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# The effect of tertiary study at an English medium university on the written English of speakers of Black South African English

ABSTRACT

Increasing numbers of South African students speak a variety of English known as Black South African English (BSAfE). Lectures, notes and textbooks are in Standard English, and might be expected to influence the written English of students. Students are under pressure to produce "correct" English, as assignments and exams containing too many non-standard constructions may be misunderstood by lecturers or possibly viewed as ungrammatical and thus worthy of fewer marks. This article finds little change in the variety of English used by science students in response to exposure to standard South African English over a period of two to five years. It speculates that this may reflect a positive attitude towards BSAfE influenced perhaps by the use of BSAfE by government officials and a rapidly growing group of successful middle-class South Africans. Secondly, it finds a high level of variability in use of the constructions studied. It suggests that this may be because much of the English heard by students remains BSAfE, reinforcing variability in the grammars of the participants. Finally, this high level of variability indicates that it is too early in the development of BSAfE to talk of restandardisation of English in South Africa.

**Keywords:** Black South African English, restandardisation, language variability, grammatical accuracy.

## Introduction

The teacher of English as a second language (ESL) in South Africa is subject to a range of conflicting pressures. ESL teachers find that colleagues complain of the non-standard English of their students, and recently at the University of Natal there have been claims that students are graduating without the requisite proficiency in English. Such claims beg the question of what constitutes proficiency in English; should we, for instance, insist on native-speaker norms, or is a certain level of non-standard usage inevitable? A second contrasting pressure on the ESL teacher is the concern that insisting on native-speaker norms disempowers students and entrenches the power of native-speakers (e.g. Webb 1996; Sachs 1994: 1). It is certainly a problem for students if they are made to feel that their language is inferior, and leads to loss of confidence. A third

pressure on ESL teachers is the concern that if failing to help students acquire standard varieties in formal situations or writing disempowers them (e.g. Wright 1996: 154). As the language of parliament, most official documents, most schools and most employers, English is a powerful language in South Africa. It is widely viewed as necessary for social mobility. Perhaps reflecting the improved prospects for employment and education for those proficient in English, there is some evidence indicating a preference for Standard English amongst speakers of BSAfE (de Klerk and Bosch 1993; Cooper 1989; Nwala 1993).

As this article compares a local South African variety of English to Standard English, it is worth noting that defining Standard English is not as easy as might be expected. In this article I follow Crystal's (1995: 110) definition of Standard English as a prestige variety of a country, identified by its vocabulary and grammar and not by pronunciation. It is usually a minority variety, but the one that is most widely understood.

In this article, which focuses largely on the first of the above three problems, that of proficiency, I report on a comparison of university students' written grammatical use soon after entering University with their grammatical use several years later. A limited number of measures of proficiency (namely use of articles, prepositions and of various aspects of tense) were employed. In addition three measures of acquisition of the norms of formal academic writing (namely avoidance of non-finite and run-on sentences and lexical density) were employed. As the students were all speakers of BSAfE, I begin this account by considering what BSAfE is.

## What Is Black South African English?

Mesthrie (1995: 254), in his discussion of South African Indian English (SAIE), characterises SAIE as a continuum of varying styles. Borrowing from the terminology of Creole studies, he describes 3 points on this continuum: the basilect (furthest removed from native-speaker English), the acrolect (closest to native-speaker English) and the mesolect (between these two extremes). By considering the frequency with which particular speakers of Creole varieties used different forms, Bickerton (1975) classified the speakers into the different idiolects. Mesthrie (1995: 254) points out that, from the second language acquisition perspective, these idiolects may be viewed as interlanguage varieties that have become fossilised/stabilised.

SAIE is of course spoken as a first language, which, at the moment, is not the case for BSAfE (Schuring 1993: 1). Only 113 000 black South Africans indicated that English was their first language in the 1996 census (Kamwangamalu 2002: 3). Nevertheless the notion of a continuum is useful. As de Klerk (1999: 313) points out, speakers of BSAfE range from those with very rudimentary English to very fluent speakers. Schmied (1991: 65) characterises African English in general as retaining the basic grammatical system but making "certain additions omissions or modifications … often in a very logical and sometimes even less irregular way than in Standard English". From this we might expect any variation in BSAfE to be regular and consistent.

A similar expectation arises from the perspective of research in the area of second language acquisition, which views students as speaking an interlanguage with rules that are alternative to the native-speaker system, but are **internally consistent and systematic**. Variation may arise from the fact that the learner follows a rule system with systematic exceptions to the rules. Another possibility is that the forms are regarded as optional within the writer's rule system. This is what Ellis (1985: 75) refers to as free variability – that is "haphazard use of two or more alternate forms which exist within the learner's interlanguage."

BSAfE shows great similarities with other African varieties as described by Schmied (1991). It has fairly well defined features of pronunciation, grammar, and vocabulary. My focus in my teaching is almost exclusively on written forms and this study will therefore discuss grammar only. Gough (1996: 61) lists 23 grammatical features of BSAfE, among them:

- Simplification of tense
- Simplification of verbal concord
- Omission of articles
- 'Can be able to' as a modal verb
- Non-standard preposition usage in prepositional verbs
- Noun phrases not always marked for number

Estimates of knowledge of English amongst first language speakers of African languages range from 32% (Schuring 1993: 17) to 61% (RCM survey 1993: 27) of black South Africans. These differences presumably arise from different evaluations of what it means to be a speaker of a language. What is agreed upon is that native speakers of English in South Africa (only 9% of the population according to the 1996 census (Kamwangamalu 2002: 3)) are far outnumbered by speakers English as a second language. This is one of the factors that have led to debate in the last 10 years around the possible restandardisation of English in the direction of BSAfE. The question is whether we should continue to regard a native variety, probably SAE, or possibly British English (Titlestad, 1996), as the standard in South Africa, or whether we should embrace a new standard incorporating features of BSAfE on the grounds that most speakers of English in South Africa speak BSAfE.

