Kinship terminology in English–Zulu/Northern Sotho dictionaries – a challenge for the Bantu lexicographer

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Abstract

The lemmatisation and treatment of kinship terminology in general dictionaries, and in learners' dictionaries in particular, is an established lexicographic tradition. However, due to the nature and complexity of kinship terminology in certain languages, comprehensive guidance is needed for the correct use of kinship terms especially for text and speech production purposes. In such cases the lexicographer plays an important role as the mediator between a complex kinship terminology system and the target user of the dictionary. The aim of this paper is to suggest strategies for the treatment of kinship terms in paper and electronic dictionaries with English as the source and Zulu/Northern Sotho as the target language. Zulu as well as Northern Sotho belong to the Bantu language family of Africa, and can be regarded as variations of the Iroquois type of kinship terminology system (Murdock 1949), a unilineal descent system which distinguishes between Father's and Mother's Kin.

In this paper, we firstly critically compare the kinship terminology structures of English and Zulu/Northern Sotho, and secondly evaluate the treatment (or lack thereof) in Zulu and Northern Sotho dictionaries. Given that in traditional paper dictionaries, it was not possible for lexicographers to do justice textually to the description of complex kinship terms, we suggest an innovative design for an interactive electronic dictionary with English as the source language and Zulu/Northern Sotho as the target that guides the user step-by-step through a sequence of selection processes utilising a decision tree algorithm, to the correct term. Such a design could result in a dynamic as well as a static system. Links to various types of corpora will not only ensure authentic examples, but also collocations and frequency of occurrence.

1. Introduction and aims

The need to lemmatise and to treat kinship terminology in general dictionaries, and in learners' dictionaries in particular is a given. No dictionary can afford not to lemmatise *aunt*, *brother*, *sister,* etc. The nature and complexity of kinship terminology, however, varies substantially between languages such as English, German and French on the one hand and the languages of the Bantu family on the other. The English-speaking learner of a Bantu language requires comprehensive guidance in the correct use of kinship terms especially for text and speech production purposes. In this case the lexicographer plays a crucial role as the mediator between a complex kinship terminology system and the target user of the dictionary.

The aim of this paper is to suggest strategies for the treatment of kinship terms in paper and electronic dictionaries with English as the source and Bantu languages as the target language. English-Zulu/Northern Sotho dictionaries will be taken as a case in point. Zulu as well as Northern Sotho belong to the Bantu language family of Africa, and are spoken in the South-Eastern Zone. First, a comparison between the kinship terminology structures of English and Bantu will be made, secondly, the treatment (or lack thereof) in Zulu and Northern Sotho dictionaries will be evaluated, and finally, a new design for an interactive dictionary guiding the user through a sequence of selection processes to the correct term will be suggested.

2. Methods, conventions and description of kinship structures in Zulu and Northern Sotho

The most prevalent classification of kinship terminology is that of Murdock (1949), who distinguished six broad types of general principles. These types are not regarded as exact blueprints for all terminology systems, however, the type with which the Bantu kinship structures correlate most closely, is the Iroquois system (de Beer et al. 1994:122). Some of the Iroquois principles reflected in the kinship terminology of Zulu and Northern Sotho are the following: a single term is used for two or more types of relatives, for example, the father's brothers are classified as fathers and the mother's sisters as mothers. Similarly, the children of the father's brothers and the mother's sisters can be addressed as brother and sister.

From an early age, a child speaking a Bantu language learns that a certain code of conduct towards relatives serves as guideline in interpersonal relationships. Such guidelines are related to the relevant kinship terminology. For instance, a person may, over and above his/her mother and father, have other mothers and fathers, for example in Zulu *ubabamkhulu* literally means 'big father' and refers to 'father's elder brother', while *ubabomncane* with the literal meaning 'small father' refers to 'father's younger brother'. In the case of societies that calculate descent in a unilinear way, the father's sister is often called *ubabekazi* 'female father' while the mother's brother is often called *umalume* 'male mother' in Zulu.

