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Michel Lafon, Vic Webb

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

CENTREPOL AND IFAS

PROCEEDINGS OF A CENTREPOL WORKSHOP
HELD AT UNIVERSITY OF PRETORIA ON MARCH 29,
2007, SUPPORTED BY THE FRENCH INSTITUTE FOR
SOUTHERN AFRICA

MICHEL LAFON (LLACAN-CNRS) &
VIC WEBB (CENTREPOL)
COMPILERS/ EDITORS

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Under the supervision of appointed editors, each issue covers a specific theme; papers originate from researchers, experts or post-graduate students from France, Europe or Southern Africa with an interest in the region.

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IFAS – Research
PO Box 542 – Newtown 2113
Johannesburg – RSA
Tel: +27 (011) 836 0561
Fax: +27 (011) 836 5850
Email: secretariatrecherche@IFAS.org.za

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foreword

MICHEL LAFON, LLACAN-CNRS
VIC WEBB, CENTREPOL,UP

In all human communities, education is crucially important: taken in its broadest meaning, it is, ultimately, the strategy through which the youth is groomed to, eventually, take over the community destiny, and allow it to maintain and further its existence. Education therefore shapes the character of communities and their performance in the future.

With the growing globalisation process, there is a tendency to limit the concept 'education' to school education. This is particularly so in South Africa, even though 'traditional' education, as instanced in, *inter alia*, initiation schools, is maintained in some communities at least. This emphasizes the importance that, for better or for worse, school education now assumes in the country.

Indeed, since the advent of democracy, the SA government has placed (formal or school) education at the core of the transformation process. While ensuring general access to primary education, which was not effective under the previous dispensation, government has been adamant in its resolve to make education at all levels, particularly in scientific domains, accessible to all those to whom it was previously denied. Beyond social justice and equity, the government's avowed objective is to train highly qualified experts from among the African or black communities, to ensure that the transformation process is carried across the full breadth of the SA society.

Given these premises, it is only natural that (formal) education in the new SA has been a sustained field of research at IFAS (the French Research Institute in SA), since its creation in 1995. Such research has been supported in the form of individual grants or funding for collaborative programmes. IFAS first sponsored Ingrid Bamberg, a PhD candidate, who investigated several KZN schools as a microcosm of SA society. In 2002, IFAS, in collaboration with other French stake-holders (the IRD & the IIEP with funding from the French Embassy) joined forces with the Gauteng Department of Education to hold a large conference on Education and Decentralisation¹. IFAS also contributed to the extensive research conducted by a French education expert, from Picardie University, Prof. Claude Carpentier, which resulted in several publications, among which a richly informed book on the education system under transformation in 2005, and a recent one on inequalities². A research programme on 'the role of schools in the construction of a democratic, participative and multicultural model in SA' coordinated by SA and French experts (Vijé Franchi

¹ The proceedings were published by the GDE in 2002, under the title *Education and Decentralisation. African Experiences and Comparative Analyses*, 334p.

² CARPENTIER, Claude (2005). *L'école en Afrique du Sud entre fantômes de l'apartheid et contraintes du marché* Paris, Karthala; CARPENTIER, Claude (2008). *La politique scolaire sud-africaine face aux inégalités* Paris, L'Harmattan.

and Jean Paul Payet, from the French CNRS (Urmis) and Lyon-II University respectively), has already yielded a number of papers.

Within this context, it is not surprising that a collaborative programme linking a French CNRS research team dedicated to African languages (Llacan-UMR8135), and the University of Pretoria's Centre for Research in the Politics of Language (*CentRePoL*) was accepted as an IFAS programme in 2007, after IFAS had supported a preliminary phase from 2005. This programme considers the role that African languages can play in education - a major issue in the SA education system³.

Indeed, despite all government efforts to broaden access to education, it has, as yet, failed to reverse the trend whereby outcomes, notably national Grade 12 results, reflect learners' racial backgrounds, with Africans being the most prejudiced.

After socio-economic circumstances, language has been identified as the main factor underlying this sorry situation⁴. How to address this issue, however, is neither univocal nor fully apparent.

Extensive research world-wide supports the view that education in the mother-tongue, or at least in a language with which the children are adequately familiar when they set foot in class, is much superior to education provided in a language which is not used in the homes and which learners first experience as a sustained medium of communication on their first school day. In SA, this implies that African languages, mother-tongues of the majority of learners, should be used for those learners.

This collection of papers, which were presented at a workshop held at the University of Pretoria in March 2007 under the guidance of *CentRePoL* and IFAS, broadly assumes this position and considers various issues in this regard. The implementation of such a policy is indeed no easy feat, particularly beyond the very first 3 to 4 years dedicated to the initial acquisition of literacy and numeracy.

Vic Webb discusses the crucial notion of 'fully-fledged standard languages': SA African languages do have recognized standard varieties but these lack broad acceptance within the various sectors of their respective speaker communities, and this constitutes a serious impediment to their use as language of teaching and learning.

³ More information on IFAS programmes can be gleaned from the IFAS research website (www.ifas.org).

⁴ From an Umalusi document : LOLWANA, Peliwe (2005). *Where to with Matric? Matric, what is to be done?*, Umalusi, Council for Quality Assurance in General and Further Education and Training.

The issue is powerfully illustrated by Sue Cook's article. Using Setswana as an example, she shows that the forceful imposition through the school system of a standard variety that differs markedly from people's own, and diverse, practices, and the lack of any degree of official sanction for those, amounts to a negation – an erasure in her own terms - of their own identities. As a result, the future of the said standard language is bleak, as English is taking over the functions that the primary language was intended to assume.

This point is further visited by Michel Lafon in his questioning of a recent recommendation by the Education Minister that confines the use of African languages as Languages of Teaching and Learning to 'underprivileged' (ex-DET) schools, even when schools belonging to other social categories (ex-model C) have become totally or overwhelmingly African in their enrolment. His main point is that this is not the way to enhance their use amongst those who would need it most, and that, to succeed, such a strategy should be accompanied by the active and, he argues, compulsory promotion of African languages in the school system as a whole.

Using a comparative study of learners' performance in three schools from the same neighbourhood (Atteridgeville township in Tshwane), but with differing language policies and practices, Elizabeth Pretorius seemingly challenges the common sense idea that literacy is better acquired in the mother-tongue: her paper is a salutary reminder that language cannot be dissociated from the socio-economic conditions of the speakers and the socio-political context in which it is evolving.

Elsabe Taljard briefly discusses the issue of scientific terminology in African languages, which is further illustrated by Phillip Pare. Drawing from his experience as a physics lecturer at the University of Pretoria, he shows there is no ready-made recipe, and that the recourse to African language texts in science matters can be of help provided it comes as a support to the English text, rather than as its substitution.

Language policy management and implementation are the topics of two papers: Joe Rammala looks at a recent addition to the SA language scene, that of the Language Research Development Centres, and stresses the impressive performance by the Sepedi / Northern Sotho centre. Marcel Diki-Kidiri reviews some of the players at the continental level, reminding us that the promotion of African languages is gaining momentum within Africa as a whole.

We feel that these contributions represent, in their diversity of approach and arguments, a valid – if non-exhaustive - contribution to a crucial debate.

On such burning issues as the possible role of African languages in education, it is particularly appropriate to emphasize that the views expressed in this volume are not necessarily shared by the scientific editors or the different contributors, even less so by IFAS and its patrons. IFAS and the French Ministry of Foreign Affairs (of which IFAS is an institute), certainly wish for every improvement in the outputs of the SA education system, but, as foreign entities, they also refrain from direct suggestions or recommendations as to what should be done. Beyond the legitimate authorities, this remains the preserve of individual experts in the field, writing in their own capacity.

The editors of this volume undertook only minor editing. No attempt has been made to harmonise the terminology used by the different contributors. In particular, for the sake of clarity, terms whose shades of meaning and degree of acceptance changed over times such as *Africans*, *Blacks*, *Whites*, *Bantu* (languages), etc, are used according to each author's specific purpose. The same goes for concepts such as *mother-tongue*, *primary language*, *home language*, etc, as well as *medium of instruction*, *language of learning and teaching* and *language of study*. We also left each author free to choose the way to refer to South African African (Bantu) languages, viz., with or without the class prefix (Setswana or Tswana, isiZulu or Zulu, etc). In no case, should anyone construe any usage herein as implying a derogatory meaning or an offensive intention by any party to this collective book.

We thank once again all contributors for their efforts, as well as IFAS research director Aurelia Wa Kabwe-Segatti for her continued trust and unflinching support that made this publication possible.

This publication is dedicated to the people of South Africa for their resilience during a history in which, since 1652, violent domination has been more frequent than peaceful coexistence and collaboration. Their courageous faith in humanity and their innate trust in the legitimacy of their own ways remain an example to all and amply justifies the concern for the languages they so vigorously maintained in the face of so much adversity, a concern which underpins this publication.

THE EDITORS

Some abbreviations used throughout the volume:

ACALAN: Académie Africaine des Langues/ African Academy of Languages

AL: African Language

BE: Bantu Education

DAC: Department of Arts and Culture

DACTS: Department of Arts, Culture, Science and Technology

DET: Department of Education and Training

DoE: Department of Education

LoL/T: Language of Learning and Teaching

LoS: Language of Study

LRDC: Language Research and Development Center

MT: Mother-Tongue

MTE: Mother-Tongue Education

NLB: National Language Body

NLPF: National Language Policy Framework

NLS: National Language Service

NLU: National Lexicography Unit

PANSALB: Pan-South African Language Board

PLC: Provincial Language Committees

SA: South Africa

chapter one

Overview of issues at stake

The research project *The Standardisation of African Languages in South Africa* began in July, 2005, with a three-day workshop involving eight of the National Language Bodies¹ responsible for the Bantu² languages³. The workshop had the financial and administrative support of the Pan-South African Language Board (PanSALB). The papers presented at the workshop were published later in 2005 in PanSALB's Occasional Papers (Webb et al, 2005).

In March 2007, a second workshop took place. The papers delivered at that workshop form the basis of this publication. A third workshop is being planned for 2008.

The standardisation project forms part of a larger venture of *CentRePoL*, viz. to contribute to the promotion of the minoritised⁴ official languages of South Africa and the establishment of multilingualism as a meaningful reality in the country.

The project is based on the concept of *fully-fledged standard language*, and its aim is to contribute towards the development and promotion of the South African Bantu languages into fully-fledged standard languages.

The nine official Bantu languages of South Africa, as we are all aware, have all been standardised to a significant extent, and there are clear norms for writers to follow. However, we also know that these standardised varieties have not been *generally accepted in all high-function contexts*, in particular in schools, that learners (and probably even teachers) do not know these varieties effectively (that is, they do not have the required communicative

1 The Setswana National Language Body declined an invitation to participate.

2 The term *Bantu* languages is used because it is the correct technical name for this family of languages, and is the term professionally used outside South Africa. Since this publication is mainly directed at an international reader audience, this is the term that will be used in this chapter. In South Africa, the concept is stigmatised due to the association of the term Bantu with racism. In local language discussions the term *Bantu languages* is thus avoided, and the term *African languages* is used.

3 The NLBs for Afrikaans, English, the Khoesan languages and SA Sign languages participated of their own accord.

4 The term *minoritised language* must obviously be distinguished from the terms *minority language* (such as French, German, Gujarati, Hindi and Shona in South Africa) and *minor language* (such as Venda and Swati in relation to the other national official languages of South Africa). A minoritised language is an official language which has been denied its status in terms of "equity" and "parity of esteem" as a result of the covert or overt actions of powerful socio-economic and cultural forces.

competency in them) and that they are consequently not used effectively. That is: although considerable corpus development has been undertaken, status, acquisition and usage development still needs to take place to the required extent. As evidence of this, one can take note of the disagreements at the 2005 workshop about the relative roles of rural and urban varieties of the Bantu languages and the degree to which urban ways of speaking (for example Zulu in Soweto) should receive recognition as part of the standard.

The March 2007 workshop was designed on the basis of the argument that language development and promotion (including its standardisation) can not be undertaken if it is not clear what the (socio-) linguistic realities pertaining to each language are. In order to undertake language development it is essential to know as precisely as possible what the current state of a language is regarding its linguistic capacity; its social meaning for the community and for persons outside the community; the competence of first-language speakers of the language in the standard variety and their use of it. Given that knowledge, and given a proper understanding of standardisation and its processes, it is possible to undertake corpus development, status development, prestige development, acquisition development and usage development. The objective of the second workshop was thus to contribute towards determining these realities.

The following topics were dealt with:

- Linguistic realities in Tshwane schools
- Technical terminology in experimental bilingual Grade 12 exam papers
- Literacy and the Bantu languages
- Standard varieties, urban vernaculars and identity in African language communities
- The language of instruction issue

In addition to these issues, the workshop also sought information on language development agencies in South Africa. These agencies are mainly the following: the National Language Service in the Department of Arts and Culture, the Language Research and Development Centres (LRDCs), and PanSALB (NLBs, PLCs and the Lexicography Units).⁵

The following questions were asked of these agencies:

- What are their functions and tasks?
- How do they operate?

5 Not included in the workshop, but obviously of importance, are other governmental organisations (such as the bodies responsible for translation and interpretation at national, provincial and local levels of government), statutory institutions tasked with quality control (such as Umalusi), language academies (e.g. for Setswana), private language agencies (e.g. Afrophone Translation and Interpreting Services), language associations (such as ALASA and Afrilex), non-governmental organisations (such as Project Literacy and Read), language practitioners (also, for example, in private financial institutions) and language watchdogs in the publishing industry (editors) and the print and electronic media.

How are they structured?

How are they composed – what is their membership?

What products / outcomes have they produced?

Have they proved to be effective?

Is there sufficient co-operation between the different agencies in the interests of the common goal?

In addition, a contribution was made about international and continental language development agencies (from Unesco to Acalan).

The third workshop, being planned for September 2008, is intended to deal with *The standardisation of African languages* and their use in education. The workshop will be presented by PanSALB, and it is hoped that the Department of Arts and Culture, the Department of Education and Umalusi will also participate.⁶

Topics envisaged to be discussed include the following:

- (a) Tasks in the standardisation of the Bantu languages as fully-fledged educational languages, with reference to matters such as:
 - (i) Orthography and spelling
 - (ii) Scientific terminology
 - (iii) Tension between rural and urban forms of language (with particular reference to the linguistic realities in urban classrooms, in which urban vernaculars such as Pretoria Sotho seem to be used frequently – as demonstrated in one of *CentRePoL's* research projects)
 - (iv) The production of educational material: normative grammars, dictionaries and literature for study purposes
- (b) The production of literary work in the Bantu languages
- (c) The use of Bantu languages as media of instruction for grades higher than 3 or 4 (possibly in the context of bilingual education in a dual medium system or a parallel medium system)
- (d) The appropriate language norms for assessment in Grade 12 examinations

It is hoped that the proposed workshop will contribute substantially to PanSALB's central task: the promotion of the official languages of South Africa, in particular the former disadvantaged languages, and thus to the gradual establishment of equity and parity of esteem between the 11 official languages, that is: the meaningful linguistic transformation of South Africa.

6 The scientific co-ordination of the workshop is being managed by Prof. Vic Webb of *CentRePoL*, and Dr. Michel Lafon of Llacan-IFAS.

Given the focus of the project, some remarks about standard languages and their role in the public life of their speech communities are necessary.

Firstly, one has to deal with the question why the Bantu languages should be developed into fully-fledged standard languages. Could one not argue that the present degree of standardisation is adequate, that is: norms have been prescribed which are followed by publishers of school textbooks and by the editors of radio and television news, newspapers and by people who compose or translate public documents? Could one not further argue that, as regards language use in the legislatures of the country, public addresses by political and other leaders, the courts, annual reports by business corporations, and so on, that English is clearly the appropriate language to use and that the Bantu languages need not be used in these contexts? And finally: why can't we accept that teachers and learners use urban vernaculars and code-switching in classroom discussions? After all, the main issue in classroom discourse is that learners and teachers understand each other and can enter into dialogue.

The stance in this project is that all three these "arguments" are invalid, and that the development of fully-fledged standard languages is necessary for the following reasons:

- That it is highly unlikely that the majority of South Africans will acquire the necessary English language proficiency in order to attain meaningful access to educational, economic, political and social participation in South Africa. In this regard, one needs only to consider that English has been a school subject for more than a century in South Africa without the necessary success, and that a large percentage of South Africans do not have the exposure to English necessary to support their acquisition of it;
- That the use of English as medium of instruction (MoI) has been, still is and will continue to be, a serious obstacle to the educational development of many black learners;
- That there is a clear and generally accepted link between developed languages (read: languages with "fully-fledged standard varieties") and the intellectual activities of their speakers: A "developed language" is a language with a strong tradition of works of literary value, and is able to function effectively in discussions about issues at the highest levels of abstract thought;
- That there is similarly a clear and generally accepted link between the status and prestige of a language and the degree of self-esteem, emotional and social security of the members of its speech community;
- That the development of a democracy and of national unity in South Africa is directly dependent on its citizens' access to meaningful political participation at all three levels of government, which will only happen if the languages of these citizens are the languages which facilitate such access; and

- That the promotion and development of the (currently still) disadvantaged languages of South Africa are prescribed by the constitutional language stipulations.

A second necessary remark is that it is necessary to indicate how the basic terms in the project are understood.⁷ In the following discussion, extended use is made of *A dictionary of sociolinguistics*, compiled by Swann et al. 2004

The phenomenon *language X* (say “Zulu”) is generally difficult to describe, since the (linguistic) boundaries between languages are very often not clear. For example: where does the boundary between Zulu and Xhosa lie? Similarly, Afrikaans and Dutch are linguistically quite close to each other, but they are regarded and treated as different languages. And are British English, Nigerian English and American English the “same” language? The phenomenon “language” is often a political issue.

Linked to this is the fact that “*languages*” (specifically living, dynamic languages) are never homogeneous. They are generally collectivities of many varieties – different styles (formal and informal), different group varieties or dialects, and different registers (legal registers, academic “language”, medical ways of speaking). For the purpose of this publication, the term *language* is used to refer to all the varieties collectively understood to constitute a particular “language”. The language “Zulu” is thus a collection of the Zulu spoken in rural and urban areas, during traditional rituals, by older people and by younger people, in courts and in the privacy of homes and possibly also by urban street gangs.

Thus: languages are collections of varieties. However, the reverse process: allocating varieties to “languages”, is often not easy. For example: is Iscamtho a variety of Zulu? And should Pretoria Sotho be seen as part of Tswana or Northern Sotho? And where does Tsotsitaal and Flaaitaal belong? Or: should certain varieties rather be considered as languages in their own right?

Another concept to be discussed is *standard language*. A standard language is very often regarded as “a relatively uniform variety of a language which does not show regional variation, and which is used in a wide range of communicative functions ... Standard varieties tend to observe prescriptive, written norms, which are codified in grammars and dictionaries. ... Standard languages may ... be regarded as idealised varieties.” (Swann et al, p. 295).

As pointed out above, in this project the term *standard language* is used to refer, in addition to the meaning given in the previous paragraph, to a ‘fully-fledged standard

⁷ It is possible that other contributors to this volume may use these terms with differing meanings.

language”, that is, a variety which is accepted in the language community as the appropriate form of language for use in high-function formal contexts (such as teaching, government announcements, legislation, courts, etc.), is taught in schools and is therefore known by educated members of the community. In addition, standard languages also have a strong link with written language: in linguistic communities with a strong tradition of written forms – dictionaries, grammars, newspapers, literature, etc., that is, in highly literate communities, the standard variety is generally a fully-fledged variety.

In the preceding paragraphs the terms *variety* and *language* have been used, but without clear distinction. A language, as was pointed out, is a collection of varieties, and a variety is a separately identifiable form of language, which together with other varieties makes up a language. In this terminology it is therefore erroneous to speak of a standard *language*, since the standard form of a language is only one of the constituting varieties of a language. We should, linguistically seen, therefore rather use the term standard *variety* instead of standard *language*.

Finally: the term *vernacular*, sometimes used derogatively to refer to Bantu languages, means “relatively homogeneous and well-defined NON-STANDARD variet(y) which (is) used regularly by particular geographical, ethnic or SOCIAL GROUPS and which exist(s) in opposition to a dominant STANDARD variety ...The vernacular is used when talking to friends and family in informal contexts.” (Swann et al. 2004: p. 327). In this publication the term *vernacular* will not be used in its derogatory meaning.

A third matter to discuss is the need to be clear about the role of standard languages in the life of a community.

As pointed out above, a standard language is only *one* of a number of the varieties of a language. The mistake is often made to view standard languages as more important than other varieties (such as dialects and even urban vernaculars), and to regard them as the general “norm” for “appropriate” linguistic behaviour, as “proper” language, as the “correct” form of a language.⁸ Such a view is mistaken. As pointed out above, all the varieties of a language are

8 African language practitioners are sometimes heard to refer to particular forms of their languages (usually the variety they accept as the “standard”) as a (or even *the*) *pure* form of the language, whilst referring to urban forms or varieties as “adulterated”, “degenerate”, “corrupt”, “impure”. From a sociolinguistic perspective this stance is not justified. As pointed out lower down, members of speech communities have quite differing cognitive, social, affective and creative needs that need to be expressed through language, and this they do by making use of the diversity available in their languages. Linguistic diversity is an essential property of all languages (or, theoretically) seen: a “design feature”. Furthermore, no living language is without influences from other languages.

appropriate in particular contexts – in particular situations, in particular social groups or during the performance of particular activities. It would, for example, be inappropriate (improper, incorrect) for participants in a street brawl to use standard language, or for members of a funeral procession to use Tsotsitaal.⁹ The basic point is that communities have a large variety of needs, need to perform very many different communicative functions with language, that individuals have to give expression to a large variety of personal and social identities, and operate in diverse contexts, and therefore they need a (linguistic) instrument that will allow them to function in diverse ways in different contexts. Human languages are per definition, by design, highly diverse, highly heterogeneous tools. The standard variety of a language is thus of *relative* importance.¹⁰

Cook, in this volume, discusses the impact of an overestimation of the standard language on the linguistic character of a speech community, arguing that such a development can “silence”, “erase” linguistic diversity. This is quite possible, of course, if the public role of “standard languages” is misunderstood.

A further skewed perception about standard languages is that they are necessarily linked to nationalism, and that their promotion will somehow lead to a heightened ethnolinguistic awareness among their speakers, which may ultimately feed into a drive towards the promotion of own interests, eventually resulting in separatist movements. This is possible, one supposes, and may have happened in particular societies. However, the development of ethnolinguistic nationalism cannot be ascribed solely to the promotion of a community’s standard language. There are too many other variables in nationalistic language movements.¹¹

Still, the importance of the standard variety of a language must also be kept in mind. As the appropriate variety in high-function formal contexts, in particular as a written

9 Language practitioners sometimes make the mistake of assuming that only the standard variety of a language is “normalised”, that is, has “norms” (practical guidelines for appropriate behaviour). All varieties of a language have norms, as the example in the text points out. The difference between the norms of the standard variety and those of the other varieties is that the former are generally formally specified, for example, by an authoritative body appointed to perform the task of describing/prescribing the norms of the standard. Standard varieties are generally externally “constructed”. The norms of other varieties generally develop “spontaneously”, through the “decisions” of the different groups in a speech community. (For more views on the “constructedness” of languages, see Makoni, 2003. See also Alexander, 1989, who supported the notion of harmonised Nguni and harmonised Sotho.)

10 For discussions on vernaculars and related issues, see the important work of Schuring 1985; Malimabe 1990; Ntshangase, 1993; and Calteux 1996.

11 It is true though, that a fine balance must be established and maintained between promoting a language through the promotion of its standard variety, the promotion of multilingualism and linguistic diversity, and the use of languages for achieving sectional political aims.

form, the standard language must be accepted as the proper and appropriate target in first language study, and the aim of first-language teachers must be the development of learners' skills in using the standard variety in as many types of high-function formal contexts as possible. Furthermore, in so far as communication in school classrooms is in an African language, such communication should be in the standard form of the language, and not in an urban vernacular. Learners' linguistic skills in the standard variety of their primary languages must also be developed in content subjects, i.e. across-the-curriculum.

A final issue to be dealt with is the stages of the standardisation processes.

Based on the report on the first workshop (Webb et al, 2005), the following remarks can be made regarding the standardisation processes in the Bantu languages in South Africa:

- (a) The primary phase in the standardisation of the Bantu languages, viz. the selection and determination of (phonetic, morphological, syntactic, lexical; spelling and writing) norms (generally referred to as *corpus planning*) seems to be well underway, being handled by the National Language Bodies under the guidance of PanSALB. Particular attention is also being paid to the development of technical terminology and registers. For a discussion of issues and problems regarding the development of technical terminology in the Bantu languages, see Taljard and Pare in this volume.
- (b) There are, however, a number of problems. Particularly notable is the continued tension between rural and urban varieties. In discussing this matter, the 2005 workshop proposed that an "inclusive" approach, which was also called a "polycentric approach", be followed, that is, that linguistic features from more than one constituting dialect should be recognised as standard norms. It was argued that it was important that the selection and determination of norms do not alienate constituent communities. The notion of a standard language as exhibiting *flexible stability* was proposed, i.e. that standard languages allow for some degree of variation/linguistic pluralism. A significant corollary to this approach is that urban dialects, such as the Zulu of Soweto (so-called Gauteng Zulu), be recognised and accepted as varieties with their own integrity¹²
- (c) As regards the other phases in the standardisation process, several tasks still require serious attention. The Constitutional language stipulations and the language policies at various levels and domains of government and at numerous institutions (such as universities) have established the *status* of the Bantu

12 Lafon, 2005, proposed that Gauteng Zulu be formally recognised in the development of a fully-fledged standard Zulu, particularly given the demographic and economic significance of communities in Soweto.

languages; however, as Lafon demonstrates in this volume: these languages do not yet have the prescribed status in language policy practice, for example as languages of study in the South African school system. Similarly, regarding the use of these languages, a large amount of developmental work also needs to be done, as Pretorius shows with respect to the field of literacy.

- (d) Important phases in the development of the Bantu languages as fully-fledged standard languages are the process of promoting their acceptance by the community, developing speakers' proficiency in them (typically through the formal education system), and encouraging their wide-spread usage. These phases currently need serious attention (and will be one of the central issues to be discussed in the proposed third workshop, planned for 2008). A crucial requirement in these phases of the process is that they should be handled within a consultative and participatory approach, that is, a "bottom/up" approach, involving the speakers in the decision-making process. As Rammala demonstrates with reference to the Sepedi/Northern Sotho LRDC, the LRDCs will hopefully contribute meaningfully to the implementation of these phases of the standardisation processes.
- (e) Linked directly to the previous matter, is, of course, the larger problem, namely addressing the negative attitudes to the Bantu languages. Important in this regard is establishing support for the standardisation process among the intellectual leaders of speech communities: teachers, church leaders, community leaders, writers, politicians, etc.

Changing negative attitudes to the Bantu languages in South Africa is a very complex and challenging matter, and various aspects need to be given attention. The primary requirement is that these languages attain value, in particular economic, intellectual and social value. Putting it simply, economic value means obtaining economic advantage through the use of a language: being awarded a business contract through a Bantu language being used in striking the deal, selling products (such as newspapers, television programmes, DVDs), getting a job, and so on. Another requirement is that the Bantu languages be used for intellectual purposes, for example in writing, besides school text-books, literary work such as novels and poetry, newspaper articles, tertiary textbooks, philosophical treatises, religious theses, scholarly journals, etc. Accompanying the acquisition of economic and intellectual value will be the acquisition of social value. In such ways, Bantu languages will develop into badges of high social standing.