Arguments in favour of retaining a native-speaker standard include retaining international comprehensibility, and preventing increasing 'deviation' from Standard English by BSAfE. Titlestad (1996) for example argues that BSAfE has not been adequately codified to serve as a new Standard English in SA and that anyway it is not a stable variety. Arguments in favour of restandardisation are that the number of speakers of BSAfE far outnumber native speakers of English, and that insistence on standard English norms alienates and disempowers learners who are speakers of BSAfE. Strict insistence on standard English may make English an agent of domination (Webb 1996: 181) as learning a language does to some extent involve learning a culture and the norms of that culture.

A further argument in favour of restandardisation is advanced by Makalela (1999: 69), who argues that adhering to Standard English as the standard is confusing to teachers and students. He bases his argument in favour of restandardisation on a study of experienced teachers who were registered for degree studies. Makalela (1999) judges the teachers in his study to be speakers of the acrolect, while Wissing (2002: 143) suggests instead that teachers are typically speakers of the mesolect. Makalela's (1999) study indicates a high level of variability in grammatical features used by the teachers in the study and uncertainty amongst them about what Standard English is. Grammatical features in his study included progressive aspect extended to stative verbs, lack of subject/verb concord, avoidance of complex tenses in compound sentences, and non-standard use of articles and prepositions. He concludes (1999: 69) that "BSAfE *will* naturally deviate from Standard English to a point where it becomes a variety of English in its own right" (my italics) and on this basis he suggests standardising BSAfE "for use in all social institutions". In this I cannot agree with him because I see no reason to think a new standard would prevent continued confusion, given that there would continue to be pressure in the direction of Standard English from exposure to native speakers and from exposure to texts in Standard English. In a similar study to that by Makalela (1999), Gough (1996: 64) found that some features (such as non-standard use of

prepositions) were more entrenched than others (such as extended use of the progressive), which seemed more sensitive to the Standard English norm of correctness.

Precisely what restandardisation might consist in is also debatable. Chick and Wade (1997: 278) for example view it as merely "raising the status of BSAfE" making it acceptable in formal contexts such as "education, the media, business and government communication". Similarly, Webb (1996: 186) argues that instead of prescribing a new BSAfE norm, there should be a more relaxed and tolerant acceptance of non-standard English. He reminds us that prescribing the official variety of language that people are supposed to use did not work with Afrikaans despite the co-operation of teachers, schools, cultural bodies and the media (Webb 1996: 185).

Van der Walt and van Rooy (2002: 116) use a three-phase model of development of a new English norm developed by Gill (1999) to describe the Malaysian situation. In this model language use goes through an exonormative phase (certainty about an external native norm), a liberation and expansion phase (uncertainty about the norm and inconsistent application of the norm), and an endonormative phase (consistent application of a local norm). Van der Walt and van Rooy (2002: 124) found uncertainty amongst Black English teachers, who accepted the Standard English norm but also accepted non-standard features. Based on this they (2002: 125) suggest that English in South Africa is the liberation and expansion phase, and that BSAfE is "expanding itself to a standard form".

## Context of the Study

Participants in the study described in this paper are science students in a 4-year curriculum specifically designed for students from disadvantaged schools. During their first year at university all were registered in the *Scientific Writing* course that I teach. Participants are all speakers of BSAfE, spoken as a second, third or fourth language, their first language, in general, being Zulu. After 4 years of mother tongue instruction, the later years of their schooling were through the medium of English with teachers who were BSAfE-speakers, and who, research indicates (e.g. Adendorff 1993), engage in a fair amount of code-switching. As Wright (1996: 151) points out, most black South Africans, including participants in the study, have little contact with native speakers of English during their school years and experience of Standard English is largely confined to printed sources such as textbooks and newspapers. Besides the fact that first language speakers of English are a minority in the country, it has been only a decade since apartheid was brought to an end, not long enough to bring about an integrated society. Demographic, economic and cultural factors continue to contribute to most black South Africans having little contact with first language speakers of English.

The students are currently at the University of Natal in Durban (UND), an English medium university. All textbooks and course materials are in highly formal Standard English. The majority of UND students (± 70%), and an even greater proportion of staff, are native-speakers of English. In spite of this students appear to socialise almost exclusively with other speakers of BSAfE. This is partly because most live in student residences where places are preferentially given to out of town students, most of whom are black.

Thus, given the low proportion of L1 speakers in the country and the fact that current possibilities for interacting with L1 speakers are seldom put to use, integration with L1 speakers does not appear to be a motivation for the students for speaking English or improving their English. Coetzee-van Rooy (2002: 66) similarly rejects the possibility for an integrative motivation for learning English amongst Black South Africans. Instead, use of English amongst my students seems firstly to be instrumental – to get an education and later a job. Secondly,

anecdotal evidence in the form of my own observation (both in and out of class), indicates that students use a fair amount of code-switching into English in speaking to other speakers of BSAfE who may or may not have different first languages. Through informal conversations with students I also have the impression that it is the norm for students to have some level of fluency in one or more African languages besides their own first language.

