L1 influence in the L2 acquisition of isiXhosa verb placement by English and Afrikaans adolescents

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Abstract
This paper reports on an investigation into the possibility of first language (L1) transfer in the initial stages of the second language (L2) acquisition of isiXhosa by adolescent L1 speakers of Afrikaans and English, respectively. Four hypotheses about the initial state of L2 acquisition are (i) the Full Transfer hypothesis (Schwartz and Sprouse 1994, 1996; White 1989, 2003), (ii) the Minimal Trees hypothesis (Vainikka and Young-Scholten 1994, 1996), (iii) the Initial Hypothesis of Syntax (Platzack 1996) and (iv) the No Transfer hypothesis (Clahsen and Muysken 1986). A study was conducted to test the different predictions made by these hypotheses regarding verb placement by beginner learners of isiXhosa; data were collected by means of both a sentence completion and a grammaticality judgement task. It is argued that the results of the study are only compatible with the Full Transfer hypothesis. The implications of the results of this investigation for L2 teaching in a multilingual environment are also briefly discussed.

Keywords: second language acquisition, transfer, isiXhosa, verb placement

1. Introduction

In second language (L2) acquisition research conducted within the framework of Universal Grammar (UG), a number of hypotheses have been proposed regarding the nature of the initial state of L2 acquisition. This paper provides a brief overview of four of the best known initial state hypotheses (section 2) and reports on a study on the L2 acquisition of verb placement in isiXhosa by adolescent first language (L1) speakers of English and Afrikaans, respectively (section 3). It will be argued that the results of the study are only compatible with one of the initial state hypotheses, namely the Full Transfer hypothesis (section 4).

2. Hypotheses regarding the initial state of L2 acquisition

Four hypotheses about the initial state of L2 acquisition are briefly described below, namely the Full Transfer hypothesis, the Minimal Trees hypothesis, the Initial Hypothesis of Syntax and the No Transfer hypothesis. Before describing these hypotheses, however, it should be noted that this paper is set in the framework of Principles and Parameters theory, which was first proposed in Chomsky 1981a and developed further in subsequent works (cf., for example, Chomsky 1981b, 1982, 1986, 1995, 2000, 2005; Hornstein, Nunes and Grohman...
According to this theory, UG consists of (i) a set of invariant grammatical principles which are adhered to by the grammars of all natural languages, and (ii) a set of parameters, each of which can be set to one of a limited number of values and which serve to constrain the grammatical variation found among languages. In current proposals, parameters relate to the features associated with functional categories, and parameter setting involves acquiring the language-specific values associated with such features. Cross-linguistic variation is accounted for in that languages differ as to which functional categories are found in their inventory, which features make up the functional categories and what the values of these features are.\(^1\)

The Full Transfer hypothesis (Schwartz and Sprouse 1994, 1996; White 1989, 2003) claims that L2 learners transfer the functional categories and the associated features and feature values of their L1 so that the end state of the learner's L1 grammar as a whole (including L1 parameter settings) constitutes the initial state of the learner's interlanguage (IL) grammar for the target L2. The Minimal Trees hypothesis (Vainikka and Young-Scholten 1994, 1996) claims that the learner only transfers substantive lexical categories (including a specification of whether they are projected in a head-initial or head-final manner) from the L1 and that the learner starts out with only these categories, specifically, that initially the IL grammar can generate no "clausal structure" larger than a verb phrase (VP). On this view, functional categories, their features and feature values are not transferred from the L1, are initially unavailable and are gradually acquired with the aid of UG and on the basis of the L2 input.