Besides the important question of *what* the promotion of a language involves, is the question of *how* language promotion occurs. A good local example of this process is Afrikaans: a 150 years ago, Afrikaans was generally regarded as “a mere vernacular” (in the negative sense of the word), used only in the lowest social functions, was without a writing system and had no literature. Gradually, however, it became used as an instrument in the struggle against the imperialism of the British colonial government and against the Dutch-oriented elite’s preference for Dutch (and English) in high-function contexts (such as the church and education). A number of teachers and church ministers then initiated a movement directed at the development (corpus planning) and promotion (status and prestige planning) of Afrikaans. Gradually, a feeling of pride in and loyalty to Afrikaans developed, and within about 60 years Afrikaans was recognised as a language of the public domain: used in the church, recognised alongside Dutch as a language of the state (in 1925), and used in courts and in schools. Today, as we know, Afrikaans is a fully-fledged standard language.

The political developments over the past 60-70 years (apartheid and the use of language for division, discrimination, manipulation and subordination), mean, of course, that the promotion of the Bantu languages can not be handled in the same way as Afrikaans though being in a far stronger position than Afrikaans was 150 years ago. Afrikaans was strongly supported by the development of Afrikaner nationalism, which, today, in the case of the Bantu languages, could conceivably lead to conflict if an excessive degree of ethnolinguistic nationalism developed in the course of their further development. However, there are some lessons which could profitably be learnt from the language political history of Afrikaans, for example: that language promotion is directly linked to language pride and loyalty, and secondly, that it is largely a bottom/up process – language promotion requires the support of its speakers. A public movement, driven by a dedicated community leadership, is required.

Directly linked to the issue of language promotion (as mentioned: largely a bottom/up process) is the question: Who must handle language standardisation?

Although standard languages can be developed by the leaders in a community (i.e. bottom/up), for example through the initiative and leadership of lexicographers, the process is often managed by bodies formally appointed to fulfil this task (i.e. by authoritative intervention).

In the case of the Bantu languages, missionaries and (later) educational authorities established language “boards” (or committees) to develop their written forms / orthographies, first for Xhosa and Zulu (late 19th century) and later for “Sotho-Tswana”. In the time of

apartheid, especially from the 1960s onwards, the government proposed the elevation of these languages as official languages of the Bantustans (the “independent homelands”) and established separate language boards for each of them, with the task of standardising them.

Today, the promotion and standardisation of the Bantu languages is handled by two institutions: the National Language Service of the Department of Arts and Culture (DAC), and PanSALB.^{13, 14}

DAC is charged with regulating and monitoring the use of the official languages at both national and provincial levels. For this purpose, it houses a Chief Directorate called the National Language Service, which provides language services to other government structures. The main task of the National Language Service is to manage South Africa’s linguistic diversity through language planning, human language technologies and terminology projects, and by providing a translation and editing service in the official languages and foreign languages. Its functions are “to develop, promote and protect the 11 official languages through policy formulation, legislation and the implementation of the language policy in order to allow South Africans to realise their language rights”. It facilitates research and development in human language technology, e.g. the production of spellcheckers and dictionaries, the Telephone Interpretation System of South Africa (TISSA); and the management of the Language Research and Development Centres (LRDCs) (see Rammala for more details on these bodies).

PanSALB is charged with the task of promoting and creating conditions for the development and use of the official languages, the Khoe, Nama and San languages as well as South African Sign Language, and to promote and ensure respect for the heritage languages. To perform this task, PanSALB has established several bodies, viz. Provincial Language Committees (PLCs), National Language Bodies (NLBs) and National Lexicography Units.

There is one PLC per province (with 13 members), which consists of representatives of each language in the province (selected proportionately to the number of speakers in the province), and including Sign, Heritage and possibly Khoe and San languages.

The PLCs have the following strategic objectives:

- to provide advice to PanSALB on the best way in which to foster and improve cooperation and co-ordination of language matters between the different spheres

¹³ The following information is largely taken from the websites of DAC and PanSALB.

¹⁴ In addition, there is also the *Commission for the Promotion and Protection of the Rights of Cultural, Religious and Linguistic Communities*, which is tasked with the protection of language rights.

of government; the best way in which to promote general awareness of the official and other languages in use in that province; the best way in which to promote and facilitate the drafting of language policies; to take account of the full extent of language resources available in that province and the methods to optimise those resources; and to develop human resources in all sectors involved in language matters.

- To assist in the protection of languages rights and the development of multilingualism.
- To identify the language needs of speakers of all official and other South Bantu languages at all levels of language use.
- To monitor the development of the necessary infrastructures, and to address the language service requirements of the province.
- To promote research and development projects which will lead to the greater use of Bantu languages in education.
- To establish a structural working relationship with National Lexicography Units (NLUs) and National Language Bodies.

There is one National Language Body for each of the 11 official languages as well as for Khoe, Nama and San and SA Sign Language. Their functions are the standardization of spelling and orthography, the development and standardisation of terminology and lexicography, the promotion of literature as well as to conduct research and initiate projects such as educational projects.

There is also one National Lexicographic Unit (NLU) for each of the 11 official languages, and their function is to compile and create dictionaries and, thus, also to establish and disseminate the standardised spelling, orthography and terminology.

The establishment of DAC's National Language Service and PanSALB is, of course, central to language promotion and development in South Africa. However, it is essential that both be subjected to critical evaluation, and that questions such as the following be asked: What products / outcomes have they produced? Have they proved to be effective? Is there sufficient co-operation between the different agencies in the interests of the common goal? Is the overall management of the language development agencies effectively handled?

In conclusion, it is necessary to keep in mind that, although the work of official institutions in the standardisation of the Bantu languages is of central importance, they, alone, cannot succeed in the effective promotion of the standard varieties of these languages. The status and prestige of these languages, the proficiency of their speakers in these varieties and their use in public contexts are significantly dependent on actors who play a prominent part

as role-models in language use: first-language teachers as well as teachers of content subjects, language practitioners (translators, interpreters, text editors and writers) and members of the media.

The development of the Bantu languages as fully-fledged standard languages is the joint responsibility of public authorities (a top/down process), and civil society initiatives / NGOs (a bottom/up process), working in concert.

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chapter two

Do language
policies
in South Africa
symbolically
erase
multilingualism?

SUSAN E. COOK, PHD,
DEPARTMENT OF ANTHROPOLOGY AND ARCHAEOLOGY
UNIVERSITY OF PRETORIA

INTRODUCTION

Despite the worthy aims of protecting and supporting the use of previously disadvantaged languages and using language to promote both unity and diversity in the new South Africa, close scrutiny reveals that the language policies of the new government, and the concepts that buttress them, serve instead to symbolically erase fundamental social realities in contemporary South African society.

This essay examines the relationship of national language policies to ground-level language practices. The language repertoires and actual speech behaviours of people living in a township in North West Province are contrasted with the language policies in their schools. To the extent that the official language policies do not reflect the lived realities of people in this region, I ask what assumptions about language, ethnicity and nationhood underpin these policies and enable people to “make sense” of the gap between language policy and language practice. I employ the semiotic concept of “erasure” to theorize the ideological process that takes place when certain dominant ideas, through their implicit assumptions and discursive force, render invisible particular social phenomena, including speech behaviour.

One of the most important (and one of the least interrogated) ideas that have formed the ideological basis for a great number of policies (language and otherwise) in South Africa over the years is that of unitary and bounded languages/cultures/territories. This idea, rooted strongly in the German Romanticism of the 18th century, came to South Africa with the European missionaries who began arriving in South Africa in large numbers in the early nineteenth century (Fabian 1986, Comaroff and Comaroff 1991). This school of thought is centered on the idea that a “nation” or “race” of people is indivisible from its language and territory (Herder 1766), and that an individual carries the whole of his/her culture, language, and national essence within him/her (von Humboldt 1988). Thus the Xhosa and the Zulu, while speaking closely related languages, were considered separate peoples, as well as the Sotho and Tswana, whose regional dialects, it can be argued, form a single continuum rather than two distinct language groups (Janson and Tsonope 1991, Willan 1996). Although Herder’s influential writings did not envision ethnolinguistic boundaries as the grounds for

¹ This chapter is an abridged version of a previously published book chapter that addresses the same question, “Language policies and the erasure of multilingualism in South Africa” in Maria Achino-Loeb, ed. 2006, *Silence, The Currency of Power*, Berghahn Books.

political nationalism, his ideas have been deployed, consciously or not, in the service of this cause (Tambiah 1996). His idea that a group's memory, culture, and history are all of a piece led the way to anti-Enlightenment projects such as the Afrikaner volkstad premised on the need to preserve the unity and purity of "the nation" by all means possible (Templin 1984, Moodie 1975).

LANGUAGE PRACTICES IN TLHABANE TOWNSHIP

Before looking at specific language policies in education and broadcasting, it is important to have a sense of people's everyday language behaviour. The contrasts between how people communicate using language, and the assumptions about language embedded in the official language policies will provide the basis for discussion for the remainder of the chapter.

Near the town of Rustenburg lies Tlhabane, a black township built as a labour reserve in the mid 1900s. Tlhabane is a typical example of the ethnically and racially segregated reserves that the apartheid regime built to serve the labour needs of nearby white-owned farms, industry, and residential areas. Although the inhabitants of Tlhabane are mostly ethnic Tswanas, there are also many Xhosas, Zulus, Shangaans, Sothos, Pedis, and people from neighbouring countries who migrate to this region to find work in the nearby platinum and chrome mines. Socio-economically diverse, as well as ethnically heterogeneous, Tlhabane has affluent neighbourhoods where the homes have two car garages and swimming pools, as well as desperately poor homes where the residents live in crowded and squalid conditions.

Although it is located in the heart of historically Setswana-speaking territory, Tlhabane has always been a place where a range of languages has been used. In the 1950s, Breutz reported, "*the vernacular in the location is the Native language, mainly Setswana, although most of the Natives know some Afrikaans or English*" (Breutz 1953: p. 48-9). Most of the individuals interviewed in the course of my research command an even broader range of languages².

What all of these people I interviewed share is native fluency in Setswana, while the other languages in their individual repertoires are the result of their personal histories and

² Data for this study was gathered in 1996 and 1997. Follow-up research has revealed that the conclusions presented here still apply.

circumstances. In general, few blacks in North West speak fewer than three languages, and most have a passive understanding of two or three more. This is true of men and women, young and old, rich and poor, and to a lesser extent, both urban and rural dwellers.

This degree of multilingualism is not uncommon among black South Africans, or, indeed, among Africans on many parts of the continent. The legacy of colonialism, the phenomena of language contact, the institution of labour migration, urbanization, and, in SA, the politics of racial segregation have all contributed to people's extensive linguistic repertoires. Many people find themselves using one language variety at home, another one (or two) in school, a lingua franca designed for communication among people of different ethnic and national origins in the mines (Fanakalo—see Adendorff 1995), and yet another speech form in their social interactions with their peers. It is therefore not uncommon for people in Tlhabane to use three or four different languages in the course of a single day.

In addition to the prevalence of multilingualism in this region, however, is the fact of widespread multidialectalism, or the command of more than one dialect of a language. In a context such as Tlhabane, it is tempting to take people's shared identity as Setswana speakers for granted and focus instead on the variation in their knowledge of different "languages," e.g., English, Afrikaans, Zulu, etc. In fact, however, very few people ever use standard Setswana at all. Instead, they use a complex array of non-standard forms of Setswana that not only reflect the current political, economic, and cultural realities in urban South Africa, but that are also deployed in strategic ways to shape them.

The variety of Setswana that people speak differs from the standard dialect mostly in its lexicon. "Street Setswana" incorporates lexical items from a wide range of other languages, including English, Afrikaans, Zulu, and Tsotsitaal (Cook 1999). Better described as a range of styles than as a single language or dialect (i.e., a well defined and bounded code with a unique grammar, morphophonemic system, and lexicon), varieties of Street Setswana are all linked by the fact that they index the speaker's urbanness, an important part of people's identity as modern South Africans (Cook 2002, see also Spitulnik 1998).

In addition to Street Setswana, there are also regional dialects of Setswana that vary significantly from the standard variety. Most Setswana speakers understand and speak Sesotho and Sepedi. These three languages are considered distinct languages rather than closely related dialects only because of the pre-colonial politics of European missionization. Nevertheless, they have been codified as separate languages for at least one hundred and fifty years.

As with Setswana, there are numerous dialects of Afrikaans, Zulu, Sesotho and English spoken and/or heard in North West Province (Slabbert and Finlayson 2000). Not only are people multidialectal with regard to their “mother tongue,” Setswana, but they also command different dialects of the other languages in their repertoires.

The typical residents of Tlhabane township are multilingual and multidialectal speakers. And each one of them has a sophisticated understanding of the social salience attached to using different styles of Street Setswana, to codeswitching between Setswana and English, and to incorporating lexical items from Afrikaans, Zulu, and Pedi into their speech, and that all of them deploy these interactional strategies on a daily basis. Although unremarkable in the lives of these people, these language behaviours seem quite remarkable in light of the language curriculum being taught in Tlhabane’s schools.

LANGUAGE IN EDUCATION

Although the South African Constitution enshrines eleven official languages on a national level, what does this mean for language instruction in primary schools in Tlhabane? How does the current curriculum depart from the apartheid system that had children learning via the medium of their “home” language in primary school, but then switching to a mandatory 50/50 split between Afrikaans and English in secondary school, with Setswana reduced to a discipline?

Because Tlhabane was previously part of the Tswana “bantustan,” government schools in and around Tlhabane abandoned the apartheid curriculum long before the new Constitution was written. As a self-governing homeland under apartheid legislation, Bophuthatswana had its own Department of Education, and was able to shift away from the apartheid regime’s approach to the language of instruction back in the 1970s. This does not mean, as one might expect, that Bophuthatswana schools emphasized Setswana through high school, when the apartheid regime was enforcing the teaching of English and Afrikaans. Rather, English medium instruction was gradually introduced into the curriculum earlier and earlier, until by 1977, students studied Setswana as a subject until the end of secondary school, whereas all academic subjects were taught in English from Grade Four (Bophuthatswana Department of Education 1977). This was due to popular pressure, in Bophuthatswana as elsewhere, from students and their parents to provide earlier access to English so that they might have a real chance to become proficient in the language of economic advancement. This system, as well as

the pedagogical methods used to implement it, is still in place in ex-Bophuthatswana. In fact, since the fall of the Bophuthatswana regime in 1994, it has been exported to the areas of North West Province that were not part of the Tswana “bantustan.” In effect, then, the language policies in the “homeland” schools had already departed from apartheid policies by the time the new Constitution came into being, and the language situation in the schools has changed very little since 1994. Circa 1997, schools in Tlhabane still taught English, Afrikaans, and Setswana in the same proportions as before. Children in Tlhabane attend six years of primary school, three years of middle school, and three years of high school. When children enter the first grade (usually at age six or seven), they are taught exclusively in Setswana, presumed to be the “home language” for most. English is introduced unsystematically in the first grade, and then more formally in the second year. Afrikaans is introduced as a subject in the third grade, and by the fourth grade, most subjects are taught via the medium of English. Setswana remains a mandatory subject through grade twelve.

On an ideological level, then, the language policies in Tlhabane’s schools anticipated the Constitution Founding Provision Six (even as they hearken back to the apartheid era) in two important ways. First is the assumption that Setswana speakers don’t (or don’t need to) speak other African languages, and second, that there is only one legitimate form of Setswana. Thus, the language teachers in Tlhabane’s schools actively police the boundaries between Setswana and other languages, as well as between “proper Setswana” and the forms they consider corrupt and inferior. In addition, given that most adults don’t use standard Setswana in their everyday interactions, children from Tswana-speaking homes usually require remedial instruction in the standard form of the language. Students enter school not only with simplified grammar and limited vocabulary--a normal stage of language acquisition--but with a lot of non-standard words that teachers seek to excise from their vocabulary. These range from words that are standard in “another” black South African language to words that are borrowed into Setswana from English and Afrikaans and “Setswanalized.” Some examples of the “foreign” words I heard being banned from Setswana classrooms are:

WORD (LANG. OF ORIGIN)	ENGLISH GLOSS	STANDARD SETSWANA
<i>etsa</i> (Sotho)	do	<i>dira</i>
<i>mama/papa</i> (Afrikaans/Sotho)	mother/father	<i>mme/rre</i>
<i>konomaka</i> (Afrikaans)	clean	<i>phepafatsa</i>
<i>kamore</i> (Afrikaans)	room	<i>phaposi</i>
<i>distories</i> (English)	stories	<i>dikgang</i>
<i>Krismas</i> (English)	Christmas	<i>Botsalo jwa Morena</i>
<i>dikwatlele</i> (Afrikaans)	dishes	<i>dijana</i>

Most of these words are only considered “foreign” by language purists. Setswana teachers not only label these words “incorrect,” but also feel they symbolize a dangerous trend towards abandoning or contaminating Setswana culture and identity (Kotze 2000). As teachers of “pure” Setswana, these professionals thus see themselves as ethnic nationalists fighting for the survival of their culture and identity.

While Setswana teachers do not readily acknowledge that standard Setswana is not the only form of spoken Setswana, they do so implicitly by calling this variety “pure Setswana” or “clean Setswana” (*Setswana se se phepa*, *Setswana se se tlhapileng*). Thus, the state-sponsored version of Setswana is considered not only linguistically correct, but also morally superior to other varieties. The need to distinguish between “pure Setswana” and some other (unnamed) variety is best exemplified in the Setswana portion of the national matriculation exam. Since at least 1994, the Department of Education has included a section on the test where students must provide the “pure Setswana” equivalents for a number of terms.

In 1996, this section read as follows:

Kwala mafoko a a latelang ka Setswana se se phepa (Write the following words in pure Setswana):

Silabase (“syllabus” from English)
Sepitikopo (“speed cop” from English)
Tshampione (“champion” from English)
Ripoto (“report” from English)
Sepatshe (“wallet” from Afrikaans)

There are several striking points to make about the language policies in Tlhabane schools. First, and most obvious, is the fact that little has changed since 1994. If language is seen as one of the tools of democratization and making restitution for the evils of apartheid, it is unclear how the Ministry of Education, which is in charge of language policies in schools, intends to approach those tasks. Second, the teaching of Setswana, English, and Afrikaans perpetuates a system in which Setswana is considered the “home language” and English and Afrikaans are taught as “languages of wider communication.” Although we saw above that many Setswana speakers also command two or three other “historically disadvantaged” South African languages, this is clearly not the result of having learned them in school. Finally, the school language policies overlook the issue of multidialectalism altogether. Standard Setswana, despite its lack of any real application in everyday life, is taught as though it were the only variety of Setswana. Urban varieties and even more “respectable” regional varieties are derided, corrected, and marked “wrong” on national exams.

The rationale for this configuration of language subjects and media of instruction in the schools in the North West is the presumption that most students speak Setswana as their home language, that they need (and want) competence in English for social and economic reasons, and that Afrikaans still plays a significant (if unpopular) role in the region's economy. Many teachers speak of "phasing out" Afrikaans gradually, but they are aware of the strong sensitivities surrounding this issue.

What is the effect, then, of a language curriculum that presumes a population of ethnic Tswanas who 1) speak a single, standard dialect of Setswana as their home language, 2) require English as a vehicle for participating in the national and international economy, 3) must endure obligatory Afrikaans lessons because "the language of apartheid" still has a role to play in the region, and 4) do not need to speak other African languages? In a community of multilingual and multidialectal individuals who have very little practical use for the standard version of their "mother tongue," these policies serve to symbolically silence the realities of their lives. Policing the boundary between standard Setswana and Street Setswana through admonishment, correction, and testing may reinforce people's attitudes that standard Setswana is an important symbol of their ethnic identity, but it does not change the way they communicate outside the classroom. Similarly, failing to offer instruction in Zulu, Xhosa, Pedi, or Tsonga to students in the North West may enable Tswana students to maintain their allegiance to a form of ethnolinguistic nationalism based on chauvinistic notions of separatism and superiority, but it does not change the importance or status of these other languages in people's everyday behaviour or attitudes.

Susan Gal and Judith Irvine define "erasure" as "*the process in which ideology, in simplifying the field of linguistic practices, renders some persons or activities or sociolinguistic phenomena invisible*" (Gal and Irvine 1995). By this process of erasure, then—the ideological eclipsing of certain realities—the language ideologies that dominate official policy making, in particular the one culture/one language idea, obscure the dynamic multilingualism and multidialectalism that characterize the speech behaviors in this region. Gal and Irvine point out that erasure on the level of representation does not necessarily mean the "*actual eradication of the awkward element,*" i.e. the behaviour or phenomenon that doesn't fit into the official picture. This only becomes an issue when the "problematic" behaviour becomes integral to some alternative ideology that might challenge the dominant notion of how things are/should be. For the time being in North West Province, the ideological erasure of individual multilingualism and multidialectalism does not seem to have much of a direct impact on people's behaviour. On the other hand, it does provide the logic for policies that emphasize diversity (separateness) at the expense of unity (oneness), and rationalizes the allocation of resources based on an inaccurate picture of the linguistic repertoires that children bring to the classroom.

Language policy makers are not unaware of these contradictions, but seem powerless to address them. Makena E. Makapan, “Chief Language Practitioner” for Setswana in the Department of Arts, Culture, Science and Technology circa 1997 acknowledged the challenges faced by those in language planning fields who are charged with promoting varieties such as standard Setswana that are not necessarily the prevalent forms³. I asked him whether he thinks it is true that standard Setswana is dying out. He said yes, but added that the responsibility lies with parents, teachers, and government people to ensure that it doesn’t, lest people lose their culture and identity. This may suggest some perception of an ideological threat to the idea of ethnolinguistic nationalism. I noted that many Tswana-speaking parents choose to send their children to English-medium schools because they want their children to be able to compete for jobs. Makapan agreed, but said that learning English doesn’t have to mean forgetting Setswana, by which of course he means the standard dialect. Those on the front lines of the battle for linguistic and cultural purity (e.g. Setswana teachers) also appreciate the contradictions inherent in their work. Upwardly mobile educators send their children to English-medium schools, and wouldn’t be caught dead using standard Setswana in their verbal interactions, preferring instead to use English or Street Setswana to index their modern, urban South Africanness. These are the very people trying to ensure that students appreciate the “proper” form of their mother tongue, standard Setswana. Meanwhile, English is competing for people’s allegiance as the language of economic mobility; Afrikaans still plays a surprisingly important role in black popular culture and certain economic spheres; and Street Setswana is the everyday speech form of choice for most Tswanas. So while multilingualism and multidialectalism are being “erased” at the official level, they are thriving on the level of practice.

CONCLUSION

In practice the vast majority of black South Africans are both multilingual and multidialectal. Ethnic Tswanas in the North West Province are but one example of a socially and historically constructed grouping that is emblemized by the “pure” form of the language they are presumed to speak. Although the notion of linguistic, cultural and territorial unity has its roots in 18th century Europe, it remains as powerful today as it was when it provided the logic for the establishment of the bantustans during the apartheid era. The prevalence and hegemonic nature of this idea is obvious in Founding Provision Six of the new Constitution. The celebrated document that boasts radical new freedoms and protections

³ Interview with Makapan on August 11, 1997.

for South Africans of every racial, religious, sexual, and geographic community establishes eleven official languages (hence ethnic groupings) based on the same understanding of the relationship of linguistic practice to social and cultural belief that has been around for over two hundred years. What gets “erased” are the very realities that distinguish life in South Africa for most blacks today. Their verbal interactions are governed not by the standard form of their “own” ethnic languages, but by the stylistic and strategic deployment of numerous language varieties. Explained away by language purists as “laziness” or the result of too much contact with “foreigners,” the prevalence of individual multilingualism and multidialectalism may not constitute an immediate threat to those in power who would prefer to maintain the conventional “cultural map” of South Africa. But if a vision of South African unity based on pan-urban experience, or trans-ethnic identity were to take hold (as some expected it to under the leadership of the ANC), such behaviours might be increasingly scrutinized and vilified as a threat to the moral and philosophical foundations of the South African nation. Semiotic erasure would turn into practical action to address the “problem,” and a great many South Africans would be surprised to learn that their everyday speech patterns have “suddenly” become a threat to the age old myth of homogenous, bounded ethnic groups.

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chapter three

Asikhulume!

African languages for all,
a powerful strategy for
spearheading transformation
and improvement of
the South African
education system

MICHEL LAFON

(LLACAN UMR8135 CNRS-FRANCE & IFAS-JOHANNESBURG)¹

¹

The research behind this paper was conducted during the later part of my stay as a research fellow at IFAS (2001-2004) and subsequent research trips, all supported by IFAS and, from 2005 onwards, also by Llacan. The contents certainly fail to do justice to the many people to whom I owe directly or indirectly any insight I gained in the understanding of the South African education system and its evolution. They are too numerous to mention. Jako Allan and Thomas Blazer reacted to an earlier French version (to be published separately), Stephanie Rudwick, Innocentia Mhlambi and Lilly Prerorius commented on an advanced draft. To all I wish to express my gratitude. Special mention for Mrs Vilikazi, principal of Thabisile Junior Primary in Diepkloof (Soweto, Gauteng) and Mr Nzimande principal of Mzwamanda secondary school in Mlazi (Durban, KZN), who opened their schools to me. The opinions expressed, some controversial, are naturally my own. I bear sole responsibility for all shortcomings.

To address the overall high failure rate experienced by African learners in the South African education system, the recommended use of African languages as ‘*languages of learning and teaching*’ (LoL/T)² in the name of mother-tongue education was strongly re-emphasised in 2006 by Minister of Education Naledi Pandor, for the first three years of compulsory schooling. But the positive effect of this otherwise healthy move is, arguably, thwarted by its self-inflicted limitation. In a setting that does not detract from the previous dispensation, the recommended use of African languages as LoL/T remains *de facto* restricted to underprivileged schools located in townships and rural areas³. It does not apply elsewhere, particularly in the schools the Minister qualified as “*servicing multi-lingual learner populations*” (speech at Unisa on 5/10/2006 from DoE website, visited November 2007) which have been construed as referring to formerly white and Indian schools, although, in a growing number of cases, black learners now constitute the majority of the enrolment. To that extent, some have indeed turned into authentic “black schools”.

We contend that, for ‘the greater good’, all government and state-aided schools should at least be compulsorily aligned in terms of language policy. Such a move is a condition to break the association of the use of African languages as LoL/T with poverty-stricken communities, low quality education and failure, and hence pave the way for an effective transformation of the whole system which would be in the interest of the majority and pursuance of equity.

If it were combined with a new approach to language requirements for the senior certificate and in higher education, this principled unitary LoL/T policy would contribute to levelling the field amongst all learners at exam time, regardless of their linguistic background. It might then prove to be an efficient lever to overcome the quagmire in which South Africa finds itself as regards language in education. Beyond education proper, it might help to create the condition for a measure of interaction between schools and learners across racial and social boundaries, and lead to a more integrated society.

² The expression *Language of Teaching and Learning* is more encompassing than the previous *Medium of Instruction* (MoI). However, its systematic use may give credit to the fallacious notion that the language is automatically one and the same for both activities. When it differs from mother tongue, this is not necessarily so, for the early grades at least (Alexander 2002). We will therefore make a distinctive use of either MoI or LoL/T, giving full meaning to the acronyms. Some now prefer the possibly less committing *language of study* (LoS) but we have not adopted it here for this very reason.

³ These correspond closely to schools formerly under the Department of Education and Training (DET), the last avatar of Bantu Education & those under Bantustan or homeland administrations.

To make the issue explicit for readers unfamiliar with the South African education scene, we start with a short excursion into history, to recall successive policies in the field and situate the present-day situation, before turning to the challenging policy we advocate. It is all the more necessary as in SA the question of the medium in its relation to the global history of the country makes it a contentious issue.

LANGUAGE IN EDUCATION: THE SOUTH AFRICAN 'PARADOX'

The centrality of language and literacy in the education process hardly needs elaboration, at least not in the formal Western education system at stake⁴. The cognitive superiority of learning in a language familiar to the child – ideally his/her mother-tongue or home language- has been proved extensively. If learners do not have sufficient knowledge of the medium, they will constantly stumble in their learning, not necessarily on the concepts or ideas or knowledge to be imparted, but on linguistic representations and expressions. Even less can they freely and creatively participate in the educative process. The reliance of Western education on literacy all but increases the role of language as the main or only vehicle of learning. "*Literacy is the key to the curriculum. Virtually all schooling after the first year or two assumes pupil literacy*" underlines Hannon (in Bloch 2000: 4). As has been observed worldwide, the scholarly achievement of learners whose mother-tongue differs from the medium is finally dependent on their linguistic skills. In that context, in order to be able to fulfil his/her potential in any discipline, a learner need firstly to be good in language⁵. This principle informed the milestone UNESCO 1953 declaration on the right of children to education in their mother-tongue, upheld in numerous documents.