## Description of the Study

This study follows from a previous study (Parkinson 2001), in which I noted a lack of shift from BSAfE towards standard English in first year science students who had been given a short course of instruction in four features of standard written English. To extend this, the present study asks whether the grammar of L2 students shifts naturally towards Standard English as a result of attending an English medium university where, although students have limited interaction with their L1 English classmates, they attend lectures and read materials on complex topics in English.

Because of my role as a teacher of academic literacy, my concern in this study is necessarily focused upon written rather than spoken language. In the above-mentioned *Scientific Writing* course, for which all participants in the study had at one time or other been registered, students are examined in June and November of each year. The examination takes the form of an essay on a science topic on which the students have previously been supplied with readings. As I have taught the course for 9 years, I decided to invite those of my previous students who had not yet left the university (75 were invited) to write an essay of the same sort as the one they had written in their first year examination. In all, 26 students accepted the invitation, and wrote the previous year's examination under as close to the same examination conditions as possible. I then compared this piece of writing to the writing they had produced in their first year June examination. Writing an essay voluntarily and writing an essay for marks in an exam may elicit different levels of attention to form. However, it would be difficult to find an identical measure. For example, writing in students' third year exams (e.g. in Chemistry) might also elicit less focus on form than in the *Scientific Writing* exam, which was explicitly a language course.

The length of time between the two pieces of writing ranged from 2 to 5 years. Once again this variation is not ideal, but it was necessary to accept this in order to get a large enough sample of students. Students' use of grammar in writing an essay was chosen in preference to a test with an obvious focus on grammar, as I wanted to see how students performed in writing generally, under conditions when they were not concentrating on grammatical correctness.

Students who participated in the study ranged from those in courses where a reasonable amount of coursework writing is expected of students (11 Chemistry majors, 3 Biology majors, 2 Medical students, 3 Engineering students and 1 Law student) to those where little coursework writing is expected (6 Maths/Computer Science majors).

In order to enable comparison of the variety of English spoken by my students with the variety spoken by subjects in other studies (e.g. Gough (1996), Makalela (1999)), a sentence-correction exercise was given to the 2003 cohort of students. As these students were selected on the same criteria as the students in previous years, there is little reason to believe that they are significantly different from the students whose written production in essays is analysed in this study.

## Measures of Proficiency Employed

In measuring proficiency in English I sought to include a wide range of features. In selecting these features I relied on my own experience of areas of difficulty as well as points raised in literature

(Gough 1996; Schmied 1991). These included features used to measure the extent to which students approximate native speaker grammatical norms, to features used to measure student acquisition of the norms of formal academic writing. Measures of approximation to native speaker grammatical norms include use of tense, including modality and subject-verb concord, and use of articles and prepositions. Conjunction use may be said to reflect approximation to both native speaker norms and, as an indicator of ability to organise and link clauses, to academic norms. As further measures of approximation to norms of formal academic writing I include knowledge of what constitutes a finite clause, appropriate use of punctuation to avoid "run-on" sentences and lexical density (number of content words per clause). I discuss each of these below:

## Tenses

The English tense system is notoriously complex. Simplification of tense is a feature of BSAfE (Gough 1996: 62) and more generally of African English (Schmied 1991: 64). Difficulties range from problems choosing the correct tense to the less common difficulty with forming the tense once the correct tense has been selected:

> *"At a high temperature the landfill get hot and heat **penetrated** through the pile to the core of it."* (penetrates)
> *"This **is regard** as decomposition of wastes."* (is regarded)

## Modal Finites

The importance of discussing possibility in science makes control of modal finites an important element for science students for whom English is a second language. Difficulties include using the wrong modal finite, using modals that are not needed, and omitting to use modality that is required:

> *"Patients are very important in clinical trials. Otherwise the trials **could** be meaningless."* (would)
> *"By conducting trials in this way, the researchers increase the dosage and see what **would** happen."* (will happen, or happens)
> *"If there were no medicine where **will** we be?"* (would)

## Subject-Verb concord

Schmied (1991: 65) lists use of regular unmarked forms rather than inflected forms as a feature of African English. Although lack of concord between subject and verb is unlikely to prevent a reader's understanding of student writing, like use of the wrong article or preposition, it nevertheless does increase the difficulty of reading for a native English speaker, probably making the reading speed slower.

> *"At a high temperature the landfill **get** hot and heat penetrated through the pile to the core of it."*

Inclusion of subject-verb agreement as a feature of this study is useful from another perspective. Interlanguage theory maintains that learners pass through a series of grammars **each one systematic in nature** (Selinker 1972). Grammatical rules can of course have exceptions. However the rule for subject-verb agreement is a very simple one, and it is not clear what exceptions there

might be to the rule. Nevertheless writers in this study treat subject-verb concord as optional, producing the non-standard form about 15% of the time.

## Incomplete sentences

Production of incomplete sentences is not limited to students for whom English is a second language, but is found in the writing of first language speakers as well. In both groups I would expect the incidence of such sentences to decrease with exposure to formal writing. Incomplete sentences produced by students include sentences without a finite verb, subordinate clauses as sentences, nominal groups with embedded clauses and clauses in which the subject is omitted.