The Full Transfer hypothesis and the Minimal Trees hypothesis agree that (part of) the L1 grammar, in some form, makes up the initial state of L2 acquisition. However, there are also some hypotheses that claim that the L1 grammar is not implicated at all in the initial state of L2 acquisition. One such hypothesis is the Initial Hypothesis of Syntax (proposed by Platzack 1996). This hypothesis claims that the initial state of L2 acquisition is, like the initial state of L1 acquisition, the system of principles and parameters provided by UG (with the parameters either unvalued or set to some or other default value). Whereas all three of the hypotheses mentioned above (Full Transfer, Minimal Trees and the Initial Hypothesis of Syntax) agree that L2 learners, like L1 learners, employ UG to acquire an additional language, some researchers have proposed that UG is no longer operative in (adolescent/adult) L2 acquisition and that L2 learners make use of general problem-solving skills instead. Clahsen and Muysken (1986), who belong to the latter group, make specific claims about the initial state of L2 acquisition, most notably that (i) transfer is not involved in the L2 acquisition of word order (for this reason, their hypothesis is sometimes referred to as the No Transfer hypothesis), (ii) all L2 learners start out with the order subject-verb-object (SVO) (even when both the L1 and the L2 are SOV languages) and (iii) L2 learners subsequently make use of complex non-UG-constrained rules to accommodate L2 input that contradicts their initial hypotheses regarding the L2 grammar.\(^2\)

The four hypotheses described above make different predictions regarding the linguistic behaviour of beginner L2 learners of isiXhosa with either Afrikaans or English as their L1. Section 3 reports on a study which set out to test these predictions with respect to the acquisition of verb placement.
3. The L2 acquisition of verb placement in isiXhosa

3.1 Verb placement in English, Afrikaans and isiXhosa

Within generative syntax, it is claimed that all sentences have the grammatical status of a complementizer phrase (CP). The setting of the so-called verb-second (V2) parameter (Travis 1991) is linked to the presence or absence of a particular feature associated with C, the head of CP. This setting has certain observable consequences for the word order of non-subject-initial main clauses, i.e. main clauses with a non-subject – such as a prepositional phrase (PP), a topicalized object (TO) or an adverbial phrase (AP) – in sentence-initial position. For the sake of convenience, non-subject-initial main clauses are henceforth referred to as "NSIMCs". The relevant feature of C is present in [+V2] languages, and forces the verb to move out of the VP and into C (via T, the head of the Tense Phrase). By contrast, this feature is absent in [-V2] languages, so that the verb is prohibited from moving into C (Conradie 2006:72-73). The consequences of the setting of the V2-parameter are illustrated by the English and Afrikaans NSIMCs in (1) and (2) below. English is a [-V2] language. This means that the C lacks the relevant feature and the verb does not move into C; in NSIMCs, the verb therefore appears in third position, following both the non-subject-initial element (PP, TO or AP) which appears in the specifier position of CP and the subject which appears in the specifier position of the TP. In (1a), the verb read follows both the PP at school and the subject the learners; in (1c), the verb eats follows both the TO this bread and the subject John; in (1e), the verb reads follows both the AP in the afternoon and the subject Grandpa. The sentences in (1b), (1d) and (1f) show that the verb is not allowed to appear in second position.

(1) English

PP: a. [At school] [the learners] read books. √V3
   b. *[At school] read [the learners] books. *V2

TO: c. [This bread] [John] eats. √V3
   d. *[This bread] eats [John]. *V2

AP: e. [In the afternoon] [Grandpa] reads the newspaper. √V3
   f. *[In the afternoon] reads [Grandpa] the newspaper. *V2

Afrikaans, by contrast, is a [+V2] language. Consequently, the verb moves into C, and in NSIMCs it appears in second position, preceded only by the non-subject-initial element (PP, TO or AP) which appears in the specifier position of CP. In (2a), the verb lees is preceded only by the PP by die skool; in (2c), the verb eet is preceded only by the TO hierdie brood; in (2e), the verb lees is preceded only by the AP in die middag. The sentences in (2b), (2d) and (2f) show that the verb is not allowed to appear in third position.

(2) Afrikaans

   b. *[By die skool] [die leerders] lees boeke. *V3
   'At school, the learners read books.'

TO: c. [Hierdie brood] eet [John]. √V2
   d. *[Hierdie brood] [John] eet. *V3
   'This bread John eats.'
The data in (1) and (2) show that in [-V2] languages such as English, only V3-NSIMCs are allowed (V2-NSIMCs are ungrammatical), whereas in [+V2] languages such as Afrikaans, only V2-NSIMCs are allowed (V3-NSIMCs are ungrammatical).