Africa, however, is one continent often pinpointed for lagging behind tremendously regarding the implementation of this healthy principle, despite the many surveys confirming its validity (see inter alia the ADEA 2006 Africa-wide survey reported in Heugh 2007⁶) and an endless litany of commitments by national and continental authorities⁷.

⁴ Language may be less crucial in 'situated or contextualised education', where learners follow experts in their daily routine and learn by practicing with them (see Akkari & Dassen 2004).

⁵ Could the language gap be an explaining factor beyond the overall weakness of African South African learners in scientific disciplines, recurring over the years (inter alia, Botsis & Cronje 2007: 30)? It is known that many European learners are either good at language or science. In that line, science-oriented African learners would be particularly disadvantaged.

⁶ Heugh 2007 mentions the ADEA report by Alidou, Boly, Brock-Utne, Diallo, Heugh and Wolff posted at www.adeanet.org/ but the text was not available when the website was visited in February 2008.

⁷ Webb (2006: 131) lists the major conferences and declarations.

A TWO-FOLD LEGACY

In South Africa, the use of African languages in education has a long history, but its association with apartheid Bantu Education (BE) from the 1950s has triggered its rejection by the very ones for whom it would appear to be pedagogically beneficial. Still, prior to BE, the use of African languages in education and in the written domain at large had reached a level which was promising and almost unrivalled on the continent. It is necessary to keep this complex legacy in mind when approaching the subject of medium of instruction in this country.

The Missionary Period: the Heydays of African Languages in Education

In South Africa, Western-type formal education for Africans was introduced by missionaries from the beginning of the 19th century onwards. Many missions relied on African languages to convey the divine message, and some African languages were duly 'reduced to writing'. As missions (and colonialism) expanded, the scope of the written use of African languages, initially limited to religious domains, gradually came to encompass primary education - albeit with wide provincial discrepancies in coverage and scope⁸. As an aspect of the Shepstonian reserve system devised to regulate and manage the African population in colonial Natal, the use of Zulu as a medium of instruction became entrenched as early as 1885, but in the Orange Free State it was only in 1928 that the local African language (Sesotho) was made compulsory (Behr 1978: 162). In the 1920s, language committees were established to set orthography rules, one for Nguni languages and one for Sotho-Tswana. They were composed mainly of White missionaries and administrators, but included also few local educated individuals⁹. Still, beyond significant differences regarding state role, support and monitoring between the British provinces of the Cape and Natal and the two Boer Republics (Nyaggah 1980: 61), African education up to the 1950s remained essentially a missionary undertaking (Behr 1978: 162).

Even though this type of education, equated with conversion to Christianity, was initially offered mainly as a means towards a breakaway from 'heathen' traditions, as time passed, the syllabus in mission schools evolved and "*except in the matter of language, there was not much difference between black and white education*", recalls chief Albert Luthuli (2006: 20) on his experience as a staff member at Adams College on the outskirts of

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⁹ There were also differences in approaches, if not rivalries, amongst the missionaries and individualities played a role. Dube, political activist, educationist-cum-writer, founder and editor of Zulu newspaper *Ilanga laseNatal*, played an important part in the adoption of a conjunctive spelling system for Zulu.

Durban^{10,11}. Es'kia Mphahlele, the Africanist scholar and educationist par excellence, has willingly acknowledged the merits of missionary education in spite of its narrow-mindedness. It is worth quoting him at length:

“let us recognize the vigour of the pioneers of missionary education (...). Missionary education (...) provided space for students to create their own learning environment, and a starting point from which several of us continued to re-educate ourselves and explore the outer reaches of self-development in relation to the community. The more progressive amongst the alumni of mission schools were able to use that same education to rethink the narrowness of the church-going religion the scripture lessons had pumped into them.” (Es'kia Mphahlele 2002: 13)

Moreover, beyond utilitarian objectives, a writing tradition soon emerged in the languages developed by the missions¹². A first generation of pioneers such as Soga, Mqhayi, Sol Plaatje, Mofolo, Sekese, followed by the likes of Jordan, Vilakazi, Dube, Dhloomo, to name but a few, amply shows that writing in African languages was appropriated by early African intellectuals, who were in the process of “weaning themselves” gradually from their mentors (Mphahlele 2004: 35)¹³. The same author notes that, *“By the beginning of World War 2, missionaries press had begun to liberalize their endeavours”* (Mphahlele 2004: 385)¹⁴.

The value of this first modernisation and intellectualisation of African languages – to copy a modern phrasing (Alexander 2003) – was acknowledged by African intellectuals of the time. Jabavu (1921) saw merit in the literature written in African languages and Albert Luthuli himself is on record to have pronounced himself in favour of mother-tongue education in 1934 (in Rich 1995), even if later, with hindsight, after BE was imposed, he was to nuance his position on this matter (Luthuli 2006: 21).

¹⁰ I.e. before the focus on manual skills brought about when Loram was appointed Chief Inspector of Native Education (Luthuli 2006: 20).

¹¹ Adams's college was created and managed by the American Zulu Mission.

¹² The identification and instrumentalisation of the languages, conducted as they were by non-native speakers, were not without problems, and these have been raised in recent years after the pioneer work of Nhlapho (1944, 1945): see *inter alia*, Alexander (1989), Makoni (2003), and, for Tsonga, Harries (2007). These limitations however did not prevent the emergence of African writings.

¹³ The importance of these early intellectuals has been recently emphasised (see Ndletyana 2008 for a focus on some of them).

¹⁴ See Maake (2000) for a general assessment of that early literature.

*The Drawback: Bantu Education*¹⁵

From 1954 onwards, instruction in African languages was hijacked by the imposition of Bantu Education, which constituted a crucial part of the apartheid policy implemented by the Nationalist Party after its 1948 electoral victory¹⁶. Education for Africans was separated from the “main stream”, in terms of syllabus and language. The syllabus was conceived to correlate with perceived ‘cultural specificities’ and designed for an education appropriate and “useful” for Blacks in their own communities (Nyaggah 1980: 65) with, initially at least, a narrow utilitarian design, in stark contrast with the potential openness and humanism of the late missionary period. It was based on the notion of ‘an ordained hierarchy of races’, as the regime spin-doctors saw it, and aimed “to isolate [Africans] and convince [them] of their permanent inferiority” (Luthuli 2006: 35).

During that period, African languages became further entrenched as MoI during the whole primary band (8 years) for African people. The use of African languages drew upon the pioneering missionary work¹⁷, but it was also a biased echo of the promotion of Afrikaans that had garnered support in the context of the political and ideological rivalry between Boers and Britons in the 1920s, and reflected the philosophy of Christian National Education that had inspired Afrikaans schools. Language was becoming a slave of politics: in 1961, the previously united language committees were split into separate boards, and the development of each language was henceforth conducted in an isolated way. The development of African languages as LoL/T was constrained within a pedagogy that has been characterised as ‘uncreative literacy’.

From what was then standard 5, and later from standard 7 (now Grade 9), regarding MoI, except for the teaching of the African languages, there was a sudden shift to English and/or Afrikaans, which were then the only two official languages at national level¹⁸. This strategy was later referred to as subtractive bilingualism¹⁹.

¹⁵ For an in-depth study on some of the major aspects of Bantu Education, see *inter alia* the contributions in Kallaway (2002).

¹⁶ Africans had no real say in the election since the franchise that still allowed non-Whites to vote in the Cape and Natal had little impact in terms of numbers. It is worth noting that, in 1948, the NP did not obtain the majority of votes but the system was designed to advantage rural constituencies. Later elections proved, however, that the NP had gained in popularity amongst the enfranchised and, henceforward, exclusively white electorate.

¹⁷ This link is embodied in Eiselen himself, chairman of the Commission that was named after him and that produced Bantu Education. Eiselen was born from German missionaries posted in the Pedi-speaking area, where he grew up. He became a “*Pedi Linguist and Anthropologist*” (see Kross 2002).

¹⁸ English and Afrikaans were to be used in parity – the 50-50 rule – but that remained unevenly implemented for a long time. It is the brutal decision taken by the Southern Transvaal Department of Education and Training to implement it that triggered the 1976 Soweto protests (for an insightful analysis of this turning point in the evolution of language in education policy, see Heugh 2000).

¹⁹ Some African learners, however, recall the use of African languages in certain subjects, particularly in the teaching of English grammar, further up the educational ladder.

Bantu Education met with strong resistance from various sectors of society, especially black teachers and some missionaries, but political domination allowed the government to have the upper hand. Government took over most mission schools and teacher-training facilities, with only the Catholics and some minor denominations able or willing to keep their independence but at the cost of being excluded from state aid (Behr 1978: 181). Attempts at creating independent African-run schools did not succeed in the face of funding shortage and government hostility²⁰.

This also impacted on the heretofore bulging African language literature. Schools constituted *the* market for books in African languages, and this market, economically potentially rewarding due to sheer numbers, became heavily monitored by apartheid civil servants. African language literature was prevented from addressing pressing issues such as “*politics of resistance, generally portrayal of real life issues that candidly reveal adult concerns, sexual life, etc.*” (Mphahlele 2004: 385), and from adapting linguistically, as language boards adopted a conservative stance. Even if African language literature produced significant works in the main languages (Ricard 2004), the constraints it faced channelled it into perceived irrelevancy. “*The development of adult literature was arrested*” to quote Mphahlele again. In the apt words of Swanepoel (1998), African language literature was henceforth both “*smothered and sponsored*”. As a response, many African writers – including Mphahlele himself – opted for English exclusively in their work, if only to avoid censorship and to target a wider audience, inside and outside South Africa.

A LASTING LEGACY OF INEQUALITY

Bantu Education, in various garbs, controlled and determined African education for almost 50 years, i.e. over three successive generations of African learners. The curriculum was not the only aspect that set it apart. The discrepancy between the racially segregated school systems – besides Whites and Blacks, Indian and Coloured were also classified as separate racial groups – involved all parameters, from administration to funding.

Spending on white learners per capita was several times superior to that provided for Blacks, resulting in further widening the gap already existing. According to Carpentier (2005: 48), between 1969 & 1976, for every R1 of state money spent per black learner, R15 were spent per white learner.

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Soudien (2002) looks at the ways African teachers responded to BE, from resistance to unwilling acceptance.

Although there was a significant increase in physical access to education during the Bantu Education period, this occurred largely at the cost of quality. Low qualified and poorly paid African teachers were appointed (Nyaggah 1980: 72) to fill posts while white teachers were gradually phased out of African schools. This broadening of enrolment also resulted in further spreading the vicious system to all corners of the country.

During most of BE period, the government was reluctant to create secondary schools in the townships, as it argued that black people belonged to the so-called Bantustans (or homelands). This policy led to a significant shortage of educational facilities in highly populated areas, which proved self-defeating when, in the 1980s, for political and utilitarian reasons, the Government sought to increase access to secondary education for Black learners. The learners had to contend with overcrowded classrooms and inadequate or altogether inexistent facilities, such as libraries and laboratories. To date, many secondary schools in townships are still nothing more than ‘upgraded’ primary schools.

For many Africans, BE was equated to second-rate education – if not ‘slave’ education – and came to embody the apartheid regime, as much as influx control, pass laws and segregated housing, among others. As segregation was implemented and Bantustans established from the late 1960s onwards, every black person had to fit into a given ‘tribe’ or ‘nation’, and this was at times based on the language narrowly identified as that person’s mother-tongue. This process negated the evolving character of language varieties and ethnic identities, especially in urban areas.

This whole set up led to deeply engrained negative attitudes towards the use of African languages as MoI, seen as part and parcel of the apartheid policy of downgrading the African population, as well as a shrewd divide and rule strategy. So unpopular was the use of African languages in the BE framework that homeland governments, after the Transkei lead in 1965²¹, took advantage of their (very) relative autonomy and decided to use English as medium of instruction from standard 3 (Grade 5) onwards, much to the dismay of apartheid educationists. In spite of its negative context, as part and parcel of Bantu Education, the use of African mother-tongues for a full 8 years of schooling until the 1979 changes yielded positive results, as Heugh (2002: 4) courageously remarked: “*despite serious discrepancies in expenditure between white and black children, there was surprisingly significant education success for black South Africans before 1976*”. She further notes that the matric pass rates for African learners were at their highest in 1976

²¹ The Transkei decision was based on the Cingo Commission Report (Biehr 1978: 178).

and started to decline steadily from 1979 onwards. Indeed, in 1979, in the wake of the 1976 Soweto revolt and as a placatory measure, the compulsory use of African languages as MoI was reduced to the first three years in DET schools. For Heugh (2000: 18), the reduction of the mother-tongue period heralded “*a cycle of ever-decreasing educational competency*”.

To make matters worse, schools that, from then on, were identified as advanced positions of Afrikaner or White domination, were often targeted by the rebellious youth, and classes, especially in the townships, were largely disrupted²². Even when, in the later period, as a last (and belated) attempt to woo Africans, significant improvements in African education were made, marked by an increase in expenditure and a gradual narrowing of the racially-based per capita spending – down from 1 to 4,4 in 1989, to 1 to 3,4 in 1991 (Carpentier, 2005: 48; MacKenzie, 1993: 289)²³, syllabus improvement and extensive work in African language terminology, these changes failed to reverse the dominant negative perception of Bantu education, including the use of African languages as languages of learning and teaching.

LINGUISTIC FEATURES OF THE PRESENT SITUATION

A bimodal system

The unification of the education system – during apartheid, educational bodies in what is now South Africa, numbered up to 18 or possibly 19 (Umalusi²⁴) – was one of the main demands of the ANC and white liberals; it was undertaken during the transition from 1991 onwards.

In 1991, as a forerunner, state-run white schools (under the House of Assembly) were required to choose between four options, labelled A, B, C, and D, differing mostly by the degree of self-management and funding (MacKenzie 1993: 290; van Rooyen & Rossouw 2007: 24). By 1992, most of these schools opted for so-called model C²⁵, whereby they were given free rein to levy fees, as public subsidy was to decrease.

²² A motto of the period was “*No education before liberation*”

²³ In 1991/92, the per capita spending was R1 248 for black learners, R2 701 for coloured learners and R4 448 for white learners (SAIRR 1992/3, Race Relations Survey: 575).

²⁴ The racially separated facilities within South Africa proper were further divided on provincial lines; independent Bantustans and most non-independent ones had their own education department.

²⁵ In fact, in 1992 the Minister coerced schools into adopting model C which became the default option. It included 95% of the formerly white schools (van Rooyen and Rossouw, 2007: 24).

If the administrative unification was completed successfully under the democratic dispensation with the construction of a single national Department of Education, financial equity proved more difficult to implement. Such was the inertia of the system that in 1993 the state spent an average of R5500 per learner in privileged schools but only R1700 per learner in ex-DET schools (Motala & al 2007: 3), i.e. still an unequal ratio of over 1 to 3.

It is fair to note that priority was given towards extending schooling. For the first time in the history of the country, schooling was made compulsory for children of all racial groups, and for a full 9 years. This was implemented. Whilst in 1996 there was still 11% of children not attending schools (Lehohla 2001: 1), by 2003 only 3% of school-going age children were not attending school (Lavinia Mahlangu, *SA becoming more educated*, www.southafrica.info, visited Feb 2008)²⁶. Brick-schools were gradually substituting schools under the trees and mud-schools, and dilapidated ones were upgraded, with priority given to ensure minimal facilities (electricity connection, water adduction and toilets)²⁷.

Schools were eventually distributed in socio-economically defined quintiles and a greater proportion of state-funding was to be directed towards the lower strata. The system however failed to eradicate intra-country inequalities, as quintiles were, until 2003, determined on a provincial level: a school which in Gauteng (the wealthiest province) would feature in the lowest quintile and be eligible for increased funding, would feature in a higher category in, say, Limpopo, and therefore not benefit from the same degree of state support²⁸.

More crucially, although government reversed the public expenditure ratio in favour of underprivileged schools, schools were allowed to continue charging fees much as they pleased. The impact of fees can be illustrated by the following example provided by Carpentier (2005): given 2 schools in 1999, each with a population of 1000 learners; school A (privileged) levies R2500 yearly per pupil, while school B (underprivileged), R50; government differentiated funding (excluding teachers) will amount to R28 000 for school A and R196 000 for school B. All in all, the resources of privileged school A will exceed those of underprivileged school B by over R 2 millions²⁹. Government tried to address the issue. In 2005, a number of schools belonging to the two lowest quintiles

²⁶ As a result, the proportion of persons aged over 20 with no education was reduced from 14% to 10% between 1998 & 2005 (Botsis & Cronje 2007: 10).

²⁷ In 2006, out of a total of around 29 000 schools, around 8 000 were still without electricity, 3 000 without water and 1 500 without toilets (address by the Minister 28/09/2007 at Thengwe Secondary School, www.education.gov.za/dynamic/).

²⁸ This factor contributes to the fight around the proposed redefinition of provincial borders, that took place over the years.

²⁹ Assuming that all pupils in school B pay the fees.

were made ‘non-fee paying schools’, a measure that was extended to all of them by 2007, with a financial compensation drawn from state coffers to the tune of cer R500 per learner, raised to 700 in 2007. But this is not likely to bridge the gap. Within the logics of liberalism, state resources are no match, In education as elsewhere, the mere logic of crude liberalism allows for the haves to get every opportunity to have even more, while the have-nots are essentially confined to their conditions, and hence for initial inequalities to be reproduced and extended³⁰. The widely superior endowment benefiting privileged schools pays for more teachers, which allows the schools to keep class sizes small, to maintain and improve infrastructure, equipment, etc³¹. Still, such a trend is not written in stone. As Shannon Walsh (2006: p. 158) aptly observes about the city of Durban’s inadequate response to shacks and shack dwellers: “*the budget is limited only by what it [the city] has chosen to prioritise*”³².

Today’s South African school network thus still largely reflects this legacy, contrasting by and large – beyond discrepancies within each category – “*dysfunctional and impoverished schools, used by the majority of South African children*” (Botsis & Cronje 2007: 50), which happen to be ex-DET schools and other ‘Black’ schools (i.e. homeland schools), on the one hand, with “*a small number of well resourced schools used by the privileged minority*”, including former white schools and, to a varying degree, Indian and Coloured schools, on the other, now often commonly lumped together under the label ex-model C. Jensen & Amsterdam described this situation eloquently:

“Consider an elite public high school with expensive grounds, high technology facilities, highly qualified teachers, and school fees in excess of R10 000 per annum (...) and a recognised public school in which some of the classes are conducted under a tree (...). Of both entities it could be said that government has equalised funding (...). But no analysis can even begin to anticipate reasonable, let alone comparable, educational outcomes (...). In other words, while discrimination has ended, inequality has not” (in Motala & al. 2007:37).

This deep socio-economic divide translates into a ‘bimodal system’ in terms of results (Elisabeth Pretorius, this volume & personal com.). It is also reflected in school language

30 Swimming pools (and other fancy equipment) in township schools would still have to wait, giving further credence to the apartheid-old notion that ‘Blacks can’t swim.

31 For reference, it may be observed that, in Zimbabwe, in the late 1990s, some ‘A’ schools [corresponding to SA model C] provoked the ire of government by the amount of fees charged, since the level of fees was seen as a strategy to keep black learners out. The government was on the point of legislating against these schools. Situations like these formed part of the resentment built up against ‘things that don’t change’.

32 The huge infrastructural investment country-wide, including some of the major townships, in the run-off to the 2010 tournament, testifies to the capacity of the State to mobilise funds for the priorities it has set on its agenda.

policies: the use of African languages as LoL/T is restricted to underprivileged schools whilst the privileged schools invariably and regardless of their population will have English (more and more rarely Afrikaans) as LoL/T. The continuing systematic association between these two parameters is crucial. The use of African languages as LoL/T is clearly construed by African parents and the public at large as embodying poor quality education.

Straight for English for Better or Worse

As early as 1990, in a decentralisation process led to its furthest end, schools were allowed to choose their language policy, including their preferred MoI. In line with the 1996 Constitution which elevated 9 African languages³³ to a position on a par with English and Afrikaans, the 1996 School Act offer theoretical provision for any of the 11 official languages to be LoL/T during primary and secondary education. In a more realistic manner, the 1997 *Norms and Standards for Language Policy in Public Schools* recommends initial literacy and numeracy in the mother-tongue, and ‘additive bilingualism’ later on. It also vested the choice of language in the individual.

Simultaneously, racial regulations regarding schools were scrapped; the responsibility for the admission of learners was transferred to each school “*within the provisions of the Constitution*” (MacKenzie 1993: 294). A number of former white schools, especially those under model C³⁴, admitted learners from other racial groups, provided they could meet the school requirements, spelt out essentially in terms of residence and finance and, possibly, English language proficiency measured in a test (Murray 2002: 436).

This signalled a rush towards English. African parents did not necessarily run away from African languages *per se*, but, understandably, they wanted better quality education and better equipped schools for their children, and this, given the legacy of BE, led them to enrol their offspring in former white, English/Afrikaans-speaking schools.

On the one hand, more affluent families left the townships altogether for the (former White) ‘suburbs’, where ex-model-C schools were located³⁵; and on the other, many middle

³³ The very ones that had been recognised at local level and developed under apartheid. See Lafon 2006 for an analysis of the language situation and many more references on the issue.

³⁴ In fact racially integrated schools had been in existence since 1986, when the Catholics were allowed to group all learners in the establishments under their aegis (Macdonald 1990: 96). These schools were known as “open schools”.

³⁵ In the same period, influx from rural areas to townships increased, with many ‘rural’ children schooling in the townships.

or even low-income families, while staying in the townships, ‘voted with the taxis’ (as the Cuban emigrants voted with their feet)³⁶ and sent their children to English medium schools – former white schools in towns, and, especially in Natal, former-Indian schools in Indian townships. For parents with a modest income, this represented a great sacrifice. Among them, one cannot fail to notice the many black teachers from underprivileged schools, a fact which can be construed as a (negative) assessment of the system by insiders...³⁷ – maybe partly as a response to the disruptions that had overrun township schools during the last decade of apartheid, which they witnessed more than any other category of the population. Subsequently, in order to retain or attract learners, in a number of townships, with Gauteng leading the way, primary schools – the very schools that had been compelled to use African mother-tongues under apartheid – opted formally for English as MoI. Since its inception, this movement has not slowed down. Out of 25 736 SA schools under the DoE in 2004, only 6 542 had an African language as primary medium of instruction, against 16 796 having English (Minister reply to question in national Assembly, 9/3/2007, DoE website)³⁸.

From Multi- to Mono-Racial ex-Model C Schools

Moving away from township schools proceeded unabated³⁹, giving rise to a new phenomenon: a number of ex-model C schools, usually belonging to the lower rung in terms of fees, have become mainly, if not exclusively, African schools in terms of their learner population^{40,41}. White parents –followed by financially stronger black families – flock to more expensive schools, either upper crust ex-model C schools or totally independent ones, where the level of fees and/or geographical access remain an effective barrier to social (and racial) mixing⁴². However, due in part to the inherent stability of contracts and, possibly, the lack of employment opportunities elsewhere, staff, including teachers, have remained. They

36 Taxis, in South African English refers to private minibuses doing collective passenger transport particularly between townships and cities.

37 76% of KZN black teachers wish for their children to attend ex-model C schools, according to a survey conducted by Ngcobo (2001: 27).

38 The source does not specify the respective enrolment. Let us recall that over 78% of South Africans are first language African speakers (census 2001).

39 With some of them now lying empty... (Botsis & Cronje 2007: 52 and visit to Soweto, January 2008); Cer. 40 schools in Gauteng townships are not utilised, according to Gauteng Education Policy Unit researcher Mario Pillay, (personal com, April 2008).

40 From anecdotal evidence, the same occurs in KZN ex-Indian schools. In the Western Cape however, it seems that the former racial distribution of learners has undergone few changes; Black learners tend to join Coloured schools in higher proportion than they do white schools, but Coloured learners globally remain in their formerly reserved institutions (Carpentier 2008: 41).

41 In part as an acknowledgment of this new situation, from 2008, quintiles are defined according to the socio-economic status of the learners’s families, regardless of the infrastructure (Mario Pillay, personal com, April 2008).

42 In a dynamic not unlike that of residences, it seems that, when African learners reach over 40 or 50% in a school, the exodus of white children accelerates until hardly any are left.

are mostly Whites or Indians, who seldom have any competence in the African language(s) spoken by their pupils. In a new twist, independent schools are now being opened in the townships, with racially mixed staff – that is, a number of non-Black teachers (see Pretorius in this volume for an example in Atteridgeville township, Tshwane)⁴³. Indeed, according to Botsis & Cronje (2007: 24), independent schools which have increased by 94% between 1995 & 2006, came partly as a response from middle class Black parents unhappy with the standard of public education⁴⁴.

Regarding the LoL/T, these schools use English only (occasionally Afrikaans⁴⁵). African languages, if present at all in the school curriculum, feature as mere subjects of study, sometimes even – again a legacy of the past - as second or third additional languages and taught by non-mother tongue teachers as second language⁴⁶. Many of these schools, faced by a growing demand, have maintained an English proficiency test to restrict entry to those African learners who have some knowledge of English⁴⁷ – even if such measures fall outside of the legislation as they are deemed ‘unfair discrimination’ (interview with Prince Masilo, Umalusi, Pretoria, May 2007). In a ripple effect, an ever growing proportion of African parents have resorted to sending their children to English-medium pre-primary schools, which have mushroomed in townships and towns, with some parents even attempting to make English the language of the home⁴⁸, thus *‘raising little foreigners in their home’* observed sadly the famous Kenyan writer Ngugi Wa Thiongo (Time of the Writer Festival, Durban, 2007).

In South Africa, a combined phenomenon occurs to entrench English as the *‘unassailable’* (Alexander 2000) stepping stone to upward mobility: the legacy of apartheid BE, which still taints negatively the use of African languages as LoL/T and equates English with quality education, is reinforced by the ongoing globalisation process which stresses the importance of English in all professional domains.

⁴³ This situation dispels the alleged systematic danger of township posting for white teachers.

⁴⁴ The category ‘independent schools’ is broad. Some have emerged as a response to lack of facilities in new informal settlements and feature amongst the poorest and less endowed.

⁴⁵ Afrikaans-medium schools are on record for using their language policy to deter African parents (interview, R Finlayson, 2001, Unisa). Over the years this has led to various litigations by African parents, often supported by provincial departments of education, arguing, on the basis of regulation on classroom space and language choice, that their children should be admitted, and have English as LoL/T. This trend has led to the gradual disappearance of single-medium Afrikaans schools: by 2006, there remained only 300 of them out of 2 500 in 1994 (Smit 2007: p. 64). Many have turned into dual medium schools, while others have foregone Afrikaans as LoL/T. For more information on the legal aspects of this process, see Smit (2007: 65) and van Rooyen & Rossouw (2007).

⁴⁶ This is now changing.

⁴⁷ In such a school in Durban, there was a 20% failure rate (interview principal, August 2007).

⁴⁸ Maybe, as in Tsarist Russia, where native-speaking French child mentors were regarded as essential status-markers in well-to-do families, such Black families, in a savoury reversal of history, will end up hiring native English-speaking nannies.

It is difficult to assess the pedagogic effects of this linguistic dispensation on the learners in question. Beyond individual specificities, it would probably depend on interrelated factors such as social and racial integration or the lack of it in schools, the social origin of the children, the language(s) spoken at home, the pedagogic support received from parents, etc. What is clear though, is that in schools with a large majority of black learners, and contrary to common wisdom, English is seldom used outside the classroom: therefore, conversely to parents' expectations, children do not gain the proficiency in the language which can come only from regular and everyday use, in small talk and gossip⁴⁹. This contrasts these schools with what was (and still is) happening in effectively multiracial schools where the necessity of communication leads African children to use English to speak with their non-African classmates.