! **Non-finite constructions**

*"The most common nuclear fusion being that of hydrogen nuclei to form a helium nucleus."*

! **Subordinate clauses**

*"When the physicians know exactly what happens to the drug in the human body (in other words how it is absorbed)."*

! **Nominal groups with embedded clauses**

*"Places like sport stadiums, buildings, airports etc where a person and their luggage is scanned for any possible weapons such as guns and explosives."*

! **Omission of subject (rare)**

*"Computer-aided drowning detection is technology that is strictly for safety purposes installed in swimming pool areas and _ detects swimmers that become still."* (it)

## Use of conjunctions

Inappropriate use of conjunctions certainly can interfere with meaning. Inappropriate use can be interpreted as poor reasoning ability by those marking the writing. This is particularly true in cases where a causal relationship is implied but does not exist.

*"Protons repel each other and need a large amount of energy to fuse. **Therefore** the fusion process takes place as follows: $P + P \rightarrow D + e^{+} + neutrino."*

"Although" and "but" are paired so frequently as to suggest that this is a stable feature of Black South African English:

*"**Although** it looks the same **but** the therapy is either a placebo or the therapy being tested."*

## "Run-on" sentences

Although they can be regarded as stemming from a problem with punctuation, sentences which are allowed by the writer to "run-on" into each other may also be regarded as the result of lack of clarity about what constitutes a well-formed written sentence. Such run-on sentences are often separated by a comma instead of a full stop.

*"Imagine going to watch a soccer match and at the doors everyone is being scanned, it consumes a lot of time."*

## Use of articles

The rules for article use in English are more complex than is generally recognised by school textbooks. It is a measure of the difficulty of article use that at least 1 non-standard use of articles was produced by all of the students in the study, even those who approach native-speaker proficiency in other aspects. Articles may be omitted (Schmied 1991: 71. Gough 1996: 61), included in error, or the wrong article may be used:

> *"These biodegradable materials facilitate the process and _ rate of production of methane increases." (the)*
> *"**The** electricity is a vital thing in **the** society."*
> *"Methane is produced in **the** process known as biodegradation." (a)*

## Use of prepositions

As with article use, all students in this study used the wrong preposition at least once. Usually errors result from the wrong preposition being used although less commonly a preposition may be omitted. Examples are:

> *"This report **at** the origin, the structure and energy source of stars and will look at he sun and how will it be **on** the future."*
> *"Hydrogen is used ___ a fuel in a process called nuclear fission."*

## Determiner-noun agreement

Agreement within the nominal group is, like subject-verb concord and article use, another feature not likely to prevent understanding by the reader. Like these features it may however slow the rate of comprehension of native English readers. An example is:

> *"**Another important tools** in conducting clinical trials are statisticians."*

## Lexical Density

Lexical density is a measure of how "written" or "spoken" a text is. According to Halliday (1989: 62) written text is grammatically simple, with few clauses in a clause complex, but lexically dense, with a high proportion of content words (nouns, verbs, adjectives and adverbs). By contrast, speech is grammatically complex, has a lower proportion of lexical items, and a correspondingly higher proportion of grammatical words (prepositions, conjunctions, auxiliary verbs, modal verbs, pronouns and articles (Gerot and Wignell 1994: 162). Lexical density is calculated by dividing the number of lexical items by the number of ranking clauses (i.e. embedded clauses are not counted as separate clauses). In an earlier study (Parkinson 2002: 279), I found that the lexical density of university level textbooks ranged from 8.5 to 11, while the lexical density of the research article I studied was about 8. I would thus expect that extended exposure to textbooks and the formal register employed in many university texts such as lectures, exams etc would influence the written output of students, increasing its lexical density.

## Results

Table 1 shows the mean number of words in the samples of writing used in the study. On average the texts used from the students' first year were about 1/3 longer than those used from May 2002, between 2 and 5 years later.

**Table 1:  Mean number of words in the samples of writing**

| N = 26 | June of students' first year | May 2002 |
|---|---|---|
| Mean number of words in the samples | 911.1 | 668.5 |
| Standard deviation | 139.8 | 83.3 |

### Tenses

Table 2 shows the mean proportion of tenses used correctly in students' first year and then again in May 2002, between 2 and 5 years later. Sadly, the mean correct usage remains constant at about 93% in students' first year and 94% in May 2002, the difference not being significant ($p < 0.05$) according to a matched t-test.

**Table 2:  Use of verb tenses**

| N = 26<br>$\Sigma D = 0.155$<br>$\Sigma D^2 = 0.045$ | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of finite verbs | 91.27 | 67.65 | |
| Standard deviation | 18.71 | 9.21 | |
| Mean proportion of correctly used tenses per student | .931 | .937 | .006 |
| Standard deviation | .047 | .044 | .042 |

### Subject-Verb agreement

Table 3 shows the mean proportion of correct uses of the simple present tense in June of students' first year (87%) and May 2002 (86%). These two means are not significantly different ($p < 0.05$), indicating that, on average, percent standard use of the construction remained constant over the period studied.

