Perspective in South African Lexicography, (Unpublished paper presented at the Fourth International Conference of the African Association for Lexicography, University of Pretoria) 1999
- [Wiegand 1989] **Herbert E. Wiegand**: "Aspekte der Makrostruktur im allgemeinen einsprachigen Wörterbuch: alphabetische Anordnungsformen und ihre Probleme", in: Franz J. Hausmann *et al.* 1989-1991: 371-409
- [Wiegand 1998] **Herbert E. Wiegand**: Wörterbuchforschung: Untersuchungen zur Wörterbuchbenutzung, zur Theorie, Geschichte, Kritik und Automatisierung der Lexikographie. 1. Teilband, (Berlin: Walter de Gruyter) 1998
- [Wolski 1989] **Werner Wolski**: "Das Lemma und die verschiedenen Lemmatypen", in: Franz J. Hausmann *et al.* 1989-1991: 360-71