In this setting, a number of African learners are at a growing risk of failing to acquire any elaborate knowledge of their own language and of becoming alienated from an integral part of their cultural environment, while they do not necessarily gain fluency in English – thus turning into 'bilingual illiterates', as the victims of ill-thought Arabicisation were known in post-independence Algeria. The dissatisfaction of some parents and educators with this situation has led a number of township schools which had opted for English as MoI, to return to the use of African languages in the first years, even before it became a recommended policy⁵⁰. In privileged schools, it explains the new emphasis on the teaching of African languages as additional languages and the anger when teachers are not deemed competent enough⁵¹.

High Failure Rate in South African Education: Accused: Language Discrepancy

The South African education system is characterised by a high failure rate, distributed largely along racial lines, with black learners topping the list. In 2002, only 10% of black candidates obtained a 'pass with matric endorsement' (i.e. access to higher education) as

⁴⁹ Schools may have an English-only rule, in apparent contradiction with the philosophy of the Language in Education Policy which promotes diversity. The principal of a Durban ex-model C school clearly admitted that it was un-enforceable. However, in an English-medium primary school in Atteridgeville (Tshwane), learners who have been "caught" speaking "vernacular" on the premises are singled out; as an act of contrition, they have to read in front of their class from an English book (interview deputy principal, April 2008).

⁵⁰ This was the case in Thabisile Junior Primary, Diepkloof, Soweto, from 2002 to 2006. Bowing to parents's pressure, the school however has now become a 'dual medium school' with Zulu and English (interviews with the principal, Mrs Vilakazi, March 2005 & January 2008).

⁵¹ The Minister of Education and other officials are on record for having come down heavily on schools (still) employing non-native African language speaking teachers for the teaching of African languages.

opposed to half the Whites (Carpentier 2005: 279), for a national average of 17%, a figure that showed a slight decrease in 2006 (16%) (Botsis & Cronje 2007: 26).

The limited command of the MoI by the bulk of non-MoI native speakers has long been identified as a major contributor to this sorry situation. Van Dyk (1993: 185) writes:

“although there are many other variables involved in the failure of African children to progress at schools and afterwards, not the least of which are unequal funding and general disruption, it is perhaps the problems that scholars experience with MOI that have the most wide-ranging and debilitating effect on them”

and in 2004, an Umalusi document comments ([Lolwana] 2004: 47):

“There is an increasing weight of evidence that, after poverty, language, and in particular proficiency in the medium of instruction, is the largest single factor affecting learner performance at school”.

The high failure rate among African learners makes a mockery of the stated policy of equal education opportunities. For many of those whose home language differs from English, language clearly remains a barrier to success at school. The issue undermines the whole system, fostering inequality between learners according to their background, i.e. mostly along ethnic lines, and is obviously a waste of public resources and learners’s time and energy. The Government could no longer delay tackling this issue.

GOVERNMENT RESPONSE: MOTHER-TONGUE EDUCATION FOR UNDERPRIVILEGED AFRICANS

In an apparent attempt at addressing the issue at its very root, in her Unisa speech alluded to above, the Minister of Education, Naledi Pandor, strongly recommended the use of African languages as LoL/T for the first 3 years (grade 1 to 3)⁵² (www.education.gov.za, visited July 2007), implying that initial literacy and numeracy should now be imparted in the (African) mother-tongue⁵³, as long as it is one of the 9 official African languages of the

⁵² Reception is not considered as yet. The Department of Education aims to make Reception part of compulsory schooling by 2010, but execution seems to be lagging behind (Botsis & Cronje 2007: 47).

⁵³ Interestingly, mother-tongue in South African education parlance seems to be implicitly assimilated to an African language.

country. Further up the ladder, English and Afrikaans remain the only LoL/Ts in place and the African language is maintained as a discipline. This renewed focus on African languages is strengthened by the language stipulation in the Senior Certificate that substitutes matric from 2008 that requires a pass in one's mother-tongue taken as a subject. It seems that the DoE is considering extending the use of (African) mother-tongues up to grade 6, i.e. for the whole first band⁵⁴. An indication of its earnestness in tackling the language issue, the Department conducted an interesting experiment in 2006: exam papers for 4 subjects in the *matric* trial exams were translated in all 9 official African languages, emulating what is done for Afrikaans⁵⁵. In the experiment schools, learners received two versions of the papers, one in English, and one bilingual, with a translation in the African standard variety. Only English however was accepted as the language used in learners' answers⁵⁶.

The recommendation for the use of African languages as LoL/T at primary level was a rather bold move in the South African context considering the prevailing attitudes, even though it does not go further than the 1997 Language in Education policy. It is certainly a step in the right direction, grounded as it is on the indisputable superiority of mother-tongue education. However, the socially limited scope of the recommendation is self-defeating. For African children, mother-tongue instruction applies only in underprivileged schools. In privileged schools (ex-model C or similar), as things stand, implementing the mother-tongue principle for African learners is not taken into consideration, mainly due to their alleged multilingual character. In such environments, it is argued that English is the only possible LoL/T. This however does not take stock of the growing number of African (near) monolingual ex-model C or even private schools.

Thus, in better-endowed schools, mother-tongue education remains restricted to those learners for whom English (or Afrikaans) is a home language – i.e. mainly Whites, Indians, Coloured and possibly a few Africans, children of foreign nationals or the local elite, sometimes nicknamed “oreo” or “coconuts” (Rudwick *in print*).

54 The Minister's declaration or its reporting created some confusion: in a reply to a question in Parliament, on 9 February 2007, Naledi Pandor confirmed that the 1997 language policy was not altered, implying that the choice of language(s) remains with each school. A number of principals in African schools however seem to have taken the declaration on mother-tongue as an official policy orientation.

55 In the interest of uniformity, exam papers in Afrikaans are translated and not elaborated from within the language (Prince Masilo, Umalusi, interview, 2006).

56 I am indebted to Vic Webb for information on this experience, as *CentRePoL* was commissioned to assess the whole process. I witnessed the presentation of the preliminary conclusions to the DoE officials in April 2007.

In this context, as could be expected, the recommended reintroduction of African languages as LoL/T has been met with mixed feelings, especially by African parents. It may even have added to the flight away from township schools.

The new requirement for mother-tongue at senior certificate has the potential for preventing African languages from oblivion, but much will depend on the modality of its implementation.

THE CRUX OF THE MATTER: IMPLEMENTING A TRANSFORMED LANGUAGE POLICY IN SCHOOLS

African languages will never be accepted as mediums of instruction as long as their use remains a feature of underprivileged schools. In the name of fairness, equity and the interest of the majority, and for the sake of maintaining linguistic and cultural diversity, for “the greater good”, there is a need to adopt a more embracing policy regarding language in schools across the whole social and racial spectrum. This is no new idea. It has been advocated earlier⁵⁷, it is even part of the intentions of the Minister (see Unisa statement) but the population change that occurred in a number of ex-model C schools stresses its urgency, as does the continued drive towards English.

Taking into account the necessity to improve learners’ school achievements and the full recognition of the African nature of the country, the strategy regarding language in education should be based on the extensive implementation of the mother-tongue principle coupled with the promotion of African languages, in a manner that would create a momentum for a change of attitude and help nurture a more racially-mixed society. We briefly discuss crucial features of such a strategy.

*i) Mother-Tongue Education for All*⁵⁸

Mother-tongue education, for the first years at least, should be the case for every learner, irrespective of the type of school, with flexibility to accommodate diverse situations, and

⁵⁷ Notably by Cape-Town NGO Praesa in various publications as well as experiments in classes (see <http://web.uct.ac.za/depts/praesa/pru.html>).

⁵⁸ We assume – as is a tenet of mother-tongue education - that initial literacy and numeracy should be acquired in the mother-tongue. It has been shown that the longer the MT period, the better the cognitive results. It is not however our aim, and it falls outside our competence, to discuss the various bilingual models which have been experimented world-wide.

that includes in our mind the pre-primary stage⁵⁹. For non-English mother-tongue speakers, English would be introduced as a subject of study, after literacy and numeracy are acquired through the primary language. Books in African languages for pre-primary schools are being developed⁶⁰.

When school population is linguistically diverse, as is often the case in Gauteng but not so frequently outside the province, initial literacy in the various mother-tongues could at least be provided as long as they are shared by the relevant number of learners⁶¹. Moreover, various innovative projects have shown that language diversity can be turned into an advantage, with the children themselves playing an active part in the linguistic coaching of their peers who speak other languages, even if English is retained as a common MoI⁶².

Whatever the case, the African language(s) should be maintained as a subject taught as L1 to its speakers, until Grade 12.

It might be objected that this would run counter to the right of parents to the free choice of MoI, as stipulated in the existing policy. That may be so at a superficial level, but it should be kept in mind that the decision was taken as a reaction against the compulsory use of Afrikaans and in the context of the necessary undoing of Bantu Education; the situation has now changed. Besides, can it be said that there is a free choice when African languages have become synonymous with poor quality education? Only if there were African language-medium schools on the same level as English- and Afrikaans-medium ones, could we speak of a meaningful choice. In fact, there have been calls to ‘reassess the policy that allowed school governing bodies the power to choose their own language policies’.

*ii) Compulsory Indigenous African (Bantu) Language*⁶³

An indigenous African language (by which we mean a Bantu language) should become compulsory up to Grade 12 for all learners⁶⁴. Besides being a vindication of the current situation, it would contribute to levelling the field between all learners, as non-African

⁵⁹ There seems to be no language stipulation for pre-primary.

⁶⁰ See Biblionef project, under www.sasix.co.za/projects/

⁶¹ In terms of regulations, a school is supposed to cater linguistically for learners as soon as they number 40 in primary and 35 in secondary. So far, this has been applied merely to force Afrikaans-single medium schools to have English as MoI.

⁶² *Inter alia*, the home language project in Gauteng.

⁶³ The term *Bantu* has acquired a negative connotation in South Africa which still forbids its use. Its replacement by the phrases ‘African languages’ or ‘indigenous languages’ however has proved counter-productive (in the perspective of Bantu language promotion) as Afrikaans has a claim, debatable though it is, to such qualification.

⁶⁴ The Minister stated “*compulsory achievement of communicative competence in an indigenous language by all learners*” (Unisa statement, *passim*). It remains to be known however what is meant here by indigenous language.

language speakers would be, for one, linguistically challenged. So the language requirement for the senior certificate would read, “when the language of learning and teaching is the mother-tongue, the second language should be one of the official Bantu (or indigenous African) languages”.

In South Africa, through personal and potentially inter-active exposure, most ‘non-Africans’ have every opportunity to learn an African language. With African language-speaking nannies and gardeners at hand in many White and Indian homes, it is disturbing that White and Indian children do not acquire competency in the ‘helpers’ language - as was the case years past for a significant number of European settlers⁶⁵. In contrast, besides school, African children have to rely mostly on TV and media programmes to learn English, as they rarely benefit from the physical presence of a native speaker.

iii) True Bilingual Education

In a country such as South Africa, true bilingual education whereby, beyond the initial mother-tongue stage, some disciplines would be taught in an African language, others in English and/or Afrikaans, seems a way worth exploring. That could be implemented as soon as relevant material becomes available in African languages and teachers are trained in their use.

This, we feel, should concern all learners – rather than only non-native English speakers – if only as a way to make it accepted⁶⁶. A white learner having learnt Sotho from grade 1 should be able to follow a history class in Sotho as much as a black learner a science lesson in English. Again, beyond cultural enrichment challenging white learners, it would also prepare the ground for bilingual universities.

Let us now look at what could be the possible impact of such measures when implemented specifically in privileged schools.

⁶⁵ The new importance of African home-helpers in white children’s success at school might even result in re-assessing their status in the family - which would be no mean achievement.

⁶⁶ For an experiment of dual-medium education using Xhosa and English in a township environment, see Pluddemann (2002)

UTOPIA REVISITED: TRANSFORMED EX-MODEL C SCHOOLS

Privileged schools have a pivotal (and perhaps compensatory) role to play in the revalorisation of African languages in the education system. They should align with the bulk of public and state-aided schools in terms of language policy. We look at some of many effects the aforesaid measures might trigger.

Teacher Mobility

Privileged schools would need teachers qualified in the African language(s) at stake, as LoL/T for the first grades, as well as for other subjects later on, for both speakers and non-speakers. These openings might contribute to reverse the trend whereby there is a decline of candidate teachers for African languages, as it would broaden their work opportunities⁶⁷. It could also facilitate teacher mobility across racial and social boundaries. As African teachers would be transferred from townships to urban schools, White and Indian teachers would become available for townships and rural schools. The presence of English native teachers in the latter could have only positive consequences on the level of English whilst African teachers posted in privileged schools would certainly benefit from a more study-oriented environment⁶⁸. The security situation has sufficiently improved in most townships to make it now a reasonable prospect, as confirmed by the above-mentioned Atteridgeville example⁶⁹.

Such a measure should probably go hand in hand with a levelling of salaries strictly according to qualifications.

African Language Development

Because African languages would be used in all schools, regardless of their social status, they would emerge from the chains of poverty where they have been confined and sever the enduring linkage with poor education and the lower social stratum of society. The Bantu Education stigma still so strongly attached to the use of African languages in education would

⁶⁷ This shortage comes on the backdrop of a general dearth of teachers (see *Sunday Independent*, 30 Dec 2007, p 5, commenting on low matric examination pass rates).

⁶⁸ Such deployment of white teachers in township schools was put in place in the 1980s. It triggered a mixed reaction from learners, teachers and parents, fuelled by the prevalent political tensions. Since then, the environment has changed drastically.

⁶⁹ In the 1990s, many white teachers refused to teach in townships, arguing on the lack of security. This does not appear to be justified anymore, at least not in most places. This writer has himself visited schools in Mlazi (Durban township) and Soweto on a regular basis, in 2006 & 2007, driving to and fro, without any sense of impending danger.

fade away and the process of their intellectualisation, stalled by apartheid policies, would be rekindled. This is crucial.

To foster the use of African languages as LoL/T and as subjects of study, they need to be (re)developed into literary languages. However, for this to happen, they need to be considered in an innovative manner. It is not possible to return to the languages as they were before and during apartheid. Even though the literary achievements some had attained previously should not be discarded, the social and human context has undergone considerable changes. To stimulate readership among the youth of today and tomorrow, there is a clear need to depart from the linguistic and moral norms established a century ago. Revisited literacy in African languages has to take into account modern varieties, those spoken in today's life, those that shape the identity of present-day youth, with their heavy borrowings from one another, as well as from English and Afrikaans, and their frankness about all issues.

The inclusion of African languages up to Grade 12 level in better resourced schools, would encourage genuine authorship, as it would create a market for enticing books in African languages, from school manuals to accompanying textbooks through novels, short stories, cartoons, magazines, etc., to fill shelves in school libraries and, hopefully, people's homes.

Promoting Educational and Social Transformation

The possible consequences for society at large of such changes in the education system cannot be overstated, as one aspect would bring forth another, in a ripple effect.

Because African languages would be compulsory up to Grade 12, non-African language speaking learners would have no choice but to acquire a real command of them, thus giving more substance to their oft repeated claim of being 'White' Africans. Interaction across racial boundaries would then be encouraged⁷⁰.

Innovative exchange formulas could be set in place between schools belonging to different universes, whereby a class or part of a class could for a period be transferred to a different environment, in the way of twin cities across continents. That would allow underprivileged learners to benefit – if only occasionally – from better facilities, without a budgetary revolution, and privileged learners to have at an early stage first-hand knowledge of the real conditions in which the majority of the population live in South Africa⁷¹.

⁷⁰ The day when township and rural schools, overwhelmed by demands from white parents to enrol their children, will see Zulu or Xhosa entry tests, the goal of equality in education will have been achieved.

⁷¹ And, one would like to add, to whose destitute state they owe to a large extent their own present endowment.

African people, realising the potential of their languages for social upliftment, would regain pride in them and in the values they carry, gradually reducing their objections to their use and abandon their excessive focus on English as the only medium worthy of scholastic efforts and attention. Thus, too, the rich linguistic and cultural diversity of the country would be maintained and promoted.

CONCLUSION

The population shift in privileged schools offers, we feel, a significant opportunity for revisiting the policy on South African languages in education and deliberately promoting African languages. Former white schools are duty-bound to help reverse negative language attitudes among African people towards their own languages, in particular as literary mediums. The use of African languages as LoL/T in privileged schools and their systematic teaching as subjects, both to speakers and non-speakers, is a chance to extend their domain and enhance their status. As a result, the bulk of African learners would be keen to receive instruction in mother-tongue, enabling them to focus on the content. One is anxious to read in the news that parents have demanded, on the basis of the legislation, that tuition in, say, Venda or any other African language, be made available for their children in secondary school. Furthermore, it could favour a degree of integration between all government-funded schools by stimulating teacher mobility. The impact on school efficiency could only be positive.

On the social level, school exchanges across racial boundaries could help foster a better understanding among the SA society, fostering the idealistic vision of a Garieb nation⁷² and promoting the “*communication across barriers of colour, language and religion*” set as a goal in the LiEP (art 3).

More broadly, in the context of the African Renaissance, the reclaim of Africa’s own languages is on the agenda⁷³. Education is at the bottom of it all. South Africa is in an ideal position to lead the way, since, almost alone on the continent, it has the human and material resources to promote and implement significant and far-reaching changes. The numerous initiatives from both civil society and government amply prove it. May they be inspired and succeed!

Phambili nezilimi! Phambili neleli!

⁷² The image of the nation as a powerful river – *Garieb* is the original name for the river Christened *Orange* by the European settlers - was advocated by Neville Alexander, in lieu of the *rainbow nation*, on the grounds that it suggests the merging of streams rather than their mere juxtaposition.

⁷³ The African Parliament has just added Swahili to its otherwise mainly ex-colonial working languages.

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chapter four

What happens to literacy in (print) poor environments?

Reading in African languages
and school language policies

ELIZABETH J PRETORIUS,
DEPARTMENT OF LINGUISTICS, UNISA

INTRODUCTION

South Africa being a multilingual country with 11 official languages, it is natural that language issues, policy and planning are central concerns within the educational context. The debates concerning languages and the medium of instruction in schools are perennial items on conference, workshop, seminar and research agendas throughout South Africa and elsewhere on the continent. The results of the large scale nationwide systemic evaluation studies undertaken by the Department of Education since 2001, have stirred these debates with renewed vigour. Yet, what seems to be missing in many of these debates is an awareness of and active engagement with factors that promote literacy development that go beyond generalised associations between language and schooling.

In 2001, the Department of Education undertook its first large systemic evaluation of reading and writing in Grade 3 across all nine provinces. The results showed a mean of 38% in the home language in Grade 3 (Department of Education, 2003). The Grade 6 systemic evaluation in 2005 across the nine provinces showed a mean of 38% in the language of learning and teaching (LoLT): 63% of learners were found to be performing in the 'Not Achieved' band and only 28% of learners performed in the 'Achieved/Outstanding' bands (Department of Education, 2005). The poor performance of the learners on these literacy measures has drawn attention to the urgency of laying a good foundation for literacy and numeracy development in the primary school years. One of the ways of doing so is to provide initial instruction in the home language for as long as possible before changing over to English as the language of learning and teaching. Indeed, there is overwhelming evidence worldwide that doing one's schooling in one's home language is desirable and beneficial. Cummins, for instance, points out that there have been close to 150 empirical studies in the past 30 years that "*show beneficial effects ... on students' linguistic, cognitive or academic growth*" when they have the opportunity to acquire initial literacy in their home language (2000:37). This is the basis on which additive bilingual programmes are built, where the learners' home language is "*maintained and supported*" even though the LoLT may be in an additional language (Richards & Schmidt 2002:11). In subtractive bilingual programmes, the home language of the learner is replaced by the LoLT, and no attention is given to developing language or literacy in the home language.

In 1994 the newly elected democracy in South Africa laid the basis for a new outcomes-based approach to education, which forms the foundation of the transformed curriculum.

The new language policy explicitly promotes an additive approach to bilingualism. Thus, according to the revised curriculum, competence in the home language should be developed in order to provide “*a strong curriculum to support the language of learning and teaching*” (Department of Education, 2002:4). In this regard South Africa has one of the most progressive school language policies on the African continent in that explicit official attention is given to the development of home language literacy *in principle*. However, as is often the case, how well this policy translates into action in the classroom is debatable.

Although initial schooling in the home language is officially encouraged, school governing bodies have a choice and can opt for a ‘straight for English’ policy. In the previously disadvantaged African township and rural schools, literacy is often first developed in the home language in Grades 1-3, with English introduced in Grade 1 or 2 and becoming the LoLT in Grade 4 in most schools. After switching over to English, African children are expected to continue studying their home language as a school subject until Grade 12. Because English is regarded as the language of status, opportunity and education, the misperception often persists amongst parents that primary schools that offer ‘straight for English’ are schools that will provide a good education. The ‘straight for English’ option is also fed by the assumption that the sooner children start learning an additional language, the better their chances of becoming fluent in it.

Although African languages are not yet used as LoLTs after Grade 3 or 4, the call to adopt the use of home languages in primary schools can be seen in the drive to get schools to change their language policy accordingly and in the drive to provide textbooks in the African languages for the various learning areas up to at least Grade 6 level. These are welcome moves, and ones that are also long overdue. However, language policy is only as good as the education system that undergirds it.

That initial literacy in the home language is beneficial is not disputed here. Instead, this article focuses on the factors that underpin successful literacy development. Some data from research undertaken in three township primary schools are presented, where all three schools have a different language policy. These findings are used as a basis to identify school and classroom factors that need to be in place in order to provide learners with as propitious a learning environment as possible for literacy development. On the basis of these findings, it is argued that changes in language policy alone can create false expectations for such changes are unlikely to bring about fundamental improvements in literacy development *unless* other factors are also addressed simultaneously – and fervently.

RESEARCH FOCUS

The research reported in this article examines the reading ability of Grade 6 and 7 learners in three different primary schools in a typical urban township environment. Two of the schools are typical state primary schools that serve disadvantaged communities, while the third is a private school in the same township that attracts children from less disadvantaged homes. The three schools have different language policies (these are explained in the Methodology section below). Comparisons are drawn between the learners' reading ability in the L1, (Northern Sotho), and English, the LoLT, in these three different learning environments. There are three questions that inform the study:

- 1) What are the reading profiles in Northern Sotho and English of Grade 6 and 7 learners from three different urban township schools with different language policies?
- 2) What is the relationship between reading in Northern Sotho and English in these schools?
- 3) How does reading performance in Northern Sotho and English in Grade 7 relate to academic performance?

These findings form the basis for considering what the implications are for language policy and literacy development in the African languages in primary schools.

METHODOLOGY

Broader context

The three primary schools from which the data are obtained are all situated in Atteridgeville, a predominantly Northern Sotho/Tswana speaking township to the west of Pretoria, in Gauteng province. There is one private and 26 state primary schools in the township. Of the state primary schools, 10 are predominantly Northern Sotho speaking, 9 Tswana, 3 Zulu, 2 Tsonga, 1 Venda and 1 South Sotho. Some of the Northern Sotho and Tswana schools offer also instruction in another African language, for instance a Northern Sotho school might also have a Zulu class at each grade level. In the great majority of these primary schools, initial schooling takes place in an African language, from Grade 1 to Grade 3. The switch to English as LoLT is made in Grade 4. Thereafter the specific African languages continue to be taught as a first language subject.

Two of these primary schools (Schools B and P below) are involved in a reading intervention programme, the aim of which is to make reading an integral part of daily school activities. The private primary school serves as a comparison school.

School B (state school)

School B has over 600 learners and a staff of 16 teachers. The school serves a socio-economically disadvantaged community. School fees were R120 (about \$20) per annum but at the end of 2006 the school was declared a Quintile 1 non-fee paying school. The Department of Education now provides the school with a fixed budget which is managed by the DoE. The school has a feeding scheme, where 400 children are fed once a day. For many of these children, this is the only meal they get a day.

There are two classes at each grade level. In the Foundation Phase (Grades 1-3), there are about 35 children per class. This increases to around 50 per class in Grade 7. With regard to language policy, the school has long opted for initial literacy in the home language. Northern Sotho is the language of learning and teaching from Grade R - Grade 3, with English introduced as an additional language in Grade 2. English becomes the LoLT in Grade 4 while Northern Sotho becomes a subject of instruction from Grades 4 - 7. Although many children come from homes in which a variety of African languages are spoken, about 70% of the learners at this school come from primarily Northern Sotho speaking homes. About half the teachers at the school have Northern Sotho as their home language. In theory, this school provides additive bilingualism, the most favourable of the various bilingual models, with initial literacy in the L1 for three years and with continued L1 support after the AL becomes the LoLT in the fourth year.

School P (state school)

Similar to School B, School P also has about 600 learners and a staff of 16 teachers. It also serves a low socio-economic community, but it is still a fee paying school Quintile 3 that manages its own budget. The school fees are R100 per annum, but only about 50% of the parent body actually pay these fees. The school also has a school feeding scheme, and most of the learners at this school also come from primarily Northern Sotho speaking homes. Here too, about half of the teachers speak Northern Sotho as a home language. Class sizes at the school vary between about 45 – 55 learners.

With regard to language policy, unlike School B where initial literacy and numeracy is taught in Northern Sotho to the end of Grade 3, School P has a 'straight for English' policy from Grade 1². Northern Sotho is taught as a subject from Grades 2 to 7. This school provides a weakened form of additive bilingualism for although there is no initial literacy in the home language, the L1 is at least taught as a subject from Grades 2-7.

School M (private school)

School M is a small private primary school that was opened in the township in 1991. Even though it serves the same community as the other primary schools in the township, many of children at this school come from higher socioeconomic homes, with many parents being white collar professionals who live in the township. However, there are also several children from poor homes who attend the school on scholarships.

The classrooms at this school are well resourced and the teachers well qualified, experienced and dedicated. Classes are small (about 25 learners per class). Reading and storybooks are an integral part of each classroom in the lower grades, and teachers have high reading expectations of learners. Teachers from Schools B and P attend the private school for classroom observations and occasional workshops, and closer ties are being forged between these schools.

With regard to language policy, the school has a 'straight for English' policy. Unlike Schools B and P, the learners at this school are not linguistically homogeneous but speak different African languages at home. No African languages are taught as subjects. Unlike many other private schools or ex-Model C schools, the learners at this school do not have peers for whom English is an L1. Many of the teachers are mother tongue speakers of English from different racial backgrounds (White, Indian and Coloured). There are also African teachers. All have high levels of English proficiency. The school provides monolingualism ('straight for English'), an approach which is criticised for not providing support for the home languages of the learners.

² The school was originally a senior primary school (Grades 4-7 only) but a few years ago, following DoE directives, a Foundation Phase was incorporated into the school programme. The principal said that, due to the exodus of township learners into neighbouring Indian and ex-Model C primary schools, the only way they could attract parents to sending their children to the school was to go 'straight for English' in the Foundation Phase.

Reading context prior to intervention

For ease of reference, Schools B and P will be referred to collectively as the ‘township’ schools. Before the reading intervention programme was implemented at these schools, very little reading was happening in these two schools. Initial visits to the schools before project implementation revealed that at both schools none of the classrooms were print-rich environments, and very few books were visible. There were no bookshelves or storybooks in any of the classrooms. Neither of the schools had a school library, and although older learners were issued with textbooks, additional access to storybooks and other books and material of an educational or recreational nature was non-existent. Several teachers stated that reading was “a problem” and that many learners “couldn’t read” but the nature of their reading problems was not specified and no reading assessment was undertaken.