**Table 3:  Subject/verb agreement**

| N = 26<br>$\Sigma D = -0.2273$<br>$\Sigma D^2 = 0.4084$ | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of uses of the simple present tense per student | 41.1 | 33.1 | |
| Standard deviation | 18.3 | 8.39 | |
| Mean proportion of correct uses per student | 0.87 | 0.86 | -0.009 |
| Standard deviation | 0.119 | 0.107 | 0.128 |

## Modal Finites

Table 4 shows the mean proportion of modal finites used correctly in students' first year and in May 2002, several years later. As with all other features tested, the proportion of standard uses of the construction was high, and remained constant over the time period, being 87% in first year and 85% in May 2002, with the difference not being significant ($p < 0.05$) according to a matched t-test.

**Table 4: Proportion of modal finites used correctly**

| N = 26<br>$\Sigma D = -0.541$<br>$\Sigma D^2 = 1.445$ | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of modal finites per student | 8.42 | 9.65 | |
| Standard deviation | 5.95 | 5.46 | |
| Mean proportion of correct uses per student | 0.87 | 0.85 | -0.021 |
| Standard deviation | 0.18 | 0.16 | 0.240 |

However, although students did not shift towards standard usage in their use of modal finites, as Table 5 shows, the mean number of modal finites increased from 9 per 1000 words to 14.5 per 1000 words. A matched t-test shows this increase to be significant ($p < 0.05$). This indicates awareness on the part of students after several years of tertiary study for a need for a relatively high level of tentativeness in academic/scientific writing.

**Table 5: Modal finites produced per 1000 words**

| N = 26<br>$\Sigma D = 142.4$<br>$\Sigma D^2 = 3358.9$ | June of students' first year | May 2002 | Mean increase in number of modal finites |
|---|---|---|---|
| Mean number of modal finites per 1000 words | 9.01 | 14.48 | 5.48 |
| Standard deviation | 6.03 | 7.88 | 10.17 |

## Incomplete sentences

Table 6 shows the mean number of incomplete sentences produced by students per 1000 words of written text in their first year compared to the mean number produced in May 2002 several years later. A matched t-test shows that these two means are not significantly different ($p < 0.05$), suggesting that on average there is no improvement in this feature of students' written output.

**Table 6: Number of incomplete sentences per 1000 words**

| N = 26<br>$\Sigma D = 2.889$<br>$\Sigma D^2 = 110.50$ | June of students' first year | May 2002 | Mean improvement |
|---|---|---|---|
| Mean number of incomplete sentences per 1000 words | 1.172 | 1.283 | -0.111 |
| Standard deviation | 1.520 | 1.688 | 2.099 |

## Use of conjunctions

Table 7 displays the mean of the proportion of standard uses of conjunctions in participants' first year compared to that in May 2002, between 2 and 5 years later. These means remain constant at 94% correct in the students' first year and 93% correct several years later. A matched t-test indicates that these means are not significantly different ($p < 0.05$). This indicates that use of conjunctions did not, on average, improve during the years between the students' first year and May 2002.

**Table 7:  Use of conjunctions**

| N = 26 $\Sigma D = -0.317$ $\Sigma D^2 = 0.289$ | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of conjunctions per student | 18.00 | 11.50 | |
| Standard deviation | 7.39 | 5.66 | |
| Mean proportion of correct uses per student | 0.94 | 0.93 | -0.012 |
| Standard deviation | 0.062 | 0.091 | 0.107 |

## "Run-on" sentences

Table 8 shows the mean number of "run-on" sentences per 1000 words of text written by students in June of each student's first year and in May of 2002. A matched t-test indicates that the mean number of "run-on" sentences produced by students in their first year is not significantly different from the mean number produced by students in May 2002, between 2 and 5 years later. This means that on average students have not significantly improved in this feature.

**Table 8:   "Run-on" sentences per 1000 words**

| N = 26 $\Sigma D = -3.717$ $\Sigma D^2 = 172.57$ | June of students' first year | May 2002 | Mean improvement |
|---|---|---|---|
| Mean number of "run-on" sentences per 1000 words | 2.507 | 2.364 | 0.143 |
| Standard deviation | 2.666 | 2.597 | 2.623 |

## Use of articles

Table 9 shows the mean proportion of articles used correctly in June of the students' first year (87%) compared to May 2002 (81%), a number of years later. Astonishingly, article use in May 2002 is significantly worse ($p < 0.05$) than in the participants' first year according to a matched t-test. This indicates that article use actually deteriorated over the intervening years, if measured against Standard English.

**Table 9:  Article use**

| N = 26<br>Σ D = -1.607<br>Σ D² = 0.482 | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of articles used per student | 75.30 | 54.26 | |
| Standard deviation | 23.64 | 15.059 | |
| Mean proportion of correct uses of articles | 0.87 | 0.81 | -0.062 |
| Standard deviation | 0.066 | 0.123 | 0.124 |

## Use of prepositions

Table 10 shows the mean proportion of prepositions used correctly according to standard SAE norms in students' first year and then again in May 2002 between 2 and 5 years later. On average correct use of prepositions remained constant at 91% in first year and 93% several years later. As a matched t-test showed that these means are not significantly different (p < 0.05), it appears that the intervening years have not significantly changed student use of prepositions.

