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**THE STANDARDISATION
OF
AFRICAN LANGUAGES
LANGUAGE POLITICAL REALITIES**

CENTREPOL AND IFAS

PROCEEDINGS OF A CENTREPOL WORKSHOP HELD
AT THE UNIVERSITY OF PRETORIA ON MARCH 29,
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SOUTHERN AFRICA

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VIC WEBB (CENTREPOL)
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chapter five

Issues in scientific terminology in African / Bantu languages

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In 2006, the South African Department of Education initiated a pilot project in which the Matric or Senior Certificate papers for Science, Maths, Biology and History were translated into the nine official African/Bantu languages of the country. Grade 12 learners who use these languages as home languages therefore received a question paper containing questions in English, where every question was followed by its translation into the relevant language. Taking into consideration that these learners received their tuition in these subjects through the medium of English, the rationale behind this project was to assist learners in the decoding of the English questions by providing them with a translated version in their respective home languages.

Our discussion focuses specifically on the issue of the translation of technical terminology in the Sepedi papers¹, and is based on data collected for a research project aimed at evaluating the impact of this project on learners' performance, done under the auspices of *CentRePoL*².

Obviously, most of the terms used in the afore-mentioned subject fields do not have readily available equivalents in the African languages. The translator therefore has little choice but to create terms as he/she goes along, a practice which, in principle, is unsatisfactory, since term creation is the responsibility of a terminologist, and not that of a translator. In the South African context, it is however more often than not the task of the hapless translator him-/herself to provide the necessary equivalents.

Within the context of translation, term formation is usually of a secondary nature. Secondary term formation refers to the creation of a new term for a known concept, and typically takes place in situations where there is transfer of knowledge, especially scientific and technological knowledge from one linguistic community (in this case an English-speaking community) to another. Secondary term formation can be designed as well as engineered and is therefore more often subject to specific guidelines. International guidelines for term formation have been formulated by ISO, the International Standards Organisation, but these are at a very broad level of generality, and are in a practical domain, not very useful. Sager (1991,1990:89) points out that terms which express scientific and technical concepts, must fulfil certain conditions. He provides a list of 12 such conditions, but adds that these are highly idealised requirements that can only be realised in a highly-controlled environment. He also seems to suggest that language- and domain-specific guidelines may be formulated on an ad hoc basis. To my mind, this is an important aspect, which has not yet been given the attention

1 Further envisaged by Pare in this volume

2 See introduction for more on *CentRePoL*.

it deserves within the realm of African languages. There is, at this stage, a serious need for language specialists to formulate language-specific guidelines for term formation. This can only be done in collaboration with subject field specialists and must obviously be in keeping with general international guidelines.

When creating term equivalents, the translator needs to be at least cognizant of the following guidelines, which aim at assisting in the creation of terminology acceptable to both linguists and special field subjects:

- There should be a one-to-one relation between any given term and the concept it represents, i.e. any term should ideally refer to one concept and one concept only. This implies that there should be no synonyms and no morphological or spelling variants for any specific term.
- Terms referring to closely-related concepts should also be similar in some way, in order to reflect the similarity between the related concepts. Conversely, concepts not closely related should be expressed by terms that differ markedly in appearance and sound.
- A term should conform to the morphology, spelling and pronunciation conventions of the language for which it is intended.
- Without sacrificing precision, terms should be concise and not contain unnecessary information. Formal economy should thus be strived for in the creation of terms.
- A term should be more or less self-explanatory, i.e. transparent.
- The meaning of a term should be independent of context.
- A term should be capable of providing derivatives.
- Once a term has gained general acceptance, it should not be changed without compelling reason and a strong certainty that the new term will be accepted as a full substitute.

Term creation is often a trade-off between two or more of these guidelines. In some cases, for example, transparency needs to give way to formal economy – a term that is transparent is often long and unwieldy, which could negatively influence its acceptance in the linguistic community. In such a case transparency needs to be sacrificed in favour of formal economy. Cf. for example the Sepedi term *lelahle la mohlagase la khemikhale* (the battery of electricity of chemical) for ‘electrochemical cell’, which might be transparent, but definitely not economic.

In the creation of terms, there are a number of term translation/creation strategies which African language translators/terminologists can use. These are divided into language-internal term formation processes and borrowing from other languages.

- Language-internal term formation processes include:
 - **Semantic transfer**: this is the process of attaching new meanings to existing words by modifying their semantic content.
 - **Paraphrase**: a paraphrase is a short description or explanation and represents a very productive way by means of which terms are formed in the African languages.
 - **Compounding**: compounding is closely related to paraphrasing. Compounding is the process whereby a new term is coined by combining existing words or lexical items.

- Borrowing
 - **Loan words**: so-called loan words are words that have been borrowed as wholes and their meanings have been retained intact; they exhibit a varying degree of adaptation on the syntactic, morphological, phonological and tonological levels. **Transliterations** and **adoptives** are words that have been completely adapted to the target language, i.e. on the syntactic, morphological, phonological and tonological levels.

- From the analyses of the translated question papers done by language specialists of the various languages at stake, it was apparent that the translators made use of the whole spectrum of term creation strategies. From these analyses, it became clear that the use of transliterations as a term creation strategy was a contentious issue and the topic of much, and sometimes heated, debate. Transliteration as a term creation strategy has its benefits but also distinct disadvantages. On the positive side, transliterated terms are readily available since nothing more is needed than the necessary morphological and phonological adaptation of the term in the source language. Secondly, they display at least a morphological similarity with the source term – a feature that is often mentioned as a consideration when reference is made to guidelines for term formation. On the other hand, it is argued that a transliterated term is of little value in cases where the target user has not yet internalised the concept represented by the term, since transliterated terms provide no clue to conceptual content. Furthermore, in some sectors of linguistic communities, the use of transliteration as term formation strategy is frowned upon, and such terms are regarded as spoiling the purity of the language.

REFERENCE

SAGER, J.C., 1990, A practical course in terminology processing, Amsterdam/ Philadelphia, John Benjamins.