Literacy in the Foundation Phase was primarily taught from the chalkboard, homework was uncommon, and reading homework virtually nonexistent. There were no storybooks or readers available for learners to practise their newly acquired skills, and the teachers did very little storybook reading with them. In School B copies of the Northern Sotho Grade 1 reader were locked up in a cupboard because the teachers felt that “the children find it difficult to read”. Reading was given very little attention in the Intersen Phase (i.e. Grades 4-7) and teachers felt pressurised by the need to teach the different content subjects. Large classes were usual. There was a general feeling at these township schools that learners at all grade levels struggled with reading but, overwhelmed by their workloads, the teachers did not know how to really address this problem.

The intervention project

The intervention project has been in progress at School B since 2005, and at School P since 2006. It is hoped that by developing a culture of reading these schools will be able to improve the overall language and academic development of the learners. To this end a multi-level approach has been adopted that emphasises the building up of print based resources as well as capacity and involves the participation of the learners, teachers and parents.

The intervention project assists the schools in setting up a functional school library where learners can have easy access to age appropriate books in both Northern Sotho and English. Besides the library, the schools’ resources are also enhanced by way of increasing print based materials in the classrooms. Teachers at all grade levels are made aware of the need to create print rich classroom environments.

Because literacy resources have no value if not used properly, teachers (and parents) need to be shown what to do with books. The intervention thus also focuses on developing the instructional capacity of the teachers and the supportive capacity of the parents. Workshops are held fortnightly with the teachers after school to make them aware of the importance of reading in the learning context, to increase their understanding of the reading process, familiarise them with reading strategies, draw attention to the OBE (Outcome Based Education) assessment standards for reading and different ways of assessing reading at the various grade levels, and integrating the library into their classroom practices. The importance of developing fluent reading skills in both Northern Sotho and English are continually emphasised. Arrangements are also made for teachers to take turns, by prior appointment, to spend a morning observing good reading practice in a grade equivalent classroom in a highly effective school where reading is a priority (e.g. School M below).

A family literacy component is also included in the project to involve parents more actively in the literacy development of their children. To this end a series of Family Literacy workshops are held for parents. The aim of these workshops is to draw parents' attention to the importance of reading, to encourage them to read to their children and/or to listen to their children reading, to emphasise the importance of literacy in Northern Sotho, to take an interest in children's school activities, make time and space available in the home for homework, encourage membership of the local community library, monitor what and how much TV children watch, and so on. The head librarian at the local community library is also invited to address the parents and closer links are forged between the community libraries and the schools.

To monitor project progress at both schools each year the early literacy development of the Grade 1 learners is assessed in Northern Sotho (a mixture of English and Northern Sotho at School P), and all the Grade 6 and 7 learners at both schools are tested for language and reading ability in Northern Sotho and English. Assessments take place at the beginning of each school year (February/March) and again towards the end of the year (October/November).

The language and reading abilities of the Grade 6 and 7 learners at School M are also tested once a year towards the end of the year, to provide a comparative perspective on the literacy development of learners in the township context. Since no African languages are taught as a subject at the private school, the Northern Sotho tests were not administered to the Grade 6 and 7s at this school; they only completed the English language and reading tests.

LANGUAGE AND READING ASSESSMENT

In order to examine more closely how reading develops in different primary school contexts within the same township, the literacy performance of the 2006 cohorts of Grade 6 and 7 learners at the three schools will be examined here. Since language is the medium through/in which reading is conducted, the learners were also all given a language test in English and Northern Sotho to enable exploration of the language-reading relationship.

Language proficiency: In this study language proficiency is operationalised as performance on a dictation test in each language. According to Oller (1979:58), dictation correlates “*at surprisingly high levels with a vast array of other language tests*”. This correlation points to dictation tasks tapping into similar knowledge sources that standardised language tests tap into but it does so via the auditory rather than the written medium. Because most language tests are written tests they have to be read and thus they also tap into reading comprehension, resulting in covariance between language proficiency and reading comprehension. Because a dictation test taps into language knowledge via auditory comprehension, it avoids this covariance trap.

A dictation test can be regarded as an integrative, holistic language test – provided it is administered appropriately. A passage that is dictated word-for-word becomes a short term memory test and hence is not much use as a measure of language knowledge. Instead, the dictation passage is first read at normal conversational pace while the testees simply listen. The second time it is read at conversational pace, but chunked into natural sections of about 5-6 words which are not repeated. This kind of task meets the two naturalness criteria for natural language processing tasks, viz. it requires the processing of temporally constrained sequences of linguistic material and, in order to divide the stream of speech into identifiable chunks for writing down, it requires, to a large degree, an understanding of the meaning of what was heard (Oller 1979: p. 39).

The dictation passages were taken from current Grade 6 and 7 textbooks. After being read to the learners at normal conversational pace the first time while they simply listened, the learners wrote down what they heard when the passage was again read at conversational pace the second time but chunked into natural sections of about 5-6 words. A set of criteria was drawn up jointly by the English and Northern Sotho team members for the marking of the dictation passages. Spelling and punctuation were also taken into account. For the Northern Sotho dictation, words that were written conjunctively instead of disjunctively were accepted as correct, provided they were spelled correctly³.

³

For historical reasons, N Sotho spelling is highly disjunctive, whereas spelling in the Nguni languages is conjunctive.

The dictation test was not intended as a comprehensive index of language proficiency. It was simply used as a reflection of a learner's understanding of the language via the auditory mode but it also includes aspects of literate language since spelling and punctuation were also taken into account.

Reading comprehension: Northern Sotho and English reading proficiency was operationally defined as proficiency obtained in a reading comprehension test where a combination of test items was used for both narrative and expository texts. The texts were taken from existing Grade 6 and 7 textbooks. The test items that were designed included multiple choice questions of an inferential nature, vocabulary questions, cloze items⁴, identifying referents of anaphoric items, and questions involving graphic information, e.g. maps, graphs.

The ability to answer inferential comprehension questions rather than literal questions is a reliable indicator of how well a reader understands a text (e.g. Oakhill & Cain 1998). There were no literal, interpretive or creative comprehension questions.

In the cloze task, approximately every 9th word was deleted, if it was appropriate and could be inferred from the text. Although the same passages were used in English and Northern Sotho for the cloze activities and the same number of deletions was designed, the same *linguistic items* were not deleted. Deletions were guided by the textual clues provided by the morphosyntactic and semantic features of each language text.

The ability to resolve anaphoric references in a text is an integral part of reading skill (e.g. Webber 1980). Specific anaphoric items were identified and the learners were required to underline the referents to which they referred. This section of the text was carefully explained to the learners beforehand in the test language, with an example on the chalkboard.

Reading rate: During the reading test an informal measure of the learners' reading rate was taken. After the test preliminaries, the learners were instructed to start reading. After a minute, they were stopped and asked to circle the word they had been reading. Readers then continued the passage and answered the questions that followed. The number of words read gave a *rough* indication of reading rate. Because it is difficult to accurately assess reading rate in large groups, the scores are treated with caution.

⁴ In cloze tests, every nth word is left blank in a text and the reader has to fill an appropriate item in the blank. The cloze procedure indicates the extent to which readers are able to follow the sense of a text. In particular, it assesses a reader's use of text context as a strategy for understanding what is read.

ADMINISTRATIVE PROCEDURES

The English tests were administered first, towards the end of the academic year in mid-October. To reduce memory effects, the Northern Sotho tests were written about 3 weeks after the English tests. Both sets of tests were written during two periods allocated during school hours and administered by the project researchers. No specific time limits were set for completion of the tests. The data were captured and analysed using SPSS (Statistical Package for the Social Sciences, a software programme).

RESULTS

The effects that the intervention programme is having on the schools is not the focus of this paper. (For further details of how (and if) the project is impacting on the schools, classrooms, teachers and learners, see Pretorius & Mampuru 2007; Currin & Pretorius (forthcoming)). It suffices here to point out that at the start of the intervention in 2005, the mean English reading score of the Grade 7 learners was 29.5% at School B and 39% at School P, indicating extremely low reading levels⁵.

Before proceeding to the research question, the language distribution of the Grade 7 learners in the three schools is given in Table 1.

TABLE 1.
LANGUAGE DISTRIBUTION (PERCENTAGE) OF GRADE 7 LEARNERS ACROSS THE SCHOOLS

	School B	School P	Private school
N Sotho	82 %	52 %	43 %
Tswana	4	23	10
S Sotho	5	2	27
Zulu	2	9	13
Ndebele	4	-	7
Venda	1	9	7
Tsonga	1	5	-

⁵ In standardised reading tests in the USA, learners who score below 90% for decoding accuracy (i.e. oral fluency on word recognition tests) and 60% or below for reading comprehension are regarded as reading at frustration level, below their grade level and in need of reading remediation.

The first research question to be addressed is:

- 1) What are the reading profiles in Northern Sotho and English of Grade 6 and 7 learners from three urban township schools with (three) different language policies?

Descriptive statistics are given in Tables 2 and 3 below that reflect the results of the 2006 cohort of Grade 6 and 7 learners respectively with regard to mean performance in the dictation and reading comprehension tests in Northern Sotho and English.

TABLE 2:
GRADE 6 COMPARISON OF MEAN PERCENTAGES ACROSS THE SCHOOLS NOVEMBER 2006

	Township School B	Township School P	Private School M
Number of learners tested	n=35	n=49	n=30
Mean age (age range in all schools 11-14)	12.6	12.1	12.1
Mean Northern Sotho dictation %	74.3	70.3	-
Standard Deviation	30.1	34.1	-
Minimum	0	0	-
Maximum	99	94	-
Mean Northern Sotho reading comprehension %	29.4	38.2	-
Standard Deviation	21.9	20.3	-
Minimum	6	4	-
Maximum	90	86	-
Mean English dictation %	55.3	54.8	85.4
Standard Deviation	25.4	26.3	12.8
Minimum	12.1	1	47.3
Maximum	93.2	95	100
Mean English reading comprehension %	45	48.07	88
Standard Deviation	20.3	25.3	8.5
Minimum	17	11	63.6
Maximum	93	95	100
Reading rate (words per minute)			
Northern Sotho	99	106	-
English	103	124	152

To recapitulate, at the start of the intervention in 2005, the mean English reading score of the Grade 7 learners was 29.5% at School B and 39% at School P, indicating extremely low reading levels. The results reflected in Table 3 show some improvements.

**TABLE 3:
GRADE 7 COMPARISON OF MEAN PERCENTAGES ACROSS THE SCHOOLS NOVEMBER 2006**

	Township School B	Township School P	Private SchoolM
Numbers tested	n = 50	n = 54	n = 25
Average age (Range of years)	13.6 (11-16)	13.6 (11-16)	13.4 (12-14)
Mean Northern Sotho dictation %	67.7	64.5	-
Standard Deviation	25.65	27.04	-
Minimum	0	0	-
Maximum	98	97	-
Mean Northern Sotho reading comprehension %	38.1	36.06	-
Standard Deviation	19.62	21.57	-
Minimum	6	2	-
Maximum	82	91	-
Mean English dictation %	55.2	63.4	92.4
Standard Deviation	33.54	30.55	13.14
Minimum	2	0	45.2
Maximum	100	98	100
Mean English reading comprehension %	44.5	46.2	80.4
Standard Deviation	19.99	19.89	11.92
Minimum	9	11	52.3
Maximum	85	97	95.2
Mean Reading rate (words per minute)			
Northern Sotho	106	102	-
English	131	132	169

As can be seen from these two tables, there are four main patterns that emerge from the results. Firstly, the Grade 6 and 7 learners in the private school far outperformed the learners in the township schools in terms of English language and English reading comprehension.

They also read faster than the township learners. The weakest Grade 6 and 7 readers in the private school (63.6% and 52.3% respectively) would have been regarded as 'good readers' in the township context. Secondly, the reading performance of both Grade 6 and 7 learners in the township schools was better in English than in Northern Sotho. This has been a consistent pattern since reading assessment started at the two schools. Thirdly, the differences in language policy between the two township schools did not give them a noticeable advantage either way. In other words, the additive bilingual policy of School B did not give the learners an advantage in terms of Northern Sotho reading by the time they reached the senior primary school phase. In fact, the Grade 6 learners at School B had lower scores in Northern Sotho comprehension than their peers in School P. Similarly, the learners in School P with its weak additive bilingualism only had a slight advantage in terms of English reading comprehension compared to their School B peers. Fourthly, there was a large discrepancy in Northern Sotho in particular between performance on the dictation test and the reading comprehension test. Learners who performed well in Northern Sotho language did not necessarily read well in their language.

The second research question to be examined:

- 2) What is the relationship between language and reading ability in both languages?

This was done by means of a Pearson Product Moment correlation⁶ between language proficiency and reading ability in both Northern Sotho and English in Grade 7. These correlations are shown in Table 4.

What is important to note here is the unexpected low correlation between scores in Northern Sotho language and Northern Sotho reading in Grade 6 ($r = .356$). Scoring well on the Northern Sotho dictation test did not mean that learners also scored well when it came to reading in Northern Sotho. This relationship became stronger in Grade 7 ($r = .645$). In contrast, as expected, all the schools showed significant robust correlations between scores in English language and English reading ($r = .747$ in Grade 6; $r = .724$ in Grade 7): learners who scored well in English language tended to score comparably in English reading, and vice versa. Significant and robust too was the correlation between reading in Northern Sotho and English in both grades, but particularly in Grade 7 ($r = .773$). In other words, relatively good readers in Northern Sotho were also relatively good readers in English and vice versa; weak readers in English were also weak readers in Northern Sotho.

⁶ A correlation measures the degree of relationship between two variables. Correlation coefficients range between 0-1. The higher the correlation the stronger the association between the variables.

TABLE 4:
CORRELATION MATRIX SHOWING RELATIONSHIP BETWEEN LANGUAGE AND
READING COMPREHENSION IN BOTH LANGUAGES

	1	2	3	4
<i>Grade 6</i>				
1 N Sotho language: Township schools	-	.356**		
2 N Sotho reading: Township schools		-		.723**
3 English language: Township schools			-	.747**
Private School			-	.692**
4 English reading				-
<i>Grade 7</i>				
1 N Sotho language: Township schools	-	.645**		
2 N Sotho reading: Township schools		-		.773**
3 English language: Township schools			-	.724**
Private School			-	.691**
4 English reading				-

** Correlation is significant at the .01 level two-tailed

Since causal relations cannot be inferred from correlations, regression analyses were performed to further explore the language and reading relationships in the township schools. The question being explored was: what best predicted reading in one language? Was it language proficiency in the language or reading ability in the other language? In the first application, the dependent variable was L2 reading, and the predictor variables were L1 reading and L2 language. Because the study was exploratory, the enter (simultaneous) method was used. Significant models emerged for both the Grade 6 and 7 cohorts, with L1 reading being a stronger predictor of L2 reading than L2 language in both grades, as shown by the standardised beta coefficients⁷ in Table 5.

Given that L1 reading lagged behind L2 reading in both grades, in the second application the data were also examined in the other direction, viz. which variables best predicted L1 reading, L1 language or L2 reading? Using the enter method, significant models emerged for

⁷ The standardised beta coefficient indicates the measure of contribution of a particular variable to the prediction model. The larger the value, the greater effect the predictor variable is having on the dependent variable.

both grade cohorts. In Grade 6, L2 reading was the only significant predictor of L1 reading, while in Grade 7 L2 reading was a stronger predictor of L1 reading (beta coefficient = .605) than L1 language (beta coefficient = .347).

In other words, these findings indicated that reading ability in one language was a strong predictor of reading ability in the other language. In particular, L2 reading strongly predicted L1 reading ability. While L2 language contributed some variance to L2 reading, L1 language was not a predictor of L1 reading ability in Grade 6, although it did contribute some variance to L1 reading in Grade 7.

TABLE 5:
SIMULTANEOUS MULTIPLE REGRESSION PREDICTING L2 AND L1 READING
RESPECTIVELY

Grade 6: L2 reading

$F_{2,74} = 48.856, p < 0.0005$

Adj. R square = .557

<i>Predictor variables</i>	<i>Beta</i>	<i>Sig.</i>
L1 reading	.546	0.000
L2 language	.289	0.003

Grade 7: L2 reading

$F_{2,92} = 85.716, p < 0.0005$

Adj. R square = .643

<i>Predictor variables</i>	<i>Beta</i>	<i>Sig.</i>
L1 reading	.545	0.000
L2 language	.324	0.000

Grade 7: L1 reading

$F_{2,74} = 44.564, p < 0.0005$

Adj. R square = .531

<i>Predictor variables</i>	<i>Beta</i>	<i>Sig.</i>
L1 language	.146	0.074
L2 reading	.689	0.003

Grade 7: L1 reading

$F_{2,92} = 102.358, p < 0.0005$

Adj. R square = .683

<i>Predictor variables</i>	<i>Beta</i>	<i>Sig.</i>
L1 language	.347	0.000
L2 reading	.605	0.000

The third research question examined the relationship between reading ability and academic performance in the final year of primary school.

- 3) How does reading performance in Northern Sotho and English in Grade 7 relate to academic performance?

In order to address this question, the learners' scores in the final Grade 7 examinations were obtained in all eight subjects (English, Northern Sotho, Afrikaans, Maths, Natural Science, Social Science, Life Orientation and Technology) and a mean score computed from these marks. The learners were then placed into four achievement categories used by the Department of Education, viz. Not Achieved (0-39%), Partially Achieved (40-49%), Achieved (50-69%) and Outstanding (70-100%). The means for L1 and L2 language and reading of the learners in each of these four levels were then tabulated. The results are shown in Table 6.

It is clear from the table, firstly, that across the schools there was a trend of increased language and reading ability associated with academic category. In other words, learners who read relatively well were learners who performed in the Achieved or Outstanding groups. Learners in the Not Achieved category had much lower reading scores than learners in the Partially Achieved category, who in turn had lower reading scores than those in the Achieved group; learners in the Outstanding group were all competent readers. In the township schools, the Outstanding learners read better than their peers in both English and Northern Sotho, but their comprehension scores were superior in English than in Northern Sotho.

Secondly, the notion of being a 'good' or 'weak' reader varied considerably, and was relative to the school context. It is instructive to compare the mean reading score of the learners who failed in the private school with those who failed in the township schools. The failed learners in the township schools could hardly read in either their L1 or the L2 after seven years of primary schooling, while the failed learners in the private school were, by comparison, 'literate' failures with a mean reading score of 63.8%.

Similarly, Achieved learners in the township schools had mean reading scores that were about 13-15% lower than the mean reading level of the failed learners in the private school. On the other hand, although lower than their private school peers, the reading scores of the Outstanding learners in the township schools were remarkable, given the print-poor circumstances in which they had acquired their reading skills.

TABLE 6:
GRADE 7: COMPARISON OF L1 AND L2 LANGUAGE AND READING PROFICIENCY
ACROSS THE FOUR ACADEMIC ACHIEVEMENT CATEGORIES (PERCENTAGE)

Academic category	Language and reading assessment	Township School B Mean	Township School P Mean	Private school Mean
<i>Not achieved</i>	L1 Language	24.1	37.6	-
	L1 reading	13.1	12.2	-
	L2 Language	11.9	17.6	79.7
	L2 reading	19.0	20.2	63.6
<i>Partly achieved</i>	L1 Language	48.4	58.6	-
	L1 reading	26.3	30.3	-
	L2 Language	27.1	50.6	84.8
	L2 reading	32.9	38.6	70.8
<i>Achieved</i>	L1 Language	77.4	69.1	-
	L1 reading	42.3	39.2	-
	L2 Language	67.8	74.0	96.9
	L2 reading	48.3	50.4	86.0
<i>Outstanding</i>	L1 Language	94.6	84.3	-
	L1 reading	65.0	60.0	-
	L2 Language	96.7	87.6	99.4
	L2 reading	78.5	72.3	91.6

DISCUSSION

The main aim of this paper was to examine the reading performance of Grade 6 and 7 learners in three different urban township schools in relation to the language policies at the schools, to see how language and reading abilities were related to one another and to academic performance, and to consider the implications of the findings for language policy and literacy development in the African languages in primary schools.

One of the main findings in this study was that township learners who attended the private school in the township performed very well on the (English) reading and language tests, while the township learners who attended the township schools did poorly on the reading tests, in both Northern Sotho and English. It is important to note that Schools B

and P are typical township schools and these reading outcomes are not unusual. In fact, the Grade 6 systemic evaluation undertaken in 2005 across all nine provinces showed that Grade 6 learners achieved a national average of 38% in literacy (Department of Education, 2005). With Grade 6 reading means of 45% and 47% respectively, Schools B and P are even ahead of the national literacy norms.

There were several expectations based on received academic wisdom that were violated from the findings in this study. Firstly, contrary to expectation, the 'desirability' of language policy was in inverse relation to literacy outcomes of the schools. In other words, the school that had the least desirable language policy (English monolingualism in the private school) was the school that consistently produced the most outstanding results in terms of language and reading accomplishments, while the school that in theory had the most desirable policy (additive bilingualism in School B) performed poorly. Secondly, contrary to expectation, the learners in the two township schools did not read better in their home language than in English. Thirdly, contrary to expectation, there were large gaps between performance on the dictation tests and the reading tests in both grades in the township schools, but especially in Northern Sotho. In other words, even doing quite well in the home language did not mean that a learner would also read well in that language. Instead, there seemed to be a general construct of reading ability that manifested mutually in the L1 and the L2, although reading ability manifested more dominantly in the L2 than the L1. This finding lends some support to the Interdependence hypothesis (c.f. Bernhardt & Kamil, 1995; Cummins, 2000; Van Gelderen et al. 2007) in that reading ability clearly seemed to transfer across the languages. However, whereas this hypothesis generally assumes that transfer occurs from L1 to L2, in this study transfer seemed to occur bidirectionally, but especially from the more dominant L2 to the weaker L1.

What are we to make of these seeming contradictions? It could be argued that the findings in this study that the learners at the private school far outperformed the learners in the township schools simply confirms what we already know, viz. that poverty determines school accomplishment. The township schools served poor communities, while the private school served an emerging middle class community within the township. There is well documented empirical evidence from around the world that poverty and low levels of literacy go hand in hand, and that it is difficult to educate children from poor homes (Allington 2000; Bradley & Corwyn, 2002). However, given that 80% of South African schools are disadvantaged (Gustafsson, 2005) this view could lead to educational fatalism. The poverty argument also raises questions about the role of language policy as an explanatory variable in less than ideal school circumstances. In developing countries where much of education is framed by poverty it is more instructive and helpful to consider instead which factors might mediate the

effects of poverty in literacy development. In this study language policy per se did not seem to have a mediating effect. Instead, if one considers the research-based knowledge derived from decades of research into reading development, then it is easier to identify factors that might mediate the effects of poverty on literacy development.

FACTORS THAT PROMOTE READING DEVELOPMENT

Reading development is premised on a simple principle: reading develops reading. This is not a particularly novel tenet but it is nevertheless fundamental. It is so fundamental that it is usually overlooked, mainly because language is the medium through which reading occurs. The medium is then taken to be the main principle in reading, hence the assumption that if one speaks a language or is good at a language one can read in the language. There is of course a certain truth in this, but consider an analogy; knowing something about music does not make one a violinist. To become a good violinist one has to practice the violin (spending many hundreds of hours actually playing the instrument) with music being the medium that gives voice to the violin. Practising the piano does not make one a violinist, although it may make one more proficient in music.

Reading ability underpins academic accomplishment. Schools that produce good readers are schools that make reading a priority. They do this by providing learners with plenty of opportunities to practice reading, by providing access to books or print material to read, and by constantly motivating, cajoling or goading learners to read so that reading is not an option but a core activity.

Reading as time on task and practice

Every time young learners in primary school read a storybook or a text they are in effect practising their reading skills. In research on effective schools and classrooms that produce good readers, the amount of time spent on reading and the kinds of tasks involving reading emerge as important factors. In the Grade 6 systemic evaluation (Department of Education, 2005), time on task in general, across all subjects, was identified as an important factor associated with effective schools. Teachers in poor performing schools were found to spend much less time in classrooms actually engaged in meaningful learning activities with their learners. This loss of valuable learning time is cumulatively harmful for reading development. For example, in their study of effective literacy instruction across 14 low-income primary schools in the USA, Taylor, Pearson, Clark and Walpole (2000) found that time spent on reading activities was significant. Effective schools averaged 134 minutes a

day on reading activities in the early grades, excluding time spent reading storybooks to the children. Time was also provided for independent classroom reading, and learners engaged in authentic reading tasks and also in writing tasks in response to reading activities. In all the effective schools, reading was a priority at both school and classroom level.

Reading homework is also crucial in the early grades, with parents being involved in their children's literacy development by listening to them read and by reading storybooks to them. In a study in the USA referred to in Anderson, Wilson and Fielding (1988), it was found that good Grade 1 learners were reading at least 1,200 words a week as part of reading homework, whereas weak Grade 1 learners only read on average 16 words a week.

Regular exposure to books and opportunities to read result in hours and hours of reading practice done in meaningful contexts. In the later grades it is largely through regular exposure to a variety of books and print material over many years that learners become rapid and fluent readers who use cues in the texts they read to construct meaning. Regular reading establishes automaticity in word identification processing, which frees up working memory and facilitates comprehension processing (Perfetti, 1988; Walczyk, Marsiglia, Johns & Bryan, 2004). Only regular extensive reading leads to increased reading speed. Through regular reading learners also build up their linguistic knowledge, acquire more complex grammatical structures not often encountered in spoken language, extend their vocabulary, build up background knowledge and become familiar with text structures and conventions that characterise written language and its different genres.

In the private school in this study reading is a core activity, and the basics of reading are attended to right from the Foundation Phase, with plenty of opportunities and tasks for reading practice. In contrast, in the two township schools, many learners don't read well simply because they have never really read enough during their primary school years, in either Northern Sotho or in English. Before the intervention the schools did not make reading a real priority, very little time was spent on reading activities, and very often the little time spent on reading in the early grades consisted of reading lists of syllables, words and short sentences in chorus from the chalkboard. There was very little engagement in extended, meaningful texts.

Another factor that might account for the low reading scores in Northern Sotho and the large discrepancy between performance in the L1 language and L1 reading tests is the difference between the spoken Northern Sotho used in daily interactions, especially the urban version spoken in Gauteng (*Sesotho sa Pretoria*), and the standard language of written Northern Sotho (*Sesotho sa Leboa*). This is similar to diglossic situations, where a non-

standard variety of a language is used for every day interactions and a more formal or ‘high’ variety used for more formal situations and in written language. Some of the intervention project team members⁸ who have done classroom observations have commented on the fact that ‘proper’ Northern Sotho is not being used in the classrooms (See the contribution by Ramagoshi & Bulane outlined at the workshop for a more detailed description of this situation in schools in Tshwane.) For many learners, the language of written Northern Sotho may be an unfamiliar dialect. If they are not regularly exposed to the language of written Northern Sotho via storybooks and other print material, they may never learn to read such texts comprehendingly.

The fact that the township learners were reading relatively slowly in both Northern Sotho and English is also indicative of learners who do very little reading of extended texts. The fact that learners were reading better in English than in Northern Sotho may in part be due to the fact that what little reading they tended to do was done in English, by virtue of it being the LoLT. Before the intervention there was no reading assessment in the township schools so learners with reading difficulties were not identified and helped. By the time learners reached Grade 7 there was a large backlog of very weak readers who still had not mastered the basics of fluent and meaningful reading in either the L1 or the L2. Playing catch up at this late stage is extremely challenging.

Reading has now been explicitly put on the two schools’ agendas. A literacy period has been built into the daily timetable and in many classrooms reading activities are occupying more classroom time. This is especially evident in the Foundation Phase and in the Northern Sotho and English language classes.

Access to books and print material

Learners can’t practise reading unless they have easy access to books and spend their hours at school in classrooms that are print rich environments that stimulate reading. In the International Studies in Educational Achievement in 32 countries, differences in reading ability were consistently associated with availability of books: “*the general message is that books are essential, no matter how rich or poor a nation is*” (Ross & Postlethwaite 1994: p.147).

⁸ Two members of the project team are mother tongue speakers of N Sotho who are lecturers in the Department of African Languages at Unisa.