**Table 10: Use of prepositions**

| N = 26<br>Σ D = 0.718<br>Σ D² = 0.167 | June of students' first year | May 2002 | Mean proportional improvement |
|---|---|---|---|
| Mean total number of prepositions used per student | 74.89 | 74.46 | |
| Standard deviation | 23.19 | 14.48 | |
| Mean proportion of correct uses per student | 0.91 | 0.93 | 0.028 |
| Standard deviation | 0.062 | 0.045 | 0.077 |

Table 11 compares the mean number of prepositions per 1000 words used in June of students' first year (83 per 1000 words) with the mean number used in May of 2002 (111 per 1000 words). This large increase is significant as measured by a matched t-test.

**Table 11: Increase in mean number of prepositions used**

| N = 26<br>Σ D = 729.5<br>Σ D² = 43930.5 | June of students' first year | May 2002 | Mean increase |
|---|---|---|---|
| Mean total number of prepositions used per 1000 words | 83.4 | 111.5 | 28.06 |
| Standard deviation | 25.94 | 17.06 | 30.63 |

If this increase in prepositions reflected an increase in the use of phrasal verbs (e.g. a star is made up of hydrogen; you end up in your own house), this might reflect a more native-like, colloquial use of English. However, there is no significant increase in the number of phrasal verbs used, as Table 12 shows.

**Table 12: Comparison of number of phrasal verbs as a proportion of all verbs**

| N = 26<br>Σ D = 0.0925<br>Σ D$^2$ = 0.0196 | June of students' first year | May 2002 | Mean increase in phrasal verbs |
|---|---|---|---|
| Mean total number of phrasal verbs per 1000 words | 0.030 | 0.034 | 0.0036 |
| Standard deviation | 0.019 | 0.027 | 0.028 |

The increase in number of prepositions must therefore be the result of an increase in the number of circumstantial elements used by students in the study. This indicates that students employ a greater level of specificity and detail after several years of tertiary study. This is evidence of development of explicitness, a prized aspect of academic writing. This increase in number of prepositions used after several years of tertiary study is worthy of further investigation.

## Determiner-noun agreement

Table 13 shows the mean number of times that students failed to ensure agreement in number between determiner and noun. As is evident from the table, students produce this error less often than once per thousand words. A matched t-test ($p < 0.05$) indicates that the mean in June of the students first year is not significantly different from the mean in May 2002, suggesting that the intervening years have not caused students to decrease their production of this error on average.

**Table 13: Determiner-noun agreement**

| N = 26<br>Σ D = -8.197<br>Σ D$^2$ =78.585 | June of students' first year | May 2002 | Mean improvement |
|---|---|---|---|
| Mean instances of lack of determiner-noun agreement per 1000 words | 0.961 | 0.645 | 0.315 |
| Standard deviation | 1.295 | 1.201 | 1.744 |

## Lexical Density

Table 14 shows the mean lexical density – measured as number of content words per clause – in texts written by students in June of each student's first year and in May of 2002. A matched t-test indicates that the mean lexical density of clauses produced by students in their first year is not significantly different ($p < 0.05$) from the mean lexical density of clauses produced by students in May 2002, between 2 and 5 years later. This suggests that students' writing has not, on average, moved along the continuum of 'more spoken' to 'more written'.

**Table 14:     Lexical Density**

| N = 26<br>Σ D = 9.436<br>Σ D$^2$ = 133.67 | June of students' first year | May 2002 | Mean increase |
|---|---|---|---|
| Mean lexical density over ± 100 words | 5.557 | 5.920 | 0.363 |
| Standard deviation | 1.275 | 1.852 | 2.283 |

Table 15 shows that in the main students in the study use the grammatical features studied correctly far more often than they use them incorrectly. Rate of correct usage ranges from 81% to 94%.

**Table 15: Summary of percentage correct use of grammatical features**

|  | June of students' first year | May 2002 |
|---|---|---|
| Verb tenses | 93% | 94% |
| Subject-verb agreement | 87% | 86% |
| Modal Finites | 87% | 85% |
| Conjunction use | 94% | 93% |
| Article use | 87% | 81% |
| Preposition use | 91% | 93% |

**Table 16: Correction of sentences into Standard English**

|  |  | % corrected into standard English | | |
|---|---|---|---|---|
| Feature |  | Gough (1996) N=20 | Makalela (1999) N=20 | My students 2003 cohort N=79 |
| Omission of articles | He was good man* | 95% |  | 91% |
|  | When it is hot, rate of decomposition of food increases. |  |  | 49% |
| Noun phrase not marked for number | We did all our subject in English* |  |  | 56% |
| Extensive use of the progressive | Men are dominating the key positions in government. |  |  | 3% |
| Simplification of verbal concord | When she goes there she usually enjoy herself. |  | 65% | 42% |
| Simplification of tense | I wish that people in the world will get educated* |  |  | 28% |
|  | During the strike we supposed to stay in our homes* |  |  | 72% |
| Past tense not always marked | In 1980 the boycott starts* |  |  | 87% |
|  | We stayed in our home until the boycott stops* |  | 30% | 66% |
| Preposition usage in prepositional verbs | They were refusing with my book* | 30% |  | 15% |
|  | He explained about the situation* | 25% |  | 30% |
| Use of subordinators | Although she loved him but she didn't marry him* | 95% |  | 28% |
| 'Can be able to' as a modal verb | I can be able to go* | 65% |  | 27% |

*Sentences from Gough (1996: 61).

Percentages connected by a dotted line are statistically different.