IsiXhosa is underlyingly an SVO language in which the (non-topicalized) object follows the verb (Du Plessis and Visser 1998:48). The language has agreement markers in the form of subject and object clitics which are attached to the verb as prefixes (Du Plessis and Visser 1998:51). The choice of subject and object clitic is determined by the class of the relevant nouns. All nouns consist of a prefix (which indicates whether the noun is singular or plural) and a root (which provides the noun's meaning) (cf. Kirsch, Skorge and Magona 2002:111). Nouns are grouped into classes on the basis of their prefixes. For instance, all nouns with the prefix um- attached to a root which refers to a person (e.g. umfundl 'learner') belong to class 1. The plural form of the prefix um- is aba-/abe- and all nouns with this prefix (e.g. abafundi 'learners'; abelusi 'shepherds') belong to class 2. A noun's class determines which subject or object clitic will be attached to the verb to refer to the noun. The subject clitic of a class 1 noun is u- and the subject clitic of a class 2 noun is ba-.

Consider the isiXhosa sentence in (3) below. In this sentence, the verb uyasitya is made up of the following morphemes: The subject clitic u- which refers to the subject uJohn 'John', the aspect marker -ya-, the object clitic si- which refers to the object esi sonka 'this bread', and the verbal root -tya 'eat'.

(3) Esi sonka uyasitya uJohn.
This bread he.it.eat John
'This bread John eats.'

Because the subject and object clitics which are attached to the verb indicate which noun is the subject and which noun is the object, these nouns – the lexical subject and the lexical object – can occur in different surface positions in a sentence (Du Plessis and Visser 1998:56). One consequence of this is the fact that isiXhosa allows both V2- and V3-NSIMCs, as illustrated by the six example sentences in (4): In (4a, c, e), the verb appears in second position (as in Afrikaans), whereas in (4b, d, f) the verb appears in third position (as in English).

(4) isiXhosa

at school they.read (the) books (the) learners
'At school, the learners read books.'

b. [Esikolweni] [abafundi] bafunda iincwadi.
'At school, the learners read books.'

TO: c. [Esi sonka] uyasitya [uJohn].
this bread he.it.eats John
'This bread John eats.'

d. [Esi sonka] [uJohn] uyasitya.
'This bread John eats.'
AP: e. [Emva kwemini] ufunda iphephandaba [utatomkhulu]. √V2
   'In the afternoon he read (the) newspaper (the) grandpa'
   V2
f. [Emva kwemini] [utatomkhulu] ufunda iphephandaba. √V3

According to Du Plessis and Visser (1998:56), whether an isiXhosa speaker chooses to use a
V2-NSIMC or its V3-counterpart in a specific context depends on stylistic factors. They claim
that because this optionality is governed by stylistic factors, it does not form part of the syntax
of isiXhosa. And, indeed, it is problematic within the Principles and Parameters framework to
find a language which seems to have the V2 parameter set to both the [+V2] and the [-V2]
setting simultaneously. However, a detailed discussion of this issue falls outside the scope of
this paper – the interested reader is referred to Du Plessis and Visser (1998). What is
important for the purposes of this paper is that (i) Afrikaans is a [+V2] language that allows
only V2-NSIMCs, (ii) English is a [-V2] language that allows only V3-NSIMCs, and (iii)
isiXhosa allows both V2- and V3-NSIMCs (a fact which remains despite the unclear status of
the V2 parameter in this language).

3.2 Predictions of different initial state hypotheses
Given the word order properties of English, Afrikaans and isiXhosa described above, the Full
Transfer hypothesis predicts that English-speaking learners of isiXhosa will start out
assuming that the verb has to appear in third position in isiXhosa NSIMCs; specifically, that
the verb cannot appear in second position because the learners would have transferred from
their L1 a C that does not contain the feature which forces verb movement into C. Afrikaans-
speaking learners, by contrast, will start out assuming that the verb has to appear in second
position in isiXhosa NSIMCs; the verb cannot appear in third position because the learners
would have transferred from their L1 a C that contains the feature which forces verb
movement into C. Consequently, in production tasks, English-speaking learners should
produce only V3-NSIMCs while Afrikaans-speaking learners should produce only V2-
NSIMCs; and in grammaticality judgement tasks, English-speaking learners should accept
only V3-NSIMCs as grammatical, while Afrikaans-speaking learners should accept only V2-
NSIMCs as grammatical.