The availability of books is a basic requirement for reading development, yet one that is notably absent in high poverty schools. The two township schools were no exception in this regard. Before the intervention, books and print resources with which to inculcate good reading practices were virtually absent, and classroom walls were bare of print material. The only books that were available were textbooks, and many of these tend to be locked away in a classroom cupboard after the lesson period. Many learners also have to share textbooks and do not get the opportunity to take textbooks home with them and study from them. From a reading development perspective it is not surprising that the learners were reading more poorly in Northern Sotho than in English – they were seldom exposed to Northern Sotho books.

As a result of the intervention, the schools are building up their print resources. School P, in its second year of the project, has a collection of about 1,500 books. In School B the school library has been built up over 3 years from a modest 200 books to a fully functioning library containing 4, 000 books. However, in both schools, building up stocks of Northern Sotho books is difficult. In School B there are only 169 Northern Sotho titles in the 4, 000 book collection, in spite of the project's explicit policy to buy books in the learners' home language. The great majority of these Northern Sotho books are storybooks for children under the age of 10; there are very few novels for teenagers in Northern Sotho, and practically no non-fiction books. This has important implications for the development of more advanced reading skills in Northern Sotho. Even if a firm reading foundation in Northern Sotho is laid in the Foundation Phase, reading skills need to be sustained to cope with the increasingly more complex texts and the language and conceptual demands that characterise the middle and senior school years. A lack of exposure to more complex, non-narrative types of written texts after Grade 3 will result in a decline in reading skills from Grade 4 onwards. Based on almost two decades of research into the development of reading skills, Chall et al. (1990) argue that if adequate reading abilities are not acquired during the senior primary school years then there are severe consequences: reading skills developed during this stage "*are crucial to later academic success ... reading science and social studies texts becomes an almost impossible task for students who cannot read [in the middle grades]*" (Chall et al. 1990: p.14).

If learners are reading better in English than in Northern Sotho, this may be due not only to the fact that they read more in English because it is the LoLT but also because they have a far greater variety of books in English to read than in Northern Sotho. If learners are not exposed to a variety of texts and books in their home language and given opportunities to practice reading they won't become skilled readers in their language.

Motivations that propel reading

Although the affective aspects of reading have tended to be overlooked in traditional reading research, research in the past decade or so has focussed attention on the importance of attitudes and affect in reading and the role that sociocultural factors play in motivations to read and the values assigned to reading (e.g. McKenna, 1994; Verhoeven & Snow, 2001). In fact, it is argued that

... enthusiasm for reading is a prerequisite for learning how to read; nurturing enthusiasm for literacy is an indispensable component of adequate early prevention and intervention programs, a crucial aspect of good reading instruction in the elementary school years, and a serious challenge in adult literacy programs (Verhoeven & Snow, 2001:2)

In the private school storybook reading is a favoured activity in the early grades and this helps nurture a love and enthusiasm for reading. Reading for pleasure is treated as the norm and older learners regularly encouraged to read books and write book reports.

In the township schools storybook reading before the intervention was not a feature of any classroom activity. None of the teachers at these schools was a member of a community library and 68% of the teachers in these schools indicated that they had 10 or fewer books in the home. These factors suggest that the teachers themselves were not readers. Teachers initially commented that they perceived storybook reading to be a frivolous activity, to be engaged in only after the 'proper work' was done. As a result of the intervention, many teachers have been persuaded that the reading of storybooks is an effective and legitimate classroom activity and they perceive that a lot of language learning occurs through book reading. In addition, enjoyment and fun is now being associated with books in several classrooms. There is now also an explicit public discourse about reading at the school, learners are regularly being reminded of the importance of reading and being motivated to read books and to join the community library, and parents are being encouraged to support their children's literacy activities at home.

In order to develop good readers in the African languages, more reading needs to be done in these languages, more books and a greater variety of books need to be written in the African languages and put in classrooms, and enthusiasm for reading in the African languages needs to be nurtured. As a result of the intervention project, the two township schools are gradually adopting many of the characteristics of reading schools and reading levels in both languages are slowly improving.

LANGUAGE POLICIES, READING DEVELOPMENT AND SCHOOL EFFECTIVENESS

The findings in this study revealed differential literacy performance that is clearly linked to academic performance, occurring in complex multilingual educational contexts characterised by varying degrees of disadvantage. How does language policy fit into this picture? The finding that the learners at the private school far outperformed the learners in the township schools does not by any means imply that monolingualism ‘works’ and additive bilingualism ‘doesn’t work’. It is fallacious to make such an association. But, by the same token, is it not equally fallacious – or misleading at the least – to claim that a language policy of additive bilingualism will make for more effective schooling? The school with an additive bilingual policy was not effective, nor was the school with a weak additive language policy. These two schools are not simply examples of poor implementation of language policy. Instead, they are examples of the virtual absence of basic principles on which effective literacy development depends, irrespective of the language in which it is done. This is not simply hair splitting; it is an important conceptual distinction.

There are, undeniably, beneficial effects on learners’ linguistic, cognitive or academic growth when they have the opportunity to acquire literacy in their home language. Because language is intimately tied up with self identity, there are also affective and psychological benefits in learning in one’s own language and having one’s language and culture affirmed in the learning context. However, these beneficial effects won’t materialise if teachers do not spend time developing reading in the classrooms, if learners have little or no access to books, and if there is little motivation to impel reading. Self identity is also tied up with feelings of self worth. Children who do not develop good literacy skills may suffer from poor self esteem and will have trouble competing in a competitive job market in the high tech twenty-first century.

On the whole the learners in the private school were well behaved, polite, confident and competent young students who showed high levels of linguistic, literacy and academic accomplishments even though they did not acquire these in their home language. What effect English monolingualism has on their self identity and their connectedness to their own language and culture are issues beyond the scope of this study, but ones that merit further study. The challenges here lie in persuading schools like this who provide quality education to change their language policy to an additive language policy so that their learners can accrue even more benefits from their schooling.

On the whole, the learners in the township schools were well behaved and polite young students who showed generally low levels of linguistic, literacy and academic accomplishments even though their home language was being used in some form or other in the schools. Their intellectual potential was not being fully developed and what effect this has had on their self esteem and their feelings of self worth are issues beyond the scope of this study, but ones that merit further study. The challenges facing these schools are far greater, for very real changes need to occur in the learning and teaching context that fosters literacy development so that their learners can start accruing linguistic, literacy and academic benefits from their schooling.

CONCLUSION

The title of this article poses the question of what happens to literacy in (print) poor environments. The answer, blandly put, is that literacy doesn't happen in such environments. The findings in this study, though seemingly counter-intuitive, are not surprising. If one considers these findings from the point of view of what makes for effective literacy development, the apparent contradictions in the findings make perfect sense. A sound language policy is only as good as the education system which undergirds it.

We can be proud of South Africa's progressive school language policy, and we can applaud the moves to ensure that children initially acquire literacy in their home languages and that their home languages continue to be taught and supported after they have changed to English as a LoLT. However, in multilingual developing countries where poverty is wide spread, where schooling conditions are less than ideal, where print resources are scarce, where literacy levels in the surrounding communities are low, and where there are few educational or recreational opportunities for extensive reading in a home language, a far more complex model of effective schooling is needed to overcome the challenges facing schools.

In this paper I have argued that reading accomplishment is a complex and dynamic process that develops within a complex and interrelated web of school, classroom, teacher and home based factors that create and facilitate necessary and enabling conditions for literacy development. Practice, access and affect are integral components of the thread that weaves the literary web together. Without proper literacy development there can be no effective schooling. Learners who live in poverty pose special challenges to teachers and schools. A language policy that ensures that these learners will receive initial literacy in their home language and that their home language will continue to be taught as a subject during their schooling years is an important cornerstone for their schooling – but not a panacea. Language policy per se is unlikely to be an active agent in *literacy* development unless it is accompanied by very real changes in the complex learning/teaching context that fosters literacy development.

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chapter five

Issues in scientific terminology in African / Bantu languages

ELSABE TALJARD

AFRICAN LANGUAGES, UNIVERSITY OF PRETORIA

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.

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chapter six

The use of local African languages as languages of science¹

PHILIP PARE
UNIVERSITY OF PRETORIA

¹

This paper is based on a combination of submissions to: a) the SAARMSTE 2006 conference held at the University of Pretoria; b) a Language in Maths and Science seminar held at the University of the Witwatersrand in April 2006; c) a language planning workshop held at the University of Pretoria in April 2006 and d) a language and society conference held in Botswana in June 2008.

INTRODUCTION

In this paper, I focus on a number of multilingual initiatives that have been taken at the University of Pretoria to determine whether or not it is feasible to use African languages as media of instruction at secondary schools and in the Foundation Year Physics course which is intended for incoming University students. The initiatives include the translation of the 'Force Concept Inventory' into six languages and the administration thereof to Foundation Year students, the translation of South African Senior Certificate Physical Science papers and their memoranda into Northern Sotho; as well as various attitudinal surveys administered to assess students' opinions on being taught through languages other than English.

Historically, there have been relatively few black students studying Physics and related science disciplines at the University of Pretoria. One of the factors that has been of concern is the academic language ability of the black students (Fricke, 2006). Most of them do not come from homes where English is a/the primary language and so learning through English has put them at a disadvantage compared to those students who have been able to study through their home language, whether it be English or Afrikaans².

Black students do not usually regard their own languages as being sufficiently developed to be used for advanced level academic studies. Furthermore, for a variety of reasons, English is generally considered to be a language of high status (Webb, 2005). Black students would therefore tend to consider those people who have a good command of English to have a higher social status.

The South African Department of Education has, since 1997, encouraged a policy of additive bilingualism, where all students may use their primary languages up to the highest levels while gradually acquiring skills in other languages. This contrasts with the more common subtractive bilingualism where the primary African language gives way to a high status language as medium of instruction at some stage in the learner's educational career. For the additive bilingualism approach to be successful it would be necessary to develop the previously low status languages to the point where they can be used as languages of science. This paper will highlight some of the problems in developing these languages as languages of science.

² In most cases the term "primary language" has been used to refer to the local or predominant home language of the learners. The term "vernacular" had been used previously, but this was met with opposition in some linguistic quarters.

THEORETICAL BACKGROUND

I am approaching the language question within the context of Piaget's constructivism (Piaget, 1932), and Vygotsky's "process of mediation" (Vygotsky, 1978) and Lemke's "situated cognition" (Lemke, 1997).

Issues around the link between Piaget's work and constructivism have been described as follows by Ernst von Glasserfeld (<http://www.oikos.org/Piagethom.htm>)⁴:

As development has to do with growth and childhood, when Piaget was first discovered in the United States - about 1940 - he was classified as a child psychologist. Twenty years later, he was discovered once more as the author of a theory that postulated four stages in the development of intelligence. Finally, in the 1980s, he was rediscovered for the third time, as the progenitor of constructivism. Since then, constructivism has become fashionable, especially in the educational domain. Many writers call themselves constructivists, but few have fully understood the revolutionary aspect of Piaget's theory.

Anton Yasnitsky et al describe some of Vygotsky's contributions to cognitive theory in a 2007 Wikipedia article as follows⁵:

These thoughts on learning, which we now call cognitive constructivism, paved the way for the emergence of the educational theory called social constructivism (McMahon 1997)

Lev Semenovich Vygotsky (1896 – 1934), a Belarusian psychologist who lived and worked in a Marxist environment, became famous for his view on mediation as an integral part of human psychology: "the central fact about our psychology is the fact of mediation" (Vygotsky 1978:166).

Although his work only became known in the United States during the 1960s, his critique on his contemporary Piaget's cognitive constructivism, led to the understanding of the importance of culture, language and context in the process of constructing knowledge. Whilst Piaget in his Moral judgment of the Child (Piaget, 1932) and

⁴ <http://www.oikos.org/Piagethom.htm>

⁵ http://en.wikipedia.org/w/index.php?title=Social_constructivism_%28learning_theory%29&direction=prev&oldid=193815804 With some corrections to the grammar and taking note of the continual changes to Wikipedia articles.

note for the editor: There is no footnote 3 in this section??

Sociological Studies (1977;1995) argued for the importance of co-operation and mutual respect in social interaction as a necessary condition for cognitive development, vygotsky emphasized the importance of discourse with others, language and culture, in order to, through the process of mediation, get to a higher order of truth that has also been socially tested (Derry 1999).

Vygotsky's "zone of proximal development" is probably his best-known concept. It argues that students can, with help from adults or peers who are more advanced, master concepts and ideas that they cannot understand on their own. Again the emphasis falls on learners actively constructing knowledge and meaning through participating in activities and challenges, with the added emphasis on the interaction between learners and facilitators in order to arrive at a higher level of truth (Sternberg and Williams 1998)

In another Wikipedia article, Anton Yasnitsky et al (2006)⁶ expand on Vygotsky's work as follows:

According to Vygotsky, the intellectual development of children is a function of human communities, rather than of individuals. His contributions are widely respected and influential within the fields of developmental psychology, education, and child development.

In the Soviet Union, the ideas of Vygotsky were developed largely under the banner of activity theory that was introduced and systematically developed by such Vygotsky students and colleagues as Alexei Leont'ev, P. Zinchenko, Zaporozhets, D. El'konin, as well as Gal'perin, Davydov, Smirnov, Talyzina, etc.

*In the West, most attention was aimed at the continuing work of Vygotsky's Western contemporary, Jean Piaget. Early - albeit indirectly - influence on the growing cognitive science community in the United States was already apparent in the late 1950s and early 1960s through the work of Vygotsky's student and collaborator Alexander Luria which was read by early pioneers of cognitive science J. S. Bruner and George Miller. However, Vygotsky's work appeared to be virtually unknown until its "rediscovery" in the 1960s, when the interpretative translation of *Thought and Language* (1934) was published in English in 1962⁷. In the end of the 1970s, a truly ground-breaking*

⁶ http://en.wikipedia.org/w/index.php?title=Lev_Vygotsky&oldid=42919842.

⁷ A revised edition, translated by A. Kozulin appeared in 1986 and, as *Thinking and Speech*, translated by N. Minick, in 1987.

publication was the major compilation of Vygotsky's works that saw the light in 1978 under the header of "Mind in Society: The development of higher psychological processes".

By the 1980s, Vygotsky's work became well known in the United States in part due to the opening of the Soviet Union that followed glasnost. Vygotsky's work became extremely influential because it offered a way of reconciling the competing notions of maturation by which a child is seen as an unfolding flower best left to develop on his or her own, and environmentalism, in which a child is seen as a blank slate onto which must be poured knowledge. His views are influential on activity theory, distributed cognition, and Cognitive Apprenticeships.

Works of Vygotsky are also studied today by linguists regarding language and its influence on the formation of the perception of reality. His work has also been influential on second language acquisition theory.

Whereas constructivism stressed the importance of linking any new knowledge to existing concepts and ideas, Vygotsky suggests that intellectual development may be largely influenced by a child's interactions with others. Rollnick (2000) summarises some of Vygotsky's work by saying that "mediation and shared discourse through language lie at the basis of Vygotsky's work "

In a further article (Dahms 2007)⁸ it is written that *Vygotsky maintained that language plays a central role in cognitive development. He argued that language was the tool for determining the ways a child learns "how" to think. That is because complex concepts are conveyed to the child through words. "Learning, according to Vygotsky, always involves some type of external experience being transformed into internal processes through the use of language." [9] It follows that speech and language are the primary tools used to communicate with others, promoting learning.*

Following Vygotsky, my premises are that if some of the linguistic units and rules used in Physics are not familiar to the student, then that student would not be able to engage in effective linguistic interaction. The student would then have difficulty linking any new material to his/her pre-knowledge. If the student could find other linguistic units and rules in his primary language with similar functions as those used in English, then

⁸ <http://www.newfoundations.com/GALLERY/Vygotsky.html>

the Piageten constructivist process of accommodating the new knowledge would be made easier. Furthermore linguistic interaction with the students' tutor and his/her peers will be promoted.

Classroom interaction is far more than just a question of a knowledge of words. Interlocutors need a command of complex morphological and syntactic structures, text types, functional capacities and sociolinguistic competence. Also they need an understanding of the relevance of situational, psychological, socio-cultural contexts, as well as the required background knowledge. Furthermore, with a more competent control over the language, communication with the learner's peers is facilitated. This process allows meaning to be developed by "shared discourse" (Rollnick, 2000) between both teachers and learners as discussed in the literature (e.g. Lemke, 1997)

However intellectually satisfying Vygotskyian and Piageten perspectives may be, the students' social and economic need for English encourages them to disregard the cognitive advantages of learning through the primary language and to express their desire to be taught in English only (informal interviews with UP students).

THE UNIVERSITY OF PRETORIA FOUNDATION YEAR PROGRAM IN MATHEMATICS AND THE BASIC SCIENCES (UPFY)

In 2001, UP started a Foundation Year Programme (UPFY) directed at preparing disadvantaged students to enter the mainstream courses offered at the University. The medium of instruction was English and the students followed a year-long programme where they studied Physics, Mathematics, Chemistry, Biology and English and Study Skills (ESS).

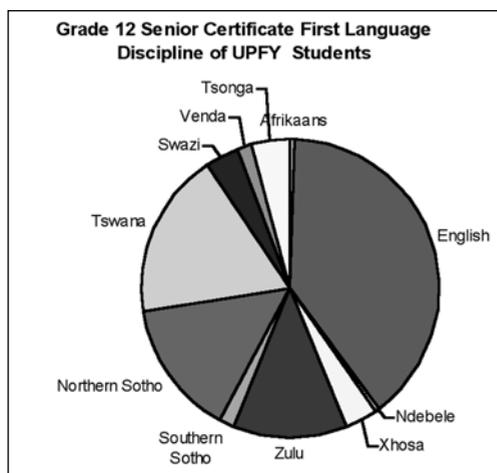
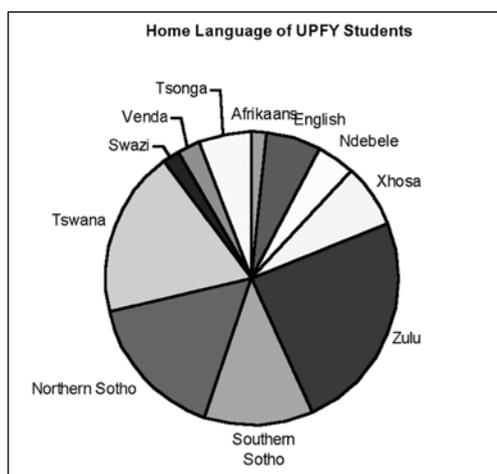
In my Physics classes I observed, however, that the UPFY students did not limit themselves to the use of English only and would converse amongst themselves in their different primary languages in class. Many of these UPFY students also welcomed some clarification of the concepts by the lecturer in their primary language (from informal interviews with them).

The background of the UPFY learners was very mixed. Some came from poor dysfunctional rural government schools, while a few others had attended expensive urban private schools. They were selected on the basis of their performance in the Senior Certificate examination (the attainment of at least an F symbol on the standard grade for Mathematics and a standard grade F for either Biology or Physical Science) and in an special UPFY placement test set by University of Pretoria lecturers. This placement test included tests in Maths,

Physics, Chemistry, Biology and English. In January 2005, 192 students were selected from about 2000 students who wrote the entrance examination.

I mention the make-up of the UPFY group in detail to show that it is a selected group and hence their opinions could be substantially different from learners still studying for the Senior Certificate.

FIGURE 1.
LANGUAGE DIVERSITY OF THE UPFY GROUP:



THE FORCE CONCEPT INVENTORY

I have used translated versions of the Force Concept Inventory (FCI) to test the effect of the language of the test on student performance. I have chosen the FCI as it is a very well used instrument in Physics Education circles. The FCI is a test that evolved from the Mechanics Diagnostic Test to assess students' understanding and knowledge of the basic concepts in Newtonian mechanics. The FCI was developed by Hestenes, Wells, & Swackhamer, in 1992, and revised in 1995 by Halloun, Hake, Mosca & Hestenes. The introduction to the 1995 revised FCI explains :

"The two standardized tests, and especially FCI, have been administered to tens of thousands of students around the world. The physics education community used them for a multitude of purposes, but most importantly for assessing student conceptual understanding of the basic concepts and principles of Newtonian mechanics, and subsequently for evaluating instruction⁹."

Because of the widespread use of the FCI, I thought that it would be a very good instrument to investigate the effect of language on students' understanding of the basic concepts in Newtonian mechanics. I had the English FCI translated through commercial translators, (that is, they did not have detailed knowledge in the field of Physics) into Afrikaans, Southern Sotho (Sesotho), Northern Sotho (Sesotho sa Leboa), Tswana (Setswana), Venda (TshiVenda) and Zulu (isiZulu). These languages were selected since they were the main primary languages of the UPFY and Mamelodi students - the Mamelodi campus, formerly part of VISTA University, had recently been incorporated into the University of Pretoria.

Figure 2 is an example from one of the distractors of one of the questions from the FCI and its translation into a number of languages. The highlighted words show some of the problems that arose with the translation and that I changed after discussing them with mother-tongue speakers of the language, who were also knowledgeable about Physics. Further terminological issues are illustrated in Appendix 1 and are described further in Elsabé Taljard's chapter in this publication.

⁹ Newtonian mechanics is that branch of Physics that deals with the basic laws of motion. It was initially developed by Isaac Newton and is centred around his three principal laws together with his law of gravitation.

FIGURE 2

A COMMON MISCONCEPTION

English

The truck exerts a greater amount of **force** on the car than the car exerts on the truck



Northern Sotho: (initial commercial translation)

Lori e ntšha **maatla** a mantši kudu mmotorong go feta ao a ntšhwago ke mmotora go lori.

Tswana: (initial commercial translation)

Llori e gatelela ka **maatla** a magolo thata mo koloing go na le a koloi e a gatelelang mo loring.

Southern Sotho: (initial commercial translation)

Lori e fehla **matla** a maholo ho hatella koloi ho feta kamo koloi e fehlang matla ka teng ho hatella.

Zulu: (initial commercial translation)

iLoli liba **nomfutho** omkhulu emotweni kunomfutho imoti enawo elolini.

Northern Sotho: – modified translation

Lori e dira **kgapeletšo** e kgolo kudu koloing go feta eo e dirilwego ke koloi loring.

Tswana: – modified translation

Lori e gatelela ka **kgapeletso** ye kgolo thata mo koloing go na le e koloi e a gatelelang mo loring.

Southern Sotho: – modified translation

Lori e etsa **qobello** e ngata koloing ho feta qobello ya koloi loring.

Zulu: – modified translation

iLoli liba nendluzula enkulu emotweni kunendluzulu yemoto encane.

In my experimental design I chose three groups of students of equal academic strength to represent firstly those who wrote the FCI from an English only question paper, secondly those who wrote from a bilingual question paper, and thirdly those who wrote from a question paper in their primary language only. In order to create three groups of equal average academic strength, I used the students' performance in the first semester of the Physics course. This was done by using a spread sheet to sort the students by language and by their first semester performance.

I assigned the students into the different language groups based on data that they supplied concerning their primary, or home, language. The intended use of those languages however turned out to be problematic in a number of cases as some students were not able to read these languages since they had attended primary and secondary schools where no use was made of these languages.

The students were divided into three groups: A, B and C. Group A were given the English-only version of the FCI, Group B the version in their primary language, and Group C the bilingual (English plus home language) version.

The FCI pre-test was conducted on the 22nd July 2005, after a semester of Physics but before the students had studied any mechanics at the university. The first semester Physics had concentrated on Heat, Measurements and Light. The FCI post-test was conducted on 25th October 2005 after the students had studied some Kinematics, Statics and Dynamics. They had not studied any circular motion and this may explain the poor performance on some of the FCI questions. The tests were also conducted at the Mamelodi where the students were following a similar Physics curriculum to that offered at the main Hatfield Campus of the University of Pretoria. The results from these two pre- and post-FCI tests are summarised in Table 1 below.

In 2004, pre- and post-FCI tests were conducted in English only amongst the 2004 UPFY students. The average percentages obtained were as follows: Pre-Test - 27.1 % ; Post-Test 39.2%. The difference was 12.1 percentage points.

In the 2005 experimental test, there does not appear to be any significant difference related to language. Hence it would seem that the language of the test is not a significant factor in the overall poor performance of the students in this test.

A comparison between the 2004 and 2005 results show little difference, again suggesting that the language of test was not a statistically significant factor.

To get an international perspective on the UPFY student performance, I have compared the results in Table 1 below to the results presented in Hake’s interactive engagement paper (Hake, 1998). This is done in figure 1 where the Gain is plotted against the pre-test result. In UPFY, we attempted to use what in Physics educational circles are called “*interactive engagement methods*” (IE”)¹⁰ and yet the gains that our students made are significantly below the gains that similar courses in the USA achieved. Not only are they below interactive engagement courses, but they are also below the gains that students would normally be expected to show in traditional lecture-, laboratory- and tutorial-based courses. This poor performance is of great concern to us and we note that providing the test in the students’ primary languages does not significantly improve the situation.

The concept of a standardised gain was developed by Richard Hake (1998) and this is just the actual difference between the pre and post test result divided by the maximum possible gain. So if a student achieved a gain of 25 percentage points from 30 percent in the pretest to 55 percent in the post test, (s)he would have a standardised gain of

$$\frac{55 - 30}{100 - 30} = \frac{25}{70} = 0.35 = 35\%$$

Hake classified standardised gains of between 70% and 100% as high gains, and those between 30% and 70% as medium gains and those less than 30% as low gains.

The standardised gain is also represented by the gradient of the %<gain> vs %<Pretest [P.T.5] > [16] graph and so a steep graph represents a high gain while a graph with a gentle slope would represent a low gain.

Dotted lines have been drawn on the graphs in figure 3 to represent gains of 30%, 70% and 100%

¹⁰

For survey classification and analysis purposes following Hake (1998) I define:

- (a) “Interactive Engagement” (IE) methods as those designed at least in part to promote conceptual understanding through interactive engagement of students in heads-on (always) and hands-on (usually) activities which yield immediate feedback through discussion with peers and/or instructors, all as judged by their literature descriptions;
- (b) “Traditional” (T) courses as those reported by instructors to make little or no use of IE methods, relying primarily on passive-student lectures, recipe labs, and algorithmic problem exams;
- (c) “Interactive Engagement” (IE) courses as those reported by instructors to make substantial use of IE methods.