Table 16 compares the percentage of sentences successfully corrected into standard English by 79 students doing Scientific Writing in 2003 with sentence-correction by subjects in studies by Gough (1996) and Makalela (1999). In most instances the sentences in this exercise were the same sentences as those used in the study by Gough (1996). Table 16 indicates that the students doing Scientific Writing are significantly worse than were the teachers in these studies at correcting errors of concord, tense, conjunctions and use of 'can be able to' as a modal verb.

## Discussion

In summary, the results indicate no shift towards native speaker norms in use of any of the features of language use studied (namely verb tenses, subject-verb agreement, modal finites, use of conjunctions, article use, preposition use, and determiner-noun agreement). In fact in one feature (use of articles) usage was significantly worse with respect to native-speaker norms after several years of tertiary study. In two features (namely production of complete sentences, and avoidance of "run-on" sentences) students also made no significant shifts towards the norms for formal academic writing. The lexical density of the writing students produced also did not increase significantly.

In spite of the lack of shift towards greater correctness according to native speaker norms, significant increases are reflected in the overall number of prepositions and the number of modal finites used per 1000 words in the writing students produced after several years of academic study. These increases I tentatively interpret as shifts towards the norms for formal academic writing in that an increase in the number of prepositions is indicative of an increased number of circumstantial elements (e.g. '*For more than a billion years*'; '*as a moderator, in the reactor*'). This suggests a greater level of specificity and detail in the students more mature writing. Increased use of modal finites is indicative of an increased awareness of the necessity for tentativeness in academic/scientific writing.

Although there is no shift towards native speaker norms in any of the features in the study, what is striking in the results (summarised in Table 15) is that correct use of all features greatly outweighs incorrect use. In all features studied, both in first year and several years later, use of the standard form is, on average, far more frequent than use of the non-standard form. In general individual student scores for individual features are 75% or more correct, although in one rare case the individual score for correct use of modal finites was as low as 47%. Students range from the most proficient in the group, a near-native speaker of English, whose scores for all features are consistently over 95% correct, to students with multiple scores below 80% correct. The feature most often used 100% correctly was conjunctions, with 20 out of the 52 texts analysed in the study containing no instances of non-standard use. The feature least likely to be used 100% correctly was articles, with only one text out of 52 containing no instances of non-standard article use.

While certain phonological features, certain lexical items and certain grammatical features of BSAfE appear to be stable (Gough 1996, Schmied 1991), the persistent co-existence of correct with incorrect grammatical use, as measured against native-speaker norms, points to a fairly high level of optionality in the grammar of BSAfE. This study of university students (probably, following Wissing (2002: 143), speakers of the mesolect) indicates variation between non-standard and standard forms both within the population and within all individuals in the study. An example of this variation is:

> "Other technologies **involves** <sup>(X)</sup> the use of special cameras that identify <sup>( ✔ )</sup> individuals by the patterns of striation in their irises."

I did not expect this variation, as I had viewed students as speaking an interlanguage with rules that were alternative to the native-speaker system, but which were **internally consistent**. It is possible that the rules followed by the writer of the above sentence are internally consistent, but in a way not obvious to me. Another possibility is that this is an example of free variability (Ellis 1985: 75), "haphazard use of two or more alternate forms which exist within the learner's interlanguage." Free variability in mature native grammars is apparently rare (Papp 2000: 194), although Kroch (1989) and others have argued that it is necessary for language change. I would

tentatively suggest that the high level of optionality in the participants in this study is indicative of language in change, and that it is therefore too soon to talk of restandardisation. Papp (2000: 173) indicates that mature non-native optionality persists only if "the target language input is non-robust or parametrically ambiguous". This may be the case with speakers of BSAfE, who are exposed to both standard and non-standard forms. As van der Walt and van Rooy (2002: 125) point out, school children are exposed to inconsistent input from their teachers. Although standard forms are almost always accepted by teachers, non-standard forms are judged correct by teachers some of the time.

For some of the features in this study, the measure I employ is too blunt to judge what the options are, or whether in fact a particular writer does employ alternate constructions. For example in my examination of preposition use I do not distinguish different prepositions, but rather record all standard use of prepositions and all non-standard use of prepositions. Thus for example the writer may consistently use "*He shouted **on** me*" or may alternate this construction with "*He shouted **at** me*". It is likely that a study of a large corpus would pinpoint alternate/optional constructions in BSAfE.

The preponderance of standard over non-standard forms means that participants in this study appear closer to native-speaker norms than do the experienced teachers registered for degree studies in Makalela's (1999) study and the teachers tested by Gough (1996). For example in Makalela's study (1999: 63) only 10% of participants appropriately corrected non-standard article use, and only 30% of his participants made appropriate corrections to a sentence containing non-standard tense sequencing (Makalela 1999: 62). However, what is measured by studies involving sentence correction is very different from what is measured in the present study in which participants produced their own texts rather than correcting sentences. Table 16, which is included for comparison with these two studies, shows that my students were significantly worse at recognising and correcting non-standard forms than were the teachers in the studies by Gough (1996) and Makalela (1999). This is possibly because, as students rather than teachers, they are not used to distinguishing standard from non-standard forms. It is interesting to note that in producing their own texts, in more than 80% of instances, participants in my study adhered to native-speaker norms for subject/verb concord (Table 3). By contrast, only 42% were able to recognise and correct lack of concord in the sentence correction exercise. This finding coincides with findings in the study by van der Walt and van Rooy (2002: 124) where teachers accepted both standard and non-standard forms. For example they accepted the omission of articles 82% of the time. Given this high level of variability in grammatical usage of speakers of BSAfE, restandardisation in the direction of BSAfE would not, as Makalela (1999: 69) claims, prevent confusion. In my opinion speakers would be as little likely to adhere to a new standard as to the present standard.