The Minimal Trees hypothesis claims that the learner only transfers substantive lexical
categories from the L1 and that the functional category C, its features and feature values are
not transferred from the L1 and are instead gradually acquired with the aid of UG and on the
basis of the L2 input. This hypothesis predicts that both English-speaking and Afrikaans-
speaking learners of isiXhosa will start out with bare VPs and will gradually acquire the
isiXhosa C with its relevant features. If this occurs with the aid of UG, with no interference
from the L1 and on the basis of L2 input, English-speaking and Afrikaans-speaking learners
receiving the same L2 input should follow the same developmental path and thus behave
similarly in both production and grammaticality judgement tasks.

The Initial Hypothesis of Syntax claims that L2 learners start out with unvalued parameters
(or parameters set to some or other default value), including a C without the feature which
forces verb movement into C. Consequently, both English-speaking and Afrikaans-speaking
learners should start out assuming that isiXhosa only allows V3-NSIMCs.

Finally, according to the No Transfer hypothesis, there is no L1 transfer; all L2 learners start
out assuming an SVO order and then make use of their general problem-solving skills to
accommodate L2 input that contradicts their initial hypotheses regarding the L2 grammar. Again, because the L1 is not implicated in the acquisition of C and its features and feature values, English- and Afrikaans-speaking learners should behave similarly in both production and grammaticality judgement tasks testing verb placement in NSIMCs.

Importantly then, the Full Transfer hypothesis is the only initial state hypothesis of the four considered here which predicts differences in the linguistic behaviour of English-speaking versus Afrikaans-speaking beginner learners of isiXhosa, with regard to verb placement in NSIMCs.

3.3 Tasks
To test the predictions made by the four hypotheses, two tasks were designed – a sentence building task and a grammaticality judgement task. In the sentence building task, the learner was provided with sets of isiXhosa words and was asked to build sentences with them. An example of a page from this task is given in (5).

(5) On paper:
1. Zonke iimini……………………………………….
2. Zonke iimini……………………………………….
3. Zonke iimini……………………………………….
4. Zonke iimini……………………………………….

In envelope:
ubukela    i-Egoli
umama

The words printed at the beginning of each dotted line were those which the learner had to place in sentence-initial position. The learner then had to use the words in the envelope on the same page to complete the sentence and was asked to "build" (i.e. write down) as many sentences as possible that (s)he finds acceptable in isiXhosa. In this case, the learner had to start with the AP zonke iimini 'every day', and the words in the envelope were ubukela 'she looks at', i-Egoli 'Egoli' and umama 'mother'. The Full Transfer hypothesis predicted that English-speaking learners would build the sentence in (6a) in which the verb appears in third position, while Afrikaans-speaking learners would build the sentence in (6b) in which the verb appears in second position. Both of these sentences are grammatical in isiXhosa.

(6) a. [Zonke iimini] [umama] ubukela i-Egoli. √V3
   every day Mother she looks at Egoli
   'Every day, Mother watches Egoli.'

   b. [Zonke iimini] ubukela i-Egoli [umama]. √V2

This task consisted of six such pages – two with a TO, two with an AP and two with a PP as sentence-initial element.