It should be noted that due to scarceness of dictionaries for African languages a single dictionary almost exclusively has to serve the needs of L1 and L2 users. For the purposes of this discussion we therefore do not distinguish between L1 and L2 dictionary users.

3. Complexity of Kinship terminology in Bantu

A family tree as illustrated in the *Macmillan English Dictionary* (MED) can be regarded as a structure of comprehensible complexity. This simply means that although it is complicated the extent for the learner is such that it can be lexicographically handled by means of sufficient lemmatic treatment of each of the relationships, for example a dictionary article for the lemma, etc. As in the case of for example fruits, vegetables, animals, etc. we believe it is good lexicographic practice to combat the decontextualisation resulting from an alphabetical ordering of lemmata by providing a plate, list, tree, etc. of the entire family tree in an appropriate place in the dictionary. This, for example was done in MED where kinship terms are treated in the dictionary article of the lemma and cross-referred to a dictionary internal address, a family tree.
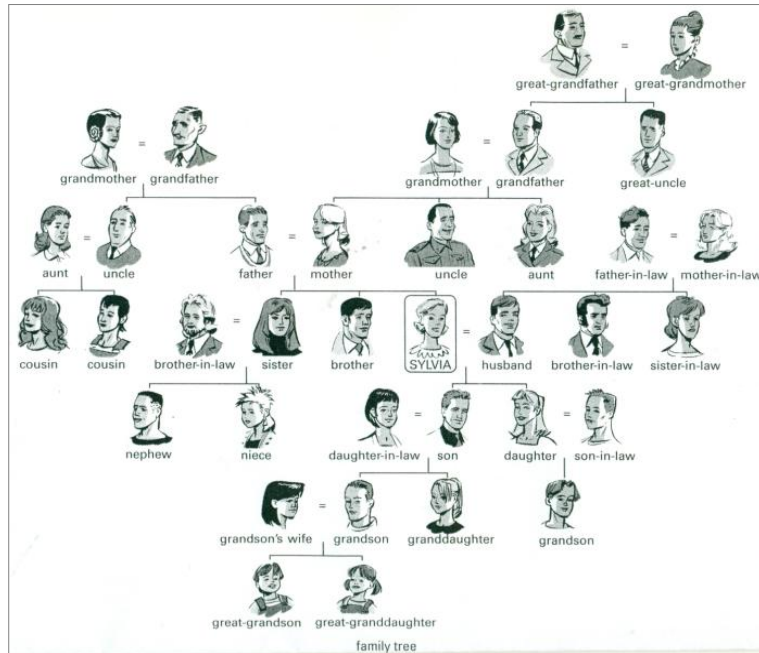
Figure 1. Family tree in MED (2007:502).

The family/relatives of EGO, Sylvia, in this case, is/are given and even illustrated by pictures reflecting relative age (children, young people, young adults and the elderly). Equal signs indicate a husband-wife relation and horizontal and vertical lines the relationship with EGO. All these conventions are appropriate and on the level of the target users of this dictionary, that is advanced learners of English. In comparison the family tree of Bantu languages, see Appendix, however, is extremely complex and cannot merely be handled in this way.

Complexity of kinship relations in Bantu lies on two levels. On the one hand it is true that some examples of complexity correspond to the gender neutral nature of English *cousin* and different generations in Dutch *neef,* and that such under-specification in which only a fraction of the biological distinctions are expressed by linguistic means, does not differ from non-Bantu languages. One could for instance argue that *cousin* could be further specified and described as a child of one's uncle or aunt and a distinction can be made between first cousin, second cousin, etc. in any language. In Bantu languages, on the other hand, in addition to such generic descriptions, for example, cousin or first cousin, specific and unique kinship terms exist for each of the relations, and that constitutes the core of the complexity of the Bantu system.