If optional constructions are a feature of the grammar of the students in the study, as I have claimed (and as Makalela (1999) and van der Walt and van Rooy (2002) demonstrate in their studies), this indicates lack of stability in BSAfE as a variety. My study provides no information about the use of optional constructions in BSAfE at other points on the basilect-mesolect-acrolect continuum. It does however suggest that the influence of the standard form, as a result of students' being at UND, has no effect on students' construal of constructions as optional. A more wide-ranging study is needed, both of grammatical usage of speakers of BSAfE at more points on the basilect-mesolect-acrolect continuum and of grammatical usage by the participants in the study in a wider range of contexts. This would enable conclusions to be drawn about how stable a variety BSAfE is, how common optional elements are, and what the contexts are in which the different options are used. This would provide useful guidance in the discussion of restandardisation of English in South Africa. In my opinion it is too early in the history of BSAfE to restandardise

English in this direction, unless we construe restandardisation as do Chick and Wade (1997), as raising the status of BSAfE in important and formal contexts. Until BSAfE stabilises into a variety in which most grammatical forms are used more constantly than is at present the case, it is difficult to know what forms would be chosen as a new standard. Webb's (1996: 185) point about the inefficacy of imposing standards on speakers of a language is an important one. It is unlikely that speakers of the language will, at the moment, adhere to any standard whether it is Standard English or a new standard BSAfE.

The failure of the participants in the study to shift in the direction of norms for academic writing (use of non-finite and run-on sentences) is worrying. Although production of these features is fairly low (an average of 2.4 run-on sentences and 1.3 non-finite sentences per 1000 words in May 2002), their use amongst participants in the study is wide enough to fuel concern about poor written language proficiency in graduates. These features are not, of course, consequent on the users being speakers of BSAfE, but are more likely to result from the fact that they have been selected as having had a disadvantaged education. These features of writing should ideally be learnt in primary school, and reinforced in high school. Improved levels of literacy amongst teachers at these levels are probably needed in order to see improvements in university students.

How possible it is to generalise this study to students in other Faculties besides Science is not clear. My experience as a teacher of academic literacy located specifically in a Science Faculty suggests to me that grammatical accuracy is highly prized by academic staff in Science; to improve the grammatical accuracy of my students is one of the most frequent requests I receive from colleagues. Whether this means that staff give feedback to students on their language use at undergraduate level is unclear. It may be that less feedback of this sort is given to students by academic staff in Science than in disciplines such as Humanities, where more assessment is based on writing. On the other hand it is possible that Humanities is the special case, as there is no reason to think that academic staff in Science give less attention to language than do staff in those disciplines taken by the majority of students such as Engineering, Medicine and Commerce.

## Implications

On average, the grammar of the students in the study barely changes as a result of attendance at an English medium university. This may reflect students' attitudes to English. Specifically, these findings may indicate that the English targeted by the students is actually BSAfE, which, it appears, tolerates a high level of variability. The last decade has seen political power pass into the hands of speakers of BSAfE. BSAfE and other non-standard varieties of English are widely used on radio and television. A growing number of business and professional people are speakers of BSAfE. It may be clear to students that BSAfE does not stand in the way of succeeding in these fields. Failure to adhere to Standard English may attract some penalties from academic staff (although no evidence of this has been presented by this study). However the continued presence at university of the participants in the study means that these penalties have not been enough to stand in the way of their proceeding in their degree programmes or that errors are not so major as to prevent them from proceeding.

A second possible reason why the students' grammar does not shift in the direction of Standard English may be that despite being in a context in which there is opportunity to engage with native speakers, the reality is that participants speak English to other speakers of BSAfE far more than they do to native speakers. Input can therefore be said to continue to be ambiguous (Papp 2000), as it was for the students at school. This may serve to confirm non-standard forms in the grammar of participants in the study.

It appears that if we define proficiency in terms of native-speaker ability in the language, the claim that some of our students are graduating without proficiency in English is correct. I, however, support Webb's (1996: 186) call for "a more tolerant approach to non-standard English" even in the writing produced by our university students. In the long term, if the teaching of English in schools shifts in the direction of native-speaker norms (which, given that most teachers are speakers of BSAfE, is not likely to happen soon) or if L2 school children are increasingly exposed to children who speak English as a first language, (which is likely to happen only on a small scale) then we may find a shift in the language of our L2 university students.

As the education system in South Africa improves, it is likely that the proportion of South Africans able to speak, read and write English will increase. Nevertheless, at least in the short term, lack of proficiency in English is likely to continue to stand in the way of access to education and employment, and this will of course continue to stand in the way of equality. However, South Africa is a multilingual country and even in the long term, with what is likely to be a greatly improved education system, it is not realistic to expect widespread native speaker grammatical proficiency amongst those for whom English is not a first language. This makes tolerance of non-standard English a necessary condition for improved access to education and employment. The basilect-mesolect-acrolect continuum is likely to continue to be a feature of BSAfE, and I have argued that restandardisation in the direction of BSAfE would be unlikely to influence this, even if, given the present level of variation in use, we were able to decide which form to use for the new standard.

## Note

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