The grammaticality judgement task consisted of 12 sets of sentences – three sets with a TO, three with an AP, and three with a PP as sentence-initial element, as well as three sets of distracter items. The learner had to judge each sentence as acceptable or unacceptable by marking either the "YES" or the "NO" next to it. An example of each type of set is given in
(7) TO
a. Esi sonka uJohn uyasitya. $\sqrt{V3}$
   this bread John he.it.eat
   'This bread John eats.'
b. Esi sonka uyasitya uJohn. $\sqrt{V2}$

(8) AP
a. Namhlanje iiintombi zidlala ihoki. $\sqrt{V3}$
   today (the) girls play hockey
   'Today, the girls are playing hockey.'
b. Namhlanje zidlala iiintombi ihoki. $\sqrt{V2-VSO}$
c. Namhlanje zidlala ihoki iiintombi. $\sqrt{V2-VOS}$

(9) PP
a. Esikolweni abafundi bafunda iincwadi. $\sqrt{V3}$
   at the school (the) learners read (the) books
   'At school, the learners read the books.'
b. Esikolweni bafunda abafundi iincwadi. $\sqrt{V2-VSO}$
c. Esikolweni bafunda iincwadi abafundi. $\sqrt{V2-VOS}$

(10) Distracter
a. Inkwenkwe ithenga iilekese egaraji $\sqrt{SVO}$
   (the) boy he.buy (the) sweets at the garage
   'The boy buys sweets at the garage.'
b. Inkwenkwe ithenga iilekese. $\sqrt{SVO}$

Each AP and PP set (cf. (8) and (9)) contained three sentences with the following orders: (i) V3, (ii) V2 followed by the S and then the O, (iii) V2 followed by the O and then the S. This was to allow us to determine whether learners accepted only the SO order, only the OS order or both, in cases where they accepted the V2 order. In TO sentences (see (7)), the position of the object in relation to the subject does not come into play since the object occurs in first position. Therefore, each TO set consisted of only two sentences – the V3 order and the V2 order.

3.4 Participants
Seventeen Grade 10 learners participated in this study. At the time of testing, they were all attending the same isiXhosa L2 class (referred to as an "isiXhosa as second additional language" class) at a former Model C secondary school in the Western Cape. The participants were from three different schools, namely an Afrikaans-medium girls' school, an English-medium girls' school and a double-medium Afrikaans-English boys' school. The classroom was situated in the English-medium school, where learners from all three schools got together four times a week for a 50-minute period. Although instruction was supposed to develop learners' knowledge of the grammar of isiXhosa as well as their communicative skills, the focus was often on grammatical aspects of the language, simply because of the assessment criteria imposed by the Department of Education and the limited amount of teaching time per week. The teacher noted that she made use of both English and Afrikaans
during the class. The learners' average age was 16 years and their length of exposure to isiXhosa ranged from 3 to 7 years. Given the length of exposure, one might ask why these learners were categorized as beginner learners and asked to participate in a study on the initial state of L2 acquisition. Two points are worth mentioning in this respect. Firstly, because isiXhosa instruction at primary and junior secondary level largely focuses on the acquisition of vocabulary and the class system of isiXhosa nouns (rather than word order, for example), (most) younger learners would not be able to complete sentence building tasks involving NSIMCs. Secondly, length of exposure measured in years should be considered in perspective: At primary school, learners' instruction in isiXhosa involves one 40-45-minute period per week. In an average 40-week school year, this amounts to a mere 30 hours' isiXhosa instruction per year (including test periods and exams), and most learners are not exposed to isiXhosa outside of the classroom at all.

On the basis of their responses on a background questionnaire, the learners were divided into three groups: (i) five native speakers of English (the English group), (ii) eight native speakers of Afrikaans (the Afrikaans group), and (iii) four native speakers of isiXhosa (the isiXhosa adolescents). The isiXhosa adolescents were included in the study because they were taking the same L2 isiXhosa class as the other learners; however, their performance is presented separately since, being L1 speakers of isiXhosa, they cannot be regarded as "beginner learners". The fourth group that participated in the study comprised four adult L1 speakers of isiXhosa (the control group).

3.5 Results
We were interested in two questions with each group, namely (i) whether they preferred V2-NSIMCs or V3-NSIMCs and (ii) whether they preferred the VOS order or the VSO order in V2 sentences. The results of the two tasks (the sentence building task "SBT" and the grammaticality judgement task "GJT") corresponded closely with each other for each of the groups and are therefore also presented together for each of the groups in the tables below. Table 1 presents the results for the isiXhosa control group (i.e. the adult native speakers of isiXhosa).