TABLE 1
AVERAGE MARKS OBTAINED IN THE FORCE CONCEPT INVENTORY AT THE HATFIELD AND MAMELODI CAMPUSES OF
THE UNIVERSITY OF PRETORIA

Bilingual Group

Language of Test	Hatfield (UPFY)						Mamelodi (CGS)									
	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised gain-g	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised ed gain-g
Afrikaans-English	1	33.3		23.3		-10.0		-0.15	0							
S. Sotho-English	4	25.0	4.3	39.2	3.2	14.2	5.0	0.19	2	21.7	2.4	20.0	14.1	-1.7	11.8	-0.02
Northern Sotho - English	19	28.9	12.6	40.4	16.6	11.4	15.1	0.16	8	26.3	21.4	38.8	16.6	12.5	8.7	0.17
Tswana-English	18	28.7	12.4	39.4	13.6	10.7	15.1	0.15	1	20.0		33.3		13.3		0.17
Venda-English	2	25.0	2.4	55.0	11.8	30.0	14.1	0.40	3	31.1	8.4	23.3	8.8	-7.8	11.7	-0.11
Zulu-English	38	28.5	7.6	41.5	12.5	13.0	13.6	0.18	15	29.8	15.9	45.1	15.3	15.3	15.6	0.22
Summary	82	28.5	9.8	40.7	13.5	12.3	14.2	0.17	29	28.0	13.1	39.0	16.5	10.9	14.7	0.20

English only Groups

Language Group	Hatfield (UPFY)						Mamelodi (CGS)									
	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised ed gain-g	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised ed gain-g
English only 2005	60	32.6	13.2	40.8	13.5	8.2	12.3	0.12	32	24.6	11	37.2	9.5	12.6	11.4	0.17
English only 2004	151	27.1		39.2		12.1		0.17								

Primary Language Only Group

Language of Test	Hatfield (UPFY)						Mamelodi (CGS)									
	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised ed gain-g	N	Pre Test %	Standard deviation of Pre of Test	Post Test %	Standard deviation of Post of Test	%<Gain>	Standard deviation of %<Gain>	Normalised ed gain-g
S. Sotho-English	5	30.7	5.5	32.7	16.9	2.0	16.4	0.03	2	21.7	2.4	11.7	16.5	-10.0	18.9	-0.13
Northern Sotho	7	26.2	7.6	41.0	13.2	14.8	12.1	0.20	10	20.0	12.0	32.3	10.2	12.3	12.6	0.15
Tswana	8	21.7	6.4	27.9	13.1	6.3	10.9	0.08	1	25.7		35.7		10.0		0.14
Venda	1	20.0		23.3		3.3		0.04	1	16.7		33.3		16.7		0.20
Zulu	14	27.6	11.5	40.7	13.3	13.1	11.3	0.18	3	15.6	10.2	34.4	5.1	18.9	10.7	0.22
Summary	35	26.2	9.1	36.2	14.3	10.0	12.4	0.14	17	19.6	10.1	30.6	11.4	11.0	14.0	0.14

FIGURE 3.
FCI GAIN VS PRETEST GRAPHS FROM FCI RESULTS AT THE UNIVERSITY
OF PRETORIA AND AT VARIOUS INSTITUTIONS IN THE USA FROM HAKE (1998)

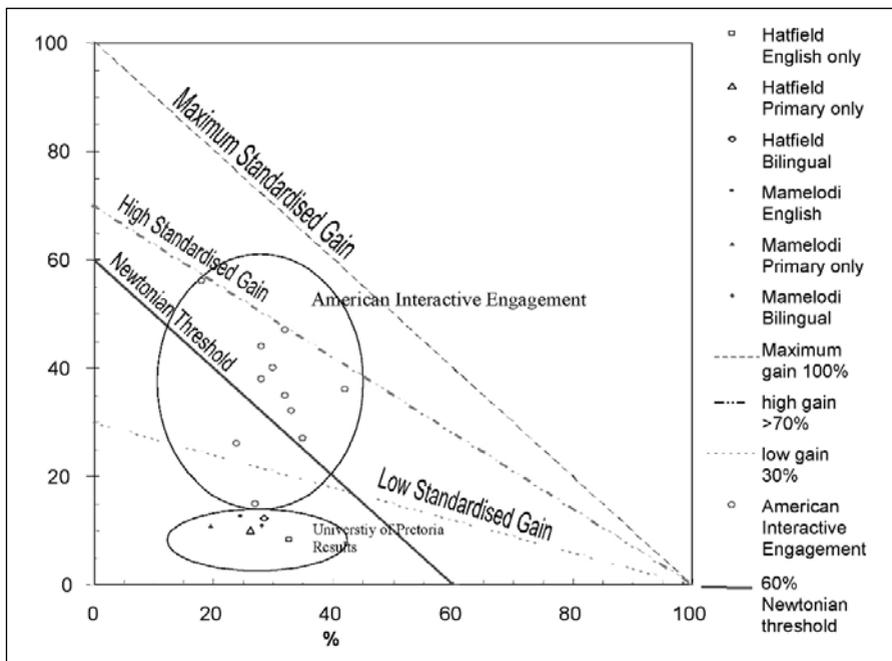
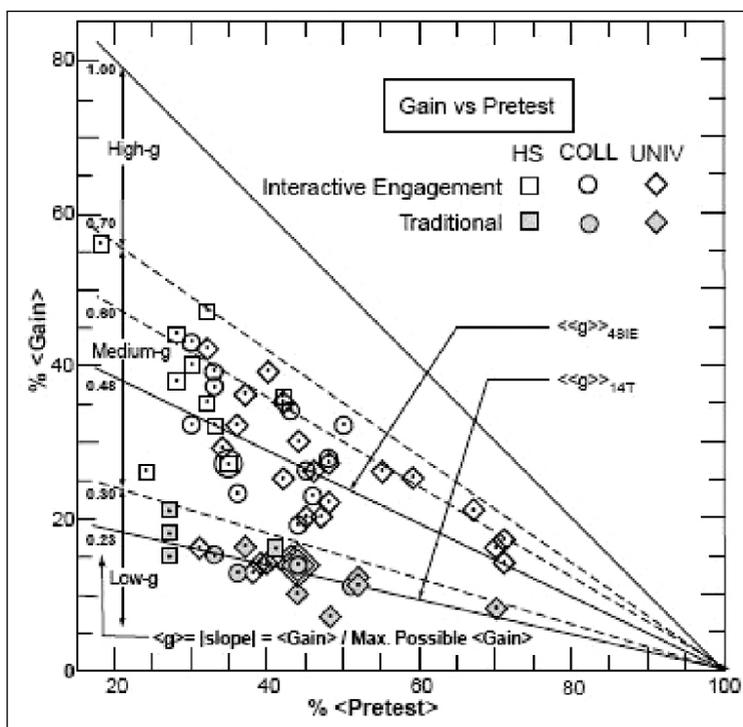


FIGURE 4.
(FROM HAKE 1998) %<GAIN> VS %<PRETEST> SCORE ON THE CONCEPTUAL MECHANICS DIAGNOSTIC (MD) OR FORCE CONCEPT INVENTORY (FCI) TESTS IN THE USA

This was done for 62 courses enrolling a total N = 6542 students: 14 traditional (T) courses (N = 2084) which made little or no use of interactive engagement (IE) methods, and 48 IE courses (N = 4458) which made considerable use of IE methods. Slope lines for the average of the 14 T courses $\langle\langle g \rangle\rangle_{14T}$ and 48 IE courses $\langle\langle g \rangle\rangle_{48IE}$ are shown, as explained in the text.



After writing the Force Concept Test, the UPFY students were asked to comment on the test. The request was expressed as follows:

“When you have finished the test please, comment on how understandable the language of the test was. Please give examples of any language that you found difficult to understand.”

I have include two examples of the kind of comments that students wrote in Appendix 2.

TABLE 2.
WAS THE PRIMARY LANGUAGE EASY TO UNDERSTAND?

		Numbers			Percentages	
Test Type	Test language	Primary Language easy to understand			Primary Language easy to understand	
		no	yes	no comment	no	yes
Bilingual	Afr-eng	1			100%	0%
	S. Sotho - English	3		2	60%	0%
	N. Sotho - English		13	6	0%	68%
	Tswana - English	1	10	10	5%	48%
	Venda - English	1	1		50%	50%
	Zulu - English	3	13	25	7%	32%
Total	Bilingual	9	37	43	10%	42%
Total	English only	7	37	22	11%	56%
Primary Language only	S. Sotho	5			100%	0%
	N. Sotho	7			100%	0%
	Tswana	6	1	1	75%	13%
	Venda			1	0%	0%
	Afrikaans		1		0%	100%
	Zulu	13		1	93%	0%
Total	Primary Language	31	2	3	86%	6%
Grand Total		47	76	68	25%	40%

TABLE 3.
WAS THE PRIMARY LANGUAGE USEFUL?

		Numbers		Percentages	
Test type	Test language	Primary Language Useful		Primary Language Useful	
		no	yes	no	yes
Bilingual	Afrikaans-Eng.				
	S. Sotho-Eng.	1	1	50%	50%
	N. Sotho -Eng.	7	8	47%	53%
	Tswana-Eng.	8	5	62%	38%
	Venda-Eng.	1	1	50%	50%
	Zulu-Eng.	21	3	88%	13%
Total	Bilingual	38	18	68%	32%
Primary Language Only	Afrikaans		1	0%	100%
	S. Sotho	5		100%	0%
	N. Sotho	7		100%	0%
	Tswana	6		100%	0%
	Venda				
	Zulu	13		100%	0%
Total	Primary Language	31	1	97%	3%
Grand Total		69	19	78%	22%

To analyse the responses, I considered two constructs:

- (i) Was the language easy to understand;
- (ii) Was the provision of an African language text useful.

In this way I was able to convert much qualitative data into quantitative data and so found that only twenty percent of the students who had a bilingual paper, thought that the primary language was useful.

This result compared with only three percent of students who thought the local language was useful when they had a question paper that was monolingual in the primary language. The main conclusion here was that it was a minority of students who found the primary language to be useful, but the provision of bilingual papers was much preferred compared to primary language monolingual papers. This is much what I expected as the students have studied most of their science to date in English and so were unfamiliar with many Physics terms in their primary language.

FIGURE 5:
A POSITIVE RESPONSE TO THE QUESTION : “WAS THE LANGUAGE IN THE FCI TEST EASY TO UNDERSTAND?” (FROM TABLE 2)

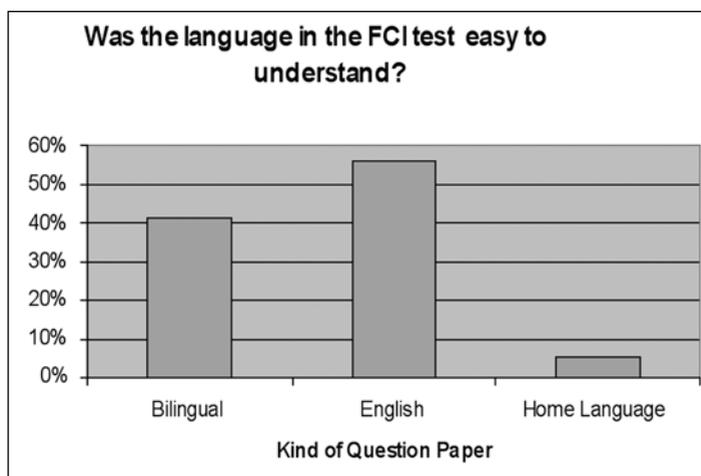
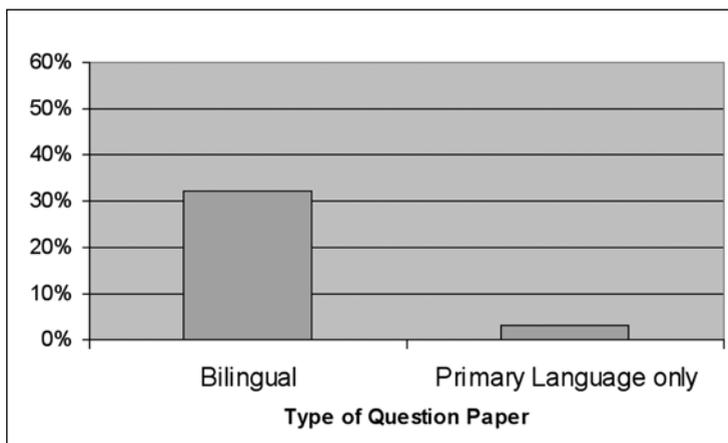


FIGURE 6:
A POSITIVE RESPONSE TO THE QUESTION : “WAS THE LANGUAGE IN THE FCI TEST USEFUL?” (FROM TABLE 3)



Concerning the first construct - was the language easy to understand - 86% of the students who wrote the FCI in the primary language, said that the language was **not easy** to understand but the figure decreased to only 10% for those who answered a bilingual question paper (English / primary language). This compared with 11% of the students who wrote the English-only paper and stated that the language was not easy to understand. So at least when the paper is presented bilingually, the disadvantages of being confronted with new terms is minimised by having the more familiar English term available. At the same time, some English words which are difficult to understand could be clarified by looking at the primary language section of the paper. In other words, the bilingual test gave the students the best of both worlds.

This then shows that there is considerable and widespread resistance to the use of African languages as sole media of testing. However, anecdotally, there is some support for concepts to be explained orally in the primary languages while the primary medium of instruction remains English.

THE ADMINISTRATION OF THE FCI TO MAINSTREAM 101 PHYSICS STUDENTS.

In February 2006, I administered the FCI to a sample of Physics 101 students in the 1st year of the Mainstream Physics course. This included many mother tongue Afrikaans-speakers as well as mother tongue English-speakers. The sample was subdivided into two broad categories to allow one group to write a monolingual English FCI and another group to write a bilingual FCI. The results are shown opposite.

The bar graphs below show that there was no significant difference in scores for those that wrote the Bilingual test compared to those that wrote the English-only test.

I then obtained data on what language was used as medium of instruction in the secondary schools from which these students came. I plotted the following bar graph which shows their performance in the FCI compared to the medium of instruction at school.

The data tends to support the common sense opinion that students' concept formation is better when they have been taught through their home language at secondary school, which officially could only have occurred to Afrikaans-and English mother tongue speakers.

**FIGURE 7:
RESULTS OF THE FCI ADMINISTERED TO STUDENTS STUDYING A STANDARD FIRST YEAR PHYSICS COURSE**

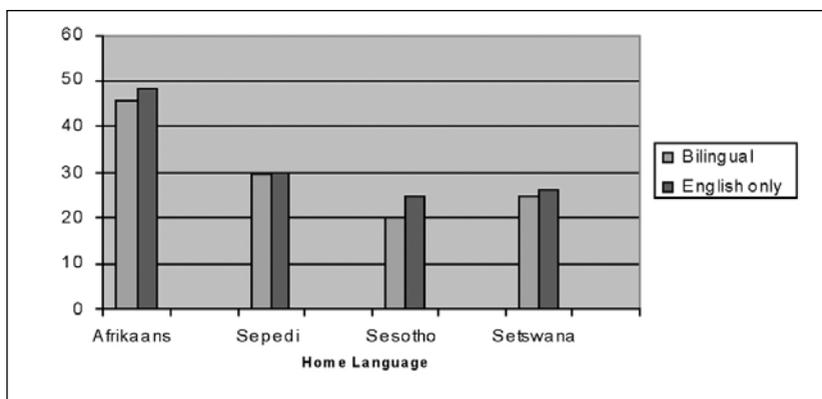
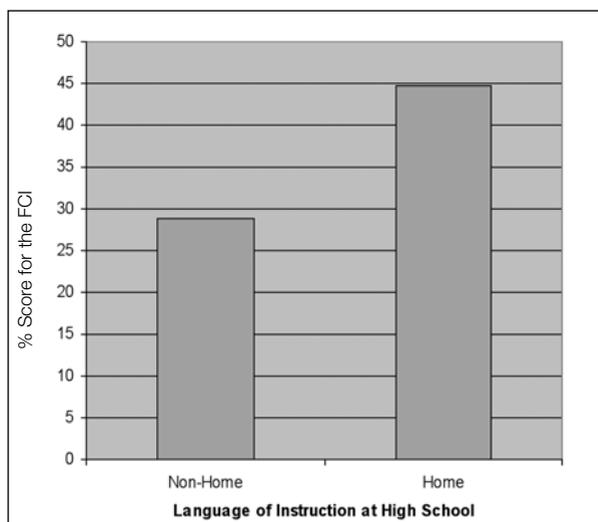


TABLE 4:
RESULTS OF THE FCI ADMINISTERED TO STUDENTS STUDYING A STANDARD FIRST
YEAR PHYSICS COURSE

FCI TEST LANGUAGE	Afrikaans		English		isiNdebele		Sepedi		Sesotho		Tshivenda		XITSonga		isiZulu		Total		
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	
Bilingual Paper	46.2	14																	
Eng/Afr	40.0	1																	
Sepedi					31.1	9					30.0	1							
Sesotho					26.7	2	20.0	3											
Seswana					23.3	1			22.2	6									
Tshivenda									33.3	1	23.3	2							
XITSonga					26.7	1													
Bilingual Total	45.8	15			29.5	13	20.0	3	24.6	8	23.3	2							
English only paper																			
Afrikaans	45.4	13	43.3	2														45.1	
English	43.1	14																43.1	
German	86.7	1																86.7	
isiNdebele							36.7	1											
isiXhosa																			
isiZulu			25.0	2												36.7	2.0	30.8	
Sepedi			23.3	2														27.8	
Sesotho			35.6	3					10.0	1								32.2	
Seswana			16.7	2					23.3	2	40.0	1						23.0	
Siswati			23.3	1														23.3	
XITSonga							40.0	1										36.7	
English only Total	48.3	14	35.9	27	36.7	1	29.8	15	25.0	2	26.3	8						33.3	
Grand Total	47.0	29	35.9	27	36.7	1	29.6	28	22.0	5	25.4	16	23.3	2	33.3	1	36.7	2	35.7
																			70
																			111

The information in this bar graph refers only to Afrikaans- and English-speaking students, who are all taught through their home language or a language they know sufficiently well at secondary school. It concurs with dominant research on mother-tongue education that establishes that concept formation is better developed when learners have been taught in their primary language, as opposed to study in a language which learners do not know adequately¹¹.

FIGURE 8:
FORCE CONCEPT INVENTORY PERFORMANCE OF 1ST YEAR PHYSICS STUDENTS AT THE UNIVERSITY OF PRETORIA



An interesting finding is that, in contrast to the medium of instruction, the language of the test makes little difference to the performance. There must be some threshold effect here which the data does not bring out, as it would stand to reason that students would not do well if the test was written in a language in which they had no competency at all for example Chinese!.

¹¹ The term “foreign language” is used to refer to a language which is not the primary language of the students

THE TRANSLATION OF SENIOR CERTIFICATE PHYSICAL SCIENCE PAPERS AND THE MEMORANDA INTO NORTHERN SOTHO

A study guide was produced in 2001, with funding from the Pan South African Language Board (PANSALB), which was similar to the widely used bilingual PhysiChem books. Whereas PhysiChem used English and Afrikaans, the “Questions and Answers” of this study guide used English and Northern Sotho (Sepedi) (Ntake and Pare, 2001).

To my knowledge, this was the first time that Physics and Chemistry material had been developed in an African language up to a senior secondary school level in SA. PanSALB was interested in the kind of reception that this book received from its target audience, which was grade 11 and grade 12 high school learners.

The papers were from 1996 to 1998 and covered both Chemistry and Physics, but from just one province, Limpopo. Just like the PhysiChem books, the PanSALB study guide also included both numerical and explanatory answers to each question. “Questions and Answers” included both higher grade and standard grade papers.

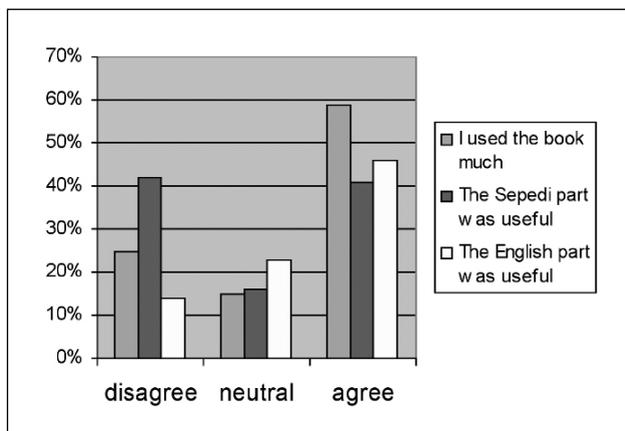
I designed a questionnaire which the learners filled in before receiving the study guide. The learners were also asked to fill in some questionnaires during the year and at the end of their Grade 12 year.

These questionnaires used a number of different types of questions. Some of the questions used a 5 point scale to measure the opinions of learners on the language issue. These questions were analysed quantitatively. Some questions required descriptive statements while others required a simple “yes” or “no.”

TABLE 5.
RESULTS FROM THREE QUESTIONS ON THE QUESTIONNAIRE
ADMINISTERED TO LEARNERS IN NOVEMBER 2005 AFTER THEY HAD
WRITTEN THEIR FINAL GRADE 12 PHYSICS EXAM.

I used the book much	(N=184)		
	disagree	neutral	agree
	25%	15%	59%
The Sepedi part was useful	(N=184)		
	disagree	neutral	agree
	42%	16%	41%
The English part was useful	(N=184)		
	disagree	neutral	agree
	14%	23%	46%

FIGURE 9:
A GRAPHICAL REPRESENTATION OF TABLE 5



Ten interviews were conducted and tape-recorded after Grade 12 learners had used a copy of the bilingual Senior Certificate papers for at least nine months. These interviews were transcribed and typed. They are still being analysed using qualitative approaches.

The students and learners came from a variety of backgrounds: some of the Senior Certificate students attended rural government schools, some a rural Catholic school, and others urban government schools in the Mamelodi and Atteridgeville townships near Pretoria.

As the information in Table 4 shows, only 59% of the learners actually used the book quite often, 41% agreed that the Northern Sotho (Sepedi) part was useful, and 46% found the English part of the book useful. This shows that although the majority did not find science material in the primary language useful, there is a sizeable minority that does benefit from having science material translated into the primary language. What is also very interesting is that whereas only 14% found the English section not useful, 42% found the Northern Sotho section not useful. This could be because a sizeable number of students did not use Northern Sotho as their home language which could have been Tswana, Zulu, Venda or Tsonga given the multilingual nature of Pretoria.[19]. It is also interesting that 58% of the learners found it useful to have some of their Science explained in the primary language.

PHYSICS TERMINOLOGY

Most of the African languages do not have different words for the concepts “force” and “power”. In Northern Sotho the word *maatla* is normally used for both these concepts, *maatla* being also sometimes used for “mass”.

This is problematic. So a large heavy person would be, in Northern Sotho, powerful, forceful and massive.

In some of the questionnaires learners were asked to describe the difference between “maatla” (power?) and the specially coined “kgapeletšo” (physical force). They were asked to do this in both N. Sotho and in English. The answers suggest that *maatla* is also regarded as ‘strength’ and this would be in accordance with popular English usage where again, ‘power’, ‘strength’, ‘force’, and sometimes even ‘mass’, are used interchangeably. However, English has developed a particular register for Physics and once they recognize that the context of a text is a Physics context, English speakers would be able to accept the narrower definitions of ‘power’ and ‘force’ that are used.

The N. Sotho noun *kgapeletšo* was derived from the verb *gapeletša* which means “to coerce”. Although this derivation would normally not be problematic for Sotho speakers in imaginative writing like poetry, many learners and teachers have expressed their dissatisfaction

with the term in a science context. This despite the fact that no other acceptable term was produced that could be used for ‘force’ to signal/express the difference between “force” and “power”.

Maatla was generally accepted for “power” but this does not show that *maatla* is actually being associated with the rate at which work is performed. From the results of various questionnaire and informal interviews with students, it would appear that N-Sotho speakers actually resist the development of a carefully defined register within their own language.

“Weight” is not usually distinguished from “mass”, and “acceleration” was translated by some professional translators as *koketsolebelo* which is literally “the increase in velocity”. So the expression “force is equal to mass times acceleration” becomes *maatla ke boima atšitšwe ke koketsolebelo*. If this is translated back into English one could get the following “power is equal to weight times an increase in velocity”.

It does indeed take some effort to give certain words a narrow definition for use in a Physics context; but it will take considerably more effort to get a linguistic community such as a group of Physicists to accept these narrower, and hence new definitions for existing terms. It stands to reason that the length of time that it will take to get a community’s primary language generally used as a medium of precise communication of scientific thought is going to be dependent in some way on this community’s scientists’ acceptance of these new definitions.

CONCLUSION

The studies discussed above have confirmed the complexity of the language situation in South African classrooms. They have suggested that a monolingual primary language approach to the problem of limited English capability is not going to be widely accepted. Whereas students like to have difficult English phrases explained in their primary languages, from the answers to questionnaires and from informal interviews it would seem that they do not want their primary languages to replace English as the main medium of instruction (neither orally nor in written form).

A comparison between the Afrikaans-speaking students on the one hand and the Zulu- and Sotho-speaking students on the other hand, also supports the view that instruction through the primary language at school leads to better concept formation in Physics. It has shown that testing in the primary language does not provide any advantage to learners when compared to testing in a moderately well understood second language. However, there are many other socio-economic variables that could also play a significant role in the difference between the Afrikaans and the Zulu students.

The provision of bilingual educational texts could be part of the solution to language problems. This could break the loop that we are in at the moment where grade 0 primary school teachers do not want to teach in the primary language because the Grade 12 exam is written in English. Grade 12 learners do not want to write Grade 12 Science in the primary language because they were always taught through English.

From the constructivist and situated cognition perspective, the mediatory role of language in the acquisition of knowledge is so fundamental that the findings in my studies, which at surface level appear to reflect negatively on the use of the Bantu languages in learning and teaching, suggest that far more research on the issue is necessary.

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APPENDIX 1

TERM FORMATION IN NORTHERN SOTHO

ENGLISH

21. A *rocket* drifts sideways in outer *space* from point “a” to point “b” as shown below. The *rocket* is subject to no outside *forces*. Starting at position “b”, the *rocket’s engine* is turned on and produces a constant *thrust (force on the rocket)* at *right angles* to the line “ab”. The *constant* thrust is maintained until the *rocket* reaches a point “c” in *space*.

Which of the *paths* below best represents the path of the *rocket* between points “b” and “c”?

N.SOTHO

21. *Rokhete* e *phaphamala* go ya ka mathoko *lefaufaung* go tloga go ntlha ya “a” go ya go ntlha ya “b” ka ge e bontšhitšwe ka fase. *Rokhete* ga e laolwe ke *kgapeletšo* ya ka ntle. Go thoma maemong a “b”, *entšini* ya *rokhete* e a dumišwa ya ba ya tšweletša *kitlano* ya go se fetoge (*kgapeletšo rokhete*) ka *dikhuulongtsepa* go ya go mothalo wa “ab”. *Kitlano* ya go *se fetoge* e a diragatšwa go fihlela *rokhete* e fihla go ntlha ya “c” *lefaufaung*. Ke efe ya *ditsetla* ka fase tšeo di tlogago di emela gabotse tsela ya *rokhete* magareng ga ntlha “b” le “c”?

	Term formation strategy	English Term	N. Sotho Term	Comments
1	Transliteration	rocket	rokhete,	
	Grammatical inflection of a transliterated word	on the rocket	rokheting	the -ng is a "locative" suffix
2	Grammatical Adaption of an existing word	a force (noun)	<i>kgapeletšo</i>	from <i>gapeletša</i> which means "coerce"
3	Compounding or Combination of existing words	right angles	dikhutlongtsepa	<i>dikhutlong</i> - angles tsepa - perpendicular
4	Ready translation equivalent	thrust	kitlano	
		paths	ditsela	
		represent	emela	
5	Use of a more general word	to drift	phaphamala	generally it means to float
		space	lefaufang	generally space or atmosphere
6	Paraphrase using unrelated words	constant	ya go se fetoge	that which is unchanging

APPENDIX 2**SOME COMMENTS FROM STUDENTS AFTER HAVING WRITTEN THE FCI****1. ON THE ZULU VERSION**

The language was difficult to follow, the quantities meaning speed, velocity, direction, force, momentum were difficult to understand, also some of the Zulu words were only known at tertiary level because of more language research and development. It is better to learn and write physical science in English because of the Zulu words we are unfamiliar with.

2. ON THE N.SOTHO VERSION

I think you have used deep Pedi, and nowadays we do not /no longer use that deep language. It was really difficult to understand clearly because we never used our own language to answer or to learn physics.

chapter seven

The Northern- Sotho/Sepedi Language Research and Development Centre

MOGALE JR RAMMALA
NORTHERN SOTO/SEPEDI LRDC,
UNIVERSITY OF LIMPOPO

This paper seeks to outline the purpose, structure and achievements of the Language Research and Development Centres (LRDC) in general and to show how the Sepedi centre in particular has handled some of its projects.

LRDCs are national structures created by the National Language Service of the Department of Arts and Culture (DAC), to undertake research and development for each of the nine official African languages in the country. The overriding aim is to effectively develop the official indigenous languages to ensure their public usage in important fields such as law, commerce, science, politics and education among others. The centres form the backbone of the institutional infrastructure required for the successful implementation of the National Language Policy Framework¹.

BACKGROUND AND CONTEXT

Since 1997 the Department of Arts, Culture, Science and Technology (DACST), has been in constant discussion and consultation with stakeholders about the urgent need to establish Language Research and Development Centres. Provincial consultations and audits of available capacity and resources were subsequently carried out to assess the need and feasibility of such an undertaking.