First, it is a much more complex system with distinction in terminology depending on the age of the person, for example father's older brother is called *ramogolo* and his younger brother *rangwane* in Northern Sotho. Secondly, distinctions are often based on the gender (male or female) of the speaker. For example, the father-in-law is called *ubabezala* by a Zulu-speaking woman, while the father-in-law is called *umukhwe* or *umkhwekazi* by a Zulu-speaking man, who also calls his mother-in-law *umkhwekazi* (Krige 1965:367). Thirdly, the same term can be used for people not belonging to the same generation, for example *rakgadi* is used in Northern Sotho to refer to father's older sister but also to father's brother's daughter. Fourthly, there are many instances where no distinction is made with regard to gender, for example *ugogo* (ancestor, great grandparent) and *ukhulukulwane* (great-great grand parent). This complexity is reflected for

example in the Northern Sotho kinship system that has a total number of 56 terms used by a man and his wife to refer to their parents, grandparents and great grandparents.

4. Equivalent relations

There are frequent instances where a suitable translation equivalent is not available. In most cases they do not constitute instances of referential gaps (the referent of a lexical item from language A is unknown to the speakers of language B) since the basic kinship structures of English, Zulu and Sotho are the same. However, a substantial number of lexical/linguistic gaps (users are familiar with a certain concept but one or more languages do not have a word to refer to it) occurs and have to be treated by means of surrogate equivalents in the form of glosses and paraphrases. Such lexical gaps can vary from reasonably basic, for example for *malome* 'my maternal uncle', to more diverse instances such as *kgaetšedi* 'younger sister of a brother or younger brother of a sister'.

5. Evaluation of current dictionary articles

Deficiencies in the treatment of kinship terminology are mainly twofold: kinship terms are either not lemmatised and treated, or they are incomplete and reflect a number of inconsistencies. Consider, for example, Doke et al. (2005:167) where father-in-law is given as: *umnawe, ubabezala, umukhwe*. In this particular article it is not specified that *umnawe* refers to the parent-in-law of one's son or daughter; that *ubabezala* refers to my father-in-law when a woman is speaking, and that *umukhwe* refers to my father-in-law when a man is speaking. The forms indicating father-in-law of the second and third person are not listed at all, that is (when a woman is speaking) *uyihlozala, uyisezala*. The article of mother-in-law in Doke et al. (2005:301), on the other hand, is complete: "… (i) (of woman) my: umamezala (1a); thy: unyokozala (1a); her: uninazala (1a). (ii) (of man) umkhwekazi (1)."

In Dent and Nyembezi (1969) the discrepancy between the treatment of terms such as uncle and aunt is conspicuous:

> "**uncle** (n) ubaba (my); uyihlo (your); uyise (his, her); umfowabo kababa (paternal u.); umalume, unyokolume, uninalume (maternal u.)."
> "**aunt** (n) umamekazi; ubabekazi."

In the latter article, the context of usage has been omitted altogether.

6. Interactive electronic dictionary linked to a corpus

To date, especially in paper dictionaries, it was not possible for lexicographers to do justice textually to the description of kinship terms by going much beyond the standard lexicographic devices such as exhaustive treatment of the lemma and a variety of cross-references to lists and trees of kinship terms and structures elsewhere in the dictionary to guide their target users. In

299

real complicated cases reference to dictionary external sources is often utilized. Viewed from a negative angle it means that the lexicographer surrenders the user to the mercy of a grammar book which can be very user-unfriendly or time consuming for him/her to find the right information by having to read entire sections of grammatical descriptions. It thus boils down to a strategy where the user has to study the entire structure instead of being guided through the structure to the required information. We believe that an interactive and dynamic electronic dictionary aimed at text production could guide the user in innovative ways, especially in respect of difficult, complicated or confusing issues such as kinship terminology. Guidance could be in the form of graphical trees or procedural boxes (Prinsloo et al. 2011). The lexicographer could even present more than one system to the target users: a static and a dynamic alternative. In terms of the Function Theory, e.g. (Tarp 2008) the static system could fulfil the cognitive needs and the dynamic alternative could address the communicative need of the target users. Both systems should preferably be tested by usability and user preferences. What is suggested here is a procedure of step-by-step guidance to productive use through a selection process utilising a decision tree algorithm. For example, the target user wants to look up the Northern Sotho equivalent for *aunt*. For English it would be rather straightforward for the lexicographer to give the required information, for example as in the MED "the sister of your mother or father, or the wife of your uncle". Consider the following example of guiding the user towards correctly addressing or referring to his/her aunt:

Level 1 selection boxes: Point of departure your own gender: male or female
Level 2 selection boxes: Point of departure: address the person or refer to him/her
Level 3 selection boxes: Choose the person's position in the family tree: eldest, older, younger, youngest, etc.
Levels 4, 5 (and lower) selection boxes: Additional information: zooming out to other kinship sub-trees or even the main tree, additional information about the target term or different uses of the target term.

Consider the following example of the actual envisaged step-by-step guidance, through a selection process by the user to correctly address his father's older sister:

Level 1

I am a boy |X|	I am a girl |__|

Level 2

I want to speak **to** my aunt |__|	I want to speak **about** my aunt |X||

Level 3

My aunt is:			
My father's:		**My mother's:**	
Older sister	|X|	Older sister	|__|
Younger sister	|__|	Younger sister	|__|
Older brother's wife	|__|	Older brother's wife	|__|
Younger brother's wife	|__|	Younger brother's wife	|__|

Level 4

<div style="border:1px solid">

MY FATHER'S OLDER SISTER
Rakgadi
Rakgadi yo mogolo
Click here for:
Additional information on a man's father's brothers and sisters |__|
Additional information on a man's wife's father's brothers and sisters |__|
Additional information: on kinship relation trees |__|
Other relations using Rakgadi |X|

</div>

Level 5

<div style="border:1px solid">

OTHER RELATIONS USING RAKGADI
My father's older brother's **daughter**:
Rakgadi e ka ba morwedi wa <u>ramogolo</u>
'Rakgadi can be the daughter of my father's elder brother'

My father's younger brother's **daughter**:
Rakgadi e ka ba morwedi wa <u>rangwane</u>
'Rakgadi can be the daughter of my father's younger brother'

</div>

Links to corpora can include raw text corpus data for additional authentic examples, processed corpora to indicate typical collocations, idioms and frequency of occurrence. Links could also be provided to terminology lists which could include tree structures, comparisons with other languages as well cultural differences.

7. Conclusion

Kinship terminology structures in Bantu languages differ remarkably from their counterparts in a language such as English, and therefore call for unique treatment in English-Zulu/Northern Sotho dictionaries. The core of the complexity of the Bantu system is constituted by the fact that, in addition to generic descriptions such as cousin or first cousin, specific and unique kinship terms exist for each of the relations. First, there is a distinction in terminology depending on the age of the person; secondly, distinctions are often based on the gender (male or female) of the speaker; thirdly, the same term may be used for persons belonging to different generations; and lastly, there are many terms which do not distinguish gender. An example of this complexity is the Northern Sotho kinship system that boasts a total number of 56 terms used by a man and his wife to refer to their parents, grandparents and great grandparents.

Against the background of these vastly different kinship terminology structures of English and Bantu, we focus on lexicographical challenges experienced with the treatment - either incomplete or inconsistent - or a total lack of treatment or lemmatisation of kinship terms in English-Zulu/Northern Sotho dictionaries. Given that in traditional paper dictionaries, it was not possible for lexicographers to do justice textually to the description of complex kinship terms, we suggest an innovative design for an interactive electronic dictionary with English as the

source language and Zulu/Northern Sotho as the target that guides the user through a sequence of selection processes, utilising a decision tree algorithm, to the correct term. Such a design could result in a dynamic as well as a static system. Links to various types of corpora will not only ensure authentic examples, but also collocations and frequency of occurrence.