Table 1. Results (V2 vs. V3 and VOS vs. VSO): IsiXhosa adults (n=4)

<table>
<thead>
<tr>
<th>Task</th>
<th>V3</th>
<th>V2</th>
<th>AP/PP</th>
<th>VOS</th>
<th>VSO</th>
<th>TO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBT</td>
<td>29/60</td>
<td>16/20</td>
<td>4/20</td>
<td>11</td>
<td>31/60</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>48.3%</td>
<td>80%</td>
<td>20%</td>
<td></td>
<td>51.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GJT</td>
<td>35/36</td>
<td>23/25</td>
<td>2/25</td>
<td>12</td>
<td>37/60</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>97.2%</td>
<td>92%</td>
<td>8%</td>
<td></td>
<td>61.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the sentence building task, the isiXhosa adults built 60 NSIMCs in total. Of these, 48.3% were V3s and 51.7% were V2s, indicating the V2/V3 optionality that we expected (given that isiXhosa allows both V2- and V3-NSIMCs). Of the 20 V2 sentences that they built starting with either an AP or a PP, 80% had the VOS order and only 20% had the VSO order, showing a very clear preference for the VOS order. (Recall that V2-NSIMCs starting with a TO cannot be used to ascertain whether there is a preference for VSO or VOS, since the object appears in sentence-initial position and, for this reason, the position of the object in relation to the subject does not come into question.) In the grammaticality judgement task, the isiXhosa
adults accepted both V2 and V3 sentences as grammatical – they accepted 97.2% of the V3-NSIMCs and 61.7% of the V2-NSIMCs. At first sight, they seemed to prefer V3s, but the lower V2 acceptance rate was due to the fact that they rejected the majority of VSO-V2s. As in the sentence building task, they had a very clear preference for VOS-V2s over VSO-V2s – 92% of the V2-sentences that they accepted as grammatical had the VOS order and only 8% had the VSO order.

The results for the isiXhosa adolescents are presented in Table 2.

Table 2. Results (V2 vs. V3 and VOS vs. VSO): IsiXhosa adolescents (n=4)

<table>
<thead>
<tr>
<th>Task</th>
<th>V3</th>
<th>V2</th>
<th>AP/PP</th>
<th>TO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>V3</td>
<td></td>
<td>V2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VOS</td>
<td>VSO</td>
<td></td>
</tr>
<tr>
<td>SBT</td>
<td>38/61</td>
<td>11/15</td>
<td>4/15</td>
<td>8</td>
<td>23/61</td>
</tr>
<tr>
<td></td>
<td>62.3%</td>
<td>73.3%</td>
<td>26.7%</td>
<td></td>
<td>37.7%</td>
</tr>
<tr>
<td>GJT</td>
<td>36/36</td>
<td>21/27</td>
<td>6/27</td>
<td>9</td>
<td>36/60</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>77.8%</td>
<td>22.2%</td>
<td></td>
<td>60%</td>
</tr>
</tbody>
</table>

In the sentence building task, the isiXhosa adolescents built 61 NSIMCs in total, of which 62.3% were V3s and 37.7% were V2s. In contrast to the isiXhosa adults, the adolescents thus showed a V3 preference rather than a V2/V3 optionality. (This might have been due to the influence of their L2 English.) They did, however, show the same preference for the VOS order when building V2-NSIMCs as shown by the isiXhosa adults – 73.3% of the V2-NSIMCs involving an AP or a PP had the VOS order. Although they showed a preference for V3-NSIMCs in this task, their performance on the grammaticality judgement task showed that they regarded both V2s and V3s as grammatical – they accepted 100% of the V3-NSIMCs as grammatical and 60% of the V2-NSIMCs. Again, the lower V2 percentage was primarily due to the fact that they preferred the VOS order over the VSO order – 77.8% of the relevant V2 sentences that they accepted had the VOS order.

Next we turn to the two learner groups. The results for the English-speaking learners are presented in Table 3.