On the basis of the research results, it was concluded that the establishment of LRDCs is a critical imperative that must be expedited to give impetus to the implementation of the National Language Policy Framework (NLPF). One of the key objectives of the Language Centres will be to ensure that indigenous languages are being used as languages of business, politics, research and government throughout South Africa.

The DAC is of the opinion that investment in the LRDCs will not only boost the usage of the indigenous languages, but will also contribute to the promotion of the language industry in South Africa, leading to sustainable economic benefits.

A primary objective of these Centres would be to change deep-rooted attitudes towards indigenous languages – attitudes that reinforce practices as well as perceptions of inequality (due to the lack of/poor economic value attached to these languages). By generating language projects with immediate practical benefits for the wider community, the LRDCs would

¹ At present, there are eight LRDCs, i.e. for Sepedi, Xitsonga, Tshivenda, Setswana, Sesotho, isiNdebele, isiZulu and isiXhosa. The Siswati LRDC still has to be established.

contribute directly towards the achievement of the broader goals of transformation, nation-building and the creation of wealth for all citizens.

DEFINING THE LANGUAGE RESEARCH AND DEVELOPMENT CENTRES

These Centres form the backbone of the institutional infrastructure required for the successful implementation of the National Language Policy Framework (NLPF) and all (related proposed) legislation, particularly at provincial level, and in close co-operation with PanSALB and the provincial Departments of Arts and Culture. It is envisaged that all key role-players will accept joint responsibility for overseeing the implementation of a multifaceted research and development programme that will seek to achieve a high degree of multilingualism, in a cost-effective manner and in as short a time as possible. Based within institutions of higher education, the Centres benefit from the capacity and expertise that already exist in such institutions. They also form a critical network of independent entities sharing common goals and objectives that are aligned with the priorities, as espoused in the NLPF.

AIMS OF THE LRDCS

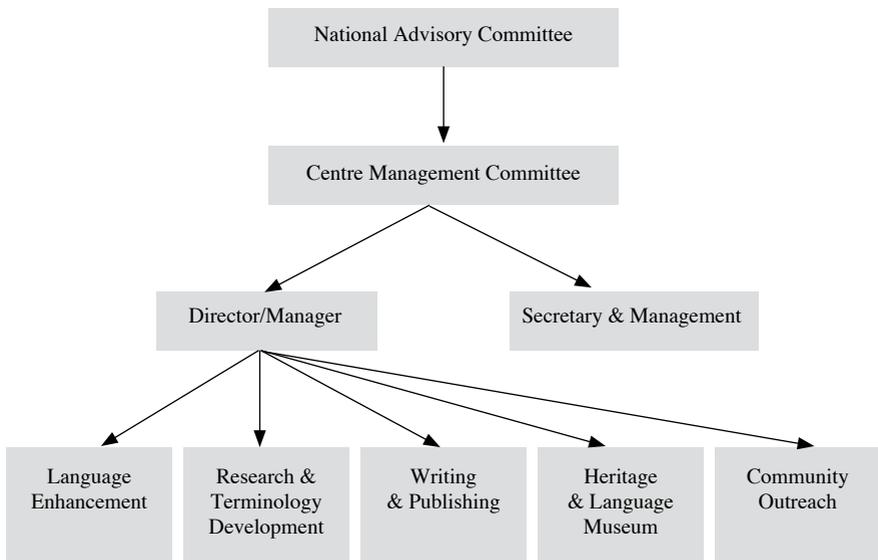
Drawing from the constitutional obligations as well as the policy intentions articulated in the NLPF, the aims of the LRDCs are to:

- Effectively develop the official indigenous languages to ensure their public usage in important fields such as law, commerce, science, politics and education, among others;
- Encourage and support language-related research that is relevant and responsive to the needs of both language users and decision-makers, as well as to maintain an accessible database;
- Streamline activities, promote synergy and enhance work to avoid the duplication of effort and wastage of resources;
- Facilitate and nurture initiatives promoting prolific writing in indigenous languages by strengthening writers' association, facilitating workshops for writers, etc;
- Devise mechanisms and instruments that will deal effectively with matters related to the protection of intellectual property and copyright;
- Advise on programmes to attract more students to the study of African languages, by indicating clear employment opportunities, including opportunities for "experiential training", where applicable;

- Contribute to the development of linguistic competencies in other international languages to enable South Africans to participate meaningfully in regional and international organisations such as the SADC, the AU, NEPAD and UNESCO among others, in view of bilateral and multilateral co-operation and agreements entered into.

LRDC STRUCTURE

Each centre would ideally have one manager, one secretary, five co-coordinators and five researchers, as shown in the flow diagram hereunder:



LINKS AND COLLABORATION

In all their operations, LRDCs must collaborate closely with all other related language development and promotion structures, such as PanSALB’s Provincial Language Committees, the National Language Bodies and the National Lexicographic Units. In this regard, the LRDCs in Limpopo have formed a provincial language forum that tries to attend

to all language problems in the Province. LRDC managers, the provincial language unit chair and the provincial PanSALB manager, have formed a managers' forum within which business plans can be shared, thus avoiding the duplication of services. They also plan events for the financial year together and organise joint training sessions.

The head of the Provincial Language Unit in the LRDCs, also has the task of ensuring that provincial Members of the Executive Councils are fully informed of their work. The Directors of the Centres periodically report to the National Language Forum – a body representing all provincial and national government departments, including PanSALB.

LANGUAGE ENHANCEMENT

Like all professions, the language field demands a well-trained cadre of practitioners with a range of skills, knowledge and expertise. What is at stake in this case is the academic training of language practitioners who must emerge with specialisation in a variety of domains, e.g. terminology, translation, interpreting, editing and human language technology. In order to produce quality services in these fields in the previously disadvantaged languages, it is necessary to extend the knowledge base and skills among serving practitioners so that there is adequate capacity to deal with domains of knowledge from which they may have been effectively barred by lack of expertise or pre-democracy history.

With the usage of indigenous languages in service delivery being pivotal in government, there is an increasing demand for translation, interpreting and terminology development services. It is the task of the LRDCs to locate such expertise, build up a network of such experts and facilitate in-service programmes relevant and appropriate to the language industry. The aim is to match expertise, skills and knowledge to job requirements for language practitioners.

In addition to building capacity for ensuring quality language services, the Centres must also play a critical role in the area of “language for conceptual development”. This is a long-term project involving research into the use of indigenous languages for academic purposes. The scope of this project extends from primary, through secondary schooling to tertiary level, and is directed at the development of appropriate learning and teaching resources (giving priority in particular to the production of “specialised dictionaries”). Terminology development based on critical curriculum areas is also prioritised. The Sepedi LRDC has already worked through a number of such dictionaries as will be shown below.

SUPPORTING LANGUAGE-RELATED RESEARCH

Being established at institutions of higher learning, LRDCs liaise with the language departments in the host institutions regarding research initiatives. In the case of the LRDC for Sepedi, the head of the Department of Sepedi at the University of Limpopo sits on the Centre management committee to ensure close co-operation.

The main focus of research activities at the LRDCs is, however, on applied research, i.e. short-term projects that will be relevant and responsive to the needs identified for a particular language. Longitudinal research studies, for example to evaluate the impact of language planning programmes or for policy reviews, can, of course, also be conducted whenever necessary.

Research projects are related to the needs of both the public and private sectors. For example, research could be carried out to determine priorities in terminology development. Some of the marginalised African languages may have an urgent need for terminology in fields such as agriculture.

A very important function of the LRDCs is to set up research databases. Each centre has to collect all available information relevant to it, such as census statistics, surveys on language distribution across the country, etc. These databases can be used to respond to requests for information from clients, and to develop research products that are directed at the language community served by the Centre, other Centres and other language stakeholders.

Databases will also be maintained on language research undertaken by various language implementation bodies in the province, for reference purposes and as guides for further research. Apart from language-related research, databases are also compiled on research on the indigenous cultures of South Africa. LRDCs will also compile databanks of research instruments, e.g. survey questionnaires, observation schedules, interview sheets, etc.

PROMOTING READING AND WRITING IN AFRICAN LANGUAGES

The culture of reading in South Africa is generally very poor, especially from the point of view of the indigenous languages. Many arguments have been advanced to explain the

problem, such as inaccessible or unavailable library centres, poorly equipped libraries, lack of books in schools, high illiteracy rates, uninteresting or unappealing books and negative attitudes towards African languages.

With the primary objective of language centres being to change deep-rooted negative attitudes towards indigenous languages, this situation cannot be allowed to continue. In fact, serious intervention needs to be made using a multi-pronged approach. Failure to do so would seriously hamper and even jeopardise the implementation of the National Language Policy. One of the first steps to be taken by the centres is to establish collaboration with writers' association and with any other non-governmental organisations that are actively involved with writers' association or individual authors. The purpose would be to understand available capacity and strengthen it where necessary. Workshops and seminars for writers could be a critical means to achieve this objective. In this regard, the Sepedi LRDC is an ex-officio member of LEBADI and organizes workshops and seminars in all genres for authors.

The Centre also collaborates closely with the University of Limpopo, to ensure that more students with qualifications in African languages are trained to write and report in the indigenous languages (e.g. in courses offered in journalism).

A large number of authors are concentrating on the production of school books and there is therefore a dire need to encourage writing in all languages for different types of readership. As an incentive, the media (the SABC and newspapers) could be involved in planning and organising competitions, with the expectation that such competitions would motivate writers further. Winning books/articles/poems, etc. could be serialised in TV drama programmes, radio stories, newspaper articles, etc. Such activities could also generate funding for the centres and, at the same time, serve as a critical source for writers and artists.

Given that government announcements need to be made in all official languages in the provinces, numerous job opportunities could be created for translators and editors who have studied African languages. In this way, the governments (at all three levels) could show their seriousness about multilingualism, as well as their concern about information accessibility to all citizens.

The LRDCs in the Limpopo Province also maintain close co-operation with Seipone, the only newspaper in the province that publishes in Xitsonga, Tšhivenda and Sepedi. Journalism students at the University are encouraged to write articles for Seipone and submit them to the respective centre for checking before submission.

HERITAGE AND LANGUAGE MUSEUMS

LRDCs have the following tasks regarding heritage and language museums:

(a) Documenting stories, folktales, legends, idioms, etc.

All centres are meant to have a unit dedicated to documenting stories, folktales, legends, idioms, etc. For this purpose, fieldworkers need to identify older people in communities who are repositories of such material, and then record all the information obtained from them for further study and preservation. This work needs to be done without delay for, as the African proverb puts it, “*Every time an old one dies a library burns down*”. In this country it is unfortunate that, 13 years into our democracy, there is still not a single museum for African languages. This shows some of the ravages of colonialism and apartheid. All of these sources – African stories, folktales, legends, idioms, etc., have always been the principal means of transmitting our values, traditions and customs from generation to generation. To prevent indigenous people from losing their identity completely, steps need to be taken immediately to collect this information.

(b) Contributing to the heritage of oral history

LRDCs have the same task as described above for collecting oral history. Additionally, the value of oral history needs to be emphasised, with communities being made aware of the fact that such history must not be regarded as being of lesser value.

(c) Overseeing intellectual copyright

LRDCs also have to oversee copyright issues – especially in the case of traditional literature. Folktale writing has become a business which, unfortunately, is being lucratively conducted by non-speakers of indigenous African languages. This has happened because not all indigenous speakers of African languages could write and, if they could, the publishing interests belonged to the speakers of other languages. It is therefore vital that the centres conduct research on this aspect of our indigenous knowledge and work out copyright and intellectual property rights mechanisms that will protect these resources from exploitation. The copyright Act, Act 98 of 1978, will also be invoked to protect literary, musical and artistic works and the sound recordings of narrated folktales.

COMMUNITY OUTREACH

One of the main objectives of the centres is to promote and encourage the use of indigenous languages. The pre-1994 socio-economic and political system of South Africa contributed greatly to the marginalisation of African languages on public platforms and public discourse. With the new National Language Policy Framework, the government has recommended various ways to improve the status and usage of indigenous languages. This could be a self-defeating exercise if speech communities are not centrally involved in the language development initiatives. The LRDCs will contribute to this aim in the following ways:

- *Literacy Training*

The need for and value of literacy training in South Africa cannot be overemphasised. The LRDCs therefore need to initiate outreach programmes to bring literacy to the community, through:

- basic literacy training
- intermediate literacy training
- advanced literacy training

Collaboration with the NGO sector and the Adult Basic Education and Training unit of the Department of Education will be necessary. The centres could be instrumental in conducting impact assessment and tracer studies towards understanding the value of such literacy training programmes in uplifting the living conditions of the ordinary people of South Africa.

- *Basic Language Courses*

As the LRDCs will be located in institutions of higher learning, they will be able to negotiate with their host institutions and join efforts in offering basic language courses to non-speakers of African languages. It should be borne in mind that the use of African languages should be encouraged not just among the African communities but also among the other speech communities in South Africa.

This initiative will accelerate the development and usage of indigenous languages in South Africa and, where applicable, even abroad. For example, the US has links with some universities in South Africa for promoting research in isiZulu. Students spend time in these institutions and get to understand the cultures as well. Such exchange programmes could be strengthened and expanded in a much more structured manner.

In the context of globalisation, South Africa is fast becoming a critical player. It is therefore imperative for as many South Africans as possible to learn and study “foreign/international languages”, not only for interpreting locally but also for obtaining meaningful employment opportunities abroad, in our foreign missions, co-operating government, etc. The Department of Foreign Affairs is the only department that trains officials in international languages, yet there is a great demand for such linguistic skills in, for example, the Departments of Home Affairs, Trade and Industry, the SANDF, the Department of Tourism and Environmental Affairs. More academic programmes need to be accessible to South Africans in this regard, with the centres mobilising resources and expertise to make this realisable.

- *Promoting the Study of African Languages*

Tertiary institutions report a decrease in the number of students majoring in African languages. To counteract this trend, LRDCs could play a role in encouraging students to study African languages, with the aim of making their careers in fields such as language teaching (from primary to tertiary level), translation and interpreting, communication studies (including advertising and journalism), and the performing arts and entertainment (e.g. scriptwriters of stage, radio and TV plays). Since tertiary institutions are already engaged in teaching these disciplines and LRDCs do not have the capacity to do the teaching themselves, they could collaborate with tertiary institutions by providing funds (grants or bursaries) for students wishing to study in these fields. Such funding could be linked to the creation of opportunities for experiential training (internships) enabling students to acquire the necessary practical experience in their chosen field(s), either at the LRDCs and tertiary institutions, or through the intermediation of the LRDCs in community-based projects and the private sector. Language-related studies could further lead to the development of learning and teaching materials in African languages, to enhance teaching in the various disciplines. These materials could also be produced in the course of these studies.

WHAT HAVE THEY PRODUCED?

The LRDC for Sepedi has produced the following:

a. On language enhancement and terminology development, as follows:

- Three glossaries have been translated from English into Sepedi from NCS (National Curriculum Statement):
 - Life orientation, grade 4-7

- Arts and culture, grade 4-7
- Economic and management sciences, grade 4-7

Work on their external verification has already begun and the final products will be sent to PanSALB for verification and approval before being submitted to the NLS for publishing and publicising.

- Translations of important documents are continuously done from English to Sepedi. These include the state of the Province addresses, budget speeches, municipal policies, documents on Islam, health documents like Stop smoking pamphlets, agricultural documents and private sector material, e.g. the Pretoria brickworks, and school textbooks on the OBE (Outcome Based Education) approach to teaching. The translations done are in line with the government policy that encourages the use of mother-tongue as medium of instruction.

b. Prospective authors are regularly supported by workshops and encouraged to write manuscripts and send them to the centre for typing, editing and checking. To date the following are ready for submission to publishers:

- 8 novels
- 8 short story books
- 13 dramas
- 11 anthologies and
- 13 folklore collections

c. Heritage and Language Museum

- Books in Sepedi have been collected and kept according to their years of publication.
- Research articles for BA Honours in Sepedi from different institutions have been collected. This is an on-going project.
- MA dissertations and PhD theses in and about Sepedi have been collected.
- A database of authors and their different periods has been created. A few bibliographies and photos of authors have also been collected.
- Space allocation for the museum is been organised and the internal design is about to begin, pending availability of funds.
- Documented histories of a number of chiefs have been collected and some are being prepared by different chiefs with assistance from the Sepedi LRDC.

CONCLUSION

The present LRDCs are pilot projects that have a life span of only three years. The intention of the NLS is to find out whether structures like these are really helpful in implementing the NLP. The experience accumulated since July 2005 shows that grass-root communities are currently more aware of the constitutional language stipulations and the role their mother-tongue can play in a country like South Africa. Unemployed graduates with mother-tongue specialisation can henceforth see the light at the end of the tunnel as they can become meaningful citizens by contributing in many ways to the development of their languages. Language awareness is now conducted on a regular basis by the LRDCs, which are closer to the speech communities. Professions like translation are now beginning to pay off and students and lecturers now know more clearly how translation should be studied and taught.

Since LRDCs are language specific, the concentration on both language and cultural issues can be handled with more confidence than when different languages had to be developed by the same group of people speaking different languages.

The amount of work which has been undertaken by the Sepedi LRDC over the past two years demonstrates its self-sustainability and its ability to support the implementation of the NLP. Language development based on research results cannot be done in three years; it needs to be undertaken on a continuous basis.

chapter eight

ICTs and African languages: International and African language development agencies from UNESCO to ACALAN

MARCEL DIKI-KIDIRI,
CNRS-LLACAN, PARIS

The workshop held at the University of Pretoria on the 30th of June and 1st of July 2005, addressed the question of what makes a language fully-fledged and standard. Several features were identified, among which the role of language development institutions. As a result, at the March 2007 workshop, it was decided to look at the work such institutions are doing to promote languages and to contribute towards their further standardisation.

Having reviewed South African national institutions, let us look at some of the international or foreign agencies which have taken some significant initiatives to develop African languages with respect to the standardisation issue.

ACALAN: Académie africaine des Langues / African Academy of Languages
<http://www.acalan.org>

ACALAN is an institution of the African Union, and is thus pan-African. It is dedicated to the promotion of African languages and the study of all languages spoken on the continent. It is concerned with lingua francas spread across boundaries because they contribute most to African regional integration, a political aim of the African Union. ACALAN has initiated two projects on African languages:

The Atlas of African Languages

This is an African-led initiative to produce reliable regional and continental linguistic maps of African languages. It offers African universities and research centres a good opportunity to co-operate in a large network and enhance capacity-building for their students and young researchers.

Web Survey of African languages

This is a joint project between ACALAN and the Nagaoka University of Technology in Japan. The Institute of Technology of the University of Nagaoka, led by Prof. Yoshuki Mikami, is well versed in the observation of Asian languages on the Web. The project aims at observing the status and use of African languages in cyberspace by analysing millions of web pages. The preliminary observations presented to UNESCO on 22 February 2007, proved to be very rich, offering valuable information.

The software used for the project can be developed by using it with new texts and thus improve its capacity for language recognition. African experts who are interested can join the project and provide texts in the languages they are working on.

MAAYA?: A World Network for Language Diversity

MAAYA is a multi-stakeholder network, involving all sectors including civil society, governments, international organisations, research centres and universities, the media, the private sector and individuals. Its mission is to develop and promote linguistic diversity as a basis for the unity of human communication. MAAYA will serve as a platform for exchanging and sharing knowledge, where technology offers a great potential for languages. To date, only a very small number of the 6 000 languages spoken in the world are available in cyberspace. The following projects are noteworthy:

- The Voices and Texts Project. This network project aims at producing a set of software for Speech to Text, Text to Text and Text to Speech services in African languages. Parts of these can stand by themselves as sub-projects and be developed by different groups of people in Africa. In the end, of course, the different projects must complement one another and form a whole. As many African languages as possible will be addressed. The project offers a great opportunity for collaboration in language engineering.
- Multilingual Internet Task Force Project. Specialists know that the internet architecture, as it stands currently, will not support the ever-increasing volume of world communication; it is already experiencing fragmentation. So a worldwide debate is going on about designing an alternative architecture for the internet, which will necessarily be multilingual right from the beginning. Specialists are thinking about an architecture which will support any language in the world (i.e. the 6 000 languages and their main 20 000 dialects). Members of the MAAYA network are involved in this project in two ways:
 - Linguasphere is directed at the codification of world languages so that every language, and even every known dialect of a given language, can be identified by a unique code. (See: <http://xml.coverpages.org/languageIdentifiers.html>)
 - INTLF is developing a referential multilingual data register for language empowerment in cyberspace. African languages are naturally involved in the early works of this project.

IDRC / CRDI: INTERNATIONAL DEVELOPMENT AND RESEARCH CENTRE

The International Development Research Centre (IDRC) or, in French, Centre de recherches pour le développement international (CRDI), is a government body that was created by the Canadian Parliament in 1970 to help developing countries to use science and technology to find long-lasting solutions to the social, economic and environmental problems with which they are confronted. One of their projects is the Pan-African Localisation Project. This project aims at developing various tools for major African languages, in order to adapt ICTs to these and enable native speakers to use these tools in their own languages. Information about African languages and on-going work in pan-African localisation can be found in the following Wikipedia website: <http://www.panafri10n.org>

UNESCO

The following two projects are relevant for our purpose:

- **Language in cyberspace**

UNESCO is very concerned about the promotion of all world languages and linguistic diversity in cyberspace. Every year, it celebrates the World Day of Mother Tongues on February 21. In 2006, UNESCO officially launched the MAAYA network and in 2007 it published *Comment assurer la présence d'une langue dans le cyberspace* ("How to insure the presence of a language in cyberspace"), by Marcel Diki-Kidiri, a step-by-step guide to the use of cyberspace. The French version of this booklet can be downloaded from the following URL: <http://unesdoc.unesco.org/images/0014/001497/149786F.pdf>, Unesdoc Clearing House, unesdoc@unesco.org

- **The World Language Documentation Centre**

UNESCO launched the World Language Documentation Centre (WLDC) in May 2007. According to its website, the WLDC is a non-profit organisation that champions linguistic research and facilitates the needs of linguistic communities worldwide.

The WLDC Board comprises 22 experts representing terminology standardisation, localisation and linguistics from around the world. The objectives of WLDC are wide-reaching and include:

- To ensure the evaluation, enrichment, maintenance and sustainability of the wealth of information about the world languages collected by WLDC and housed in ISO 639-6 databases;
 - To liaise with the organisations that contribute information and other resources to the WLDC (e.g. GeoLang Ltd as ISO 639-6 Registration Authority, BSI as ISO 639-6 Maintenance Agency, ISO 639 JAC for all ISO 639 Alpha three coded languages, and OmegaWiki for community supplied information);
 - To facilitate the needs of linguistic communities where a trusted party is required to act as intermediary.
- **LLACAN: Langage, Langues et Cultures d’Afrique noire (Black Africa’s Languages and Cultures).** <http://llacan.vjf.cnrs.fr>

LLACAN is a French research laboratory jointly led by the French National Centre for Scientific Research (*Centre National de la Recherche Scientifique*) and the National Institute of Oriental Languages and Civilisations (*Institut National des Langues et Civilisations Orientales*). It specialises in the study of sub-Saharan African languages.

One of the issues LLACAN is concerned with is the extent to which emerging African languages are standardised. The work carried out on this issue is related to that undertaken in the project which includes this workshop. We hope to produce language profiles giving information on different types of or levels in the standardisation process. The questionnaire being used can be downloaded (both in French and English) from the http://llacan.vjf.cnrs.fr/Theme1_3.htm

We would appreciate this questionnaire being filled in for any of the South African languages. Completed questionnaires should be returned to me at kidiri@vjf.cnrs.fr
Thank you very much for your co-operation.

The Authors

SUSAN COOK

Susan Cook is Associate Professor in the department of Anthropology and Archaeology, at the University of Pretoria. Her interest is on language ideologies, language policy, and urban dialects in post-Apartheid South Africa and she is currently working on a study of the social and political dimensions of non-standard Setswana in South Africa, as well as a study of corporatisation in the Royal Bafokeng Nation. Prof. Cook has also worked extensively on issues of comparative genocide, in Cambodia.

MARCEL DIKI-KIDIRI

Marcel Diki-Kidiri is a member of Llacan (Language, Langues et Cultures d'Afrique noire) UMR 8135 of the CNRS. He is an expert on *sängö*, the second official language of Central African Republic. Marcel Diki-Kidiri has researched and published widely. He has done pioneering work on cultural terminology and language planning, in language didactics in multilingual context as well as on the role of ICTs for language development.

MICHEL LAFON

Michel Lafon is a linguist belonging to Llacan (Language, Langues et Cultures d'Afrique noire)-UMR 8135 of the CNRS. He conducted research on Shingazidja spoken in the Comoro Islands and Shona spoken in Zimbabwe before working in mother-tongue literacy projects for adults and children in central Mozambique (Ndau-speaking area). Thanks to a four-year posting at IFAS in Johannesburg, he turned his attention to isiZulu and the sociolinguistic situation in South Africa, and in particular to the role of African languages in education and other prestigious domains. He is presently working on a history of the building of the South African language scene.

PHILLIP PARE

Phillip Pare started his career as an Electronic Engineer with the South African Atomic Energy Board in Pretoria. Disillusioned with his work in apartheid South Africa, he went into teaching in a school established in a rural part of what is now the Limpopo Province. He soon discovered the problems around the medium of instruction when his pupils understood very little of his English. This encouraged him to learn Northern Sotho and to

eventually get involved in the translation of Physics and Chemistry examination papers into Northern Sotho. He worked together with various teachers from Mamone and Phalaborwa in this project and subsequently joined the University of Pretoria where he teaches Physics as part of a bridging programme for students who normally would not have been accepted into a science, engineering or medical degree programme. He tries to teach bilingually, using both Northern Sotho and English. This experiment shed light on some of the sociolinguistic and terminological difficulties involved in the elevation of Northern Sotho and other African languages into an acceptable medium for modern science and technology.

ELIZABETH PRETORIUS

Elizabeth Pretorius is Associate Professor in the Department of Linguistics, University of South Africa, and the Director of the Academic Literacy Research Unit in the same department. She lectures Applied Linguistics (second/additional language learning and teaching) at postgraduate level. She has been involved for several years in reading research in English and the African languages, especially in educational contexts in high poverty areas.

JOE RAMMALA

Joe Rammala is the Director of the Language Research and Development Centre for Northern Sotho (Sesotho sa Lebowa) and a member of the Department of Linguistics at the University of Limpopo. He obtained his PhD from the University of Pretoria with a thesis on Language Planning in Limpopo.

ELISABE TALJARD

Elsabé Taljard is Associate Professor in the Department of African Languages, University of Pretoria, where she lectures various aspects of African languages at undergraduate and postgraduate levels. She specialises in Northern Sotho linguistics and corpus linguistics. She was recently part of a team of experts involved in the compilation of a new bilingual Northern Sotho-English dictionary, published by Oxford University Press. She has also published in the fields of terminology, lexicography, human language technology and translation.

VIC WEBB

Vic Webb is Professor Emeritus at the University of Pretoria and the Director of the Centre for Research in the Politics of Language (*CentRePoL*). His scholarly interest is language planning, language and identity and language development. He has published and spoken quite widely on the importance of establishing multilingualism in South Africa and promoting African languages. One of his important publication is *Language in South Africa. The role of Language in National Development and Transformation* (John Benjamin Publishers, Amsterdam/New York, 2002). Vic Webb was project manager of the *Languages in contact and conflict in Africa* (LiCCA) project from 1991 to 1996, which initiated research projects in 13 African countries. He is currently involved in a project on the *Standardisation of African Languages*, in co-operation with the Pan South African Language Board and Llacan researchers, in the project of the South African Department of Provincial and Local Governments, aiming at establishing multilingualism in all 283 municipalities with the view to contributing to improved service delivery, and in the project of the MIDP programme of the Universities of the Free State (RSA) and Antwerp and Gent (Belgium) on *Multilingualism from below*.