Hopefully the framework for the design of an interactive and dynamic electronic dictionary dealing with complex kinship terminology, as outlined in this paper, will set the stage for further research on complex kinship relations in other related languages.

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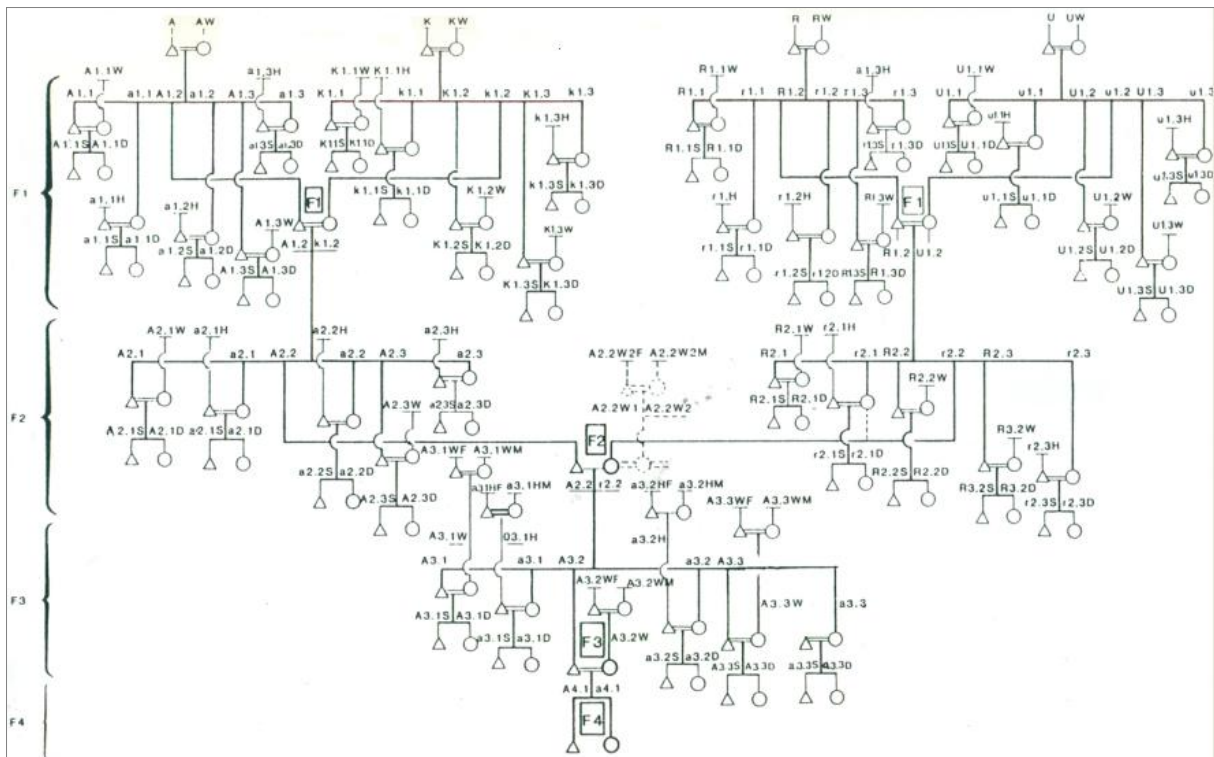
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Appendix: Diagram for paternal kinship terminology (Prinsloo and Van Wyk 1992: 45)

△	MALE	H	man (married)	A K R U – male (Capital letters)
O	FEMALE	W	woman (married)	a k r u – female (Lower case letters)
	STOP	S	Son	- - - - - EXTENTIONS
				-- -- -- RELATIVES
	MARRIAGE	D	Daughter	_____ PATRILINEAL BLOOD RELATIVES
	CHILDREN	F	Father	1ST FIGURE BEFORE THE FULL STOP e.g.
				A1. - - F1 generation
		M	Mother	2ND FIGURE AFTER THE FULL STOP e.g.
				a2.2 – SECOND DAUGHTER (in F2 generation)