Table 3. Results (V2 vs. V3 and VOS vs. VSO): L1 English group (n=5)

<table>
<thead>
<tr>
<th>Task</th>
<th>V3</th>
<th>V2</th>
<th>AP/PP</th>
<th>TO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>V3</td>
<td></td>
<td>V2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VOS</td>
<td>VSO</td>
<td></td>
</tr>
<tr>
<td>SBT</td>
<td>42/61</td>
<td>4/7</td>
<td>3/7</td>
<td>12</td>
<td>19/61</td>
</tr>
<tr>
<td></td>
<td>68.9%</td>
<td>57.1%</td>
<td>42.9%</td>
<td></td>
<td>31.1%</td>
</tr>
<tr>
<td>GJT</td>
<td>44/45</td>
<td>12/27</td>
<td>15/27</td>
<td>5</td>
<td>32/75</td>
</tr>
<tr>
<td></td>
<td>97.8%</td>
<td>44.4%</td>
<td>55.6%</td>
<td></td>
<td>42.7%</td>
</tr>
</tbody>
</table>

In the sentence building task, the English group built 61 NSIMCs in total, of which 68.9% were V3s and only 31.1% were V2s, showing a strong preference for V3-NSIMCs. Of the 19 V2-NSIMCs that they built, only seven involved an AP or a PP, so only these seven sentences could offer insight into their preference for the VOS or the VSO order. Interestingly though, all seven of these sentences were built by one particular learner and she did not show a preference for either order over the other (she built four VOS-V2s and three VSO-V2s). In the
grammaticality judgement task, the English group showed an even stronger preference for V3-NSIMCs, accepting 97.8% of the V3s and only 43% of the V2s. Furthermore, they again did not show a preference for either the VOS or the VSO order (cf. 44.4% vs. 55.6%).

Finally, the results for the Afrikaans group are presented in Table 4.

Table 4. Results (V2 vs. V3 and VOS vs. VSO): L1 Afrikaans group (n=8)

<table>
<thead>
<tr>
<th>Task</th>
<th>V3</th>
<th>V2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AP/PP</td>
<td>TO</td>
</tr>
<tr>
<td>SBT</td>
<td>39/72</td>
<td>2/19</td>
</tr>
<tr>
<td></td>
<td>54.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td>GJT</td>
<td>49/63</td>
<td>3/36</td>
</tr>
<tr>
<td></td>
<td>77.8%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

In the sentence building task, the Afrikaans group built 72 NSIMCs in total, of which 54.2% had the V3 order and 45.8% had the V2 order, exhibiting the same V2/V3 optionality as the L1 isiXhosa groups. In contrast to the two isiXhosa groups, however, the Afrikaans group showed a very strong preference for the VSO order over the VOS order in V2-NSIMCs – 89.5% vs. 10.5%. At first sight, this group showed a preference for V3-NSIMCs in the grammaticality judgement task, accepting 77.8% of the V3 sentences and only 43.8% of the V2 sentences. However, as was the case for the isiXhosa groups as well, this lower acceptance rate for V2 sentences was primarily due to the fact that they did not like all V2 sentences across-the-board; specifically, they showed the same strong preference for the VSO order that they had shown in the sentence building task – 91.7% of the V2s that they accepted had the VSO order.

For ease of comparison and as a summary of the results, all four groups' performance on the sentence building task is presented in Table 5 and all four groups' performance on the grammaticality judgement task is presented in Table 6.

Table 5. Summary of results (V2 vs. V3 and VOS vs. VSO): Sentence building task

<table>
<thead>
<tr>
<th>L1</th>
<th>V3</th>
<th>V2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V3</td>
<td>V2</td>
</tr>
<tr>
<td></td>
<td>AP/PP</td>
<td>TO</td>
</tr>
<tr>
<td></td>
<td>VOS</td>
<td>VSO</td>
</tr>
<tr>
<td>IsiXhosa Adults n=4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>29/60</td>
<td>16/20</td>
</tr>
<tr>
<td></td>
<td>48.3%</td>
<td>80%</td>
</tr>
<tr>
<td>IsiXhosa Adolescents n=4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>38/61</td>
<td>11/15</td>
</tr>
<tr>
<td></td>
<td>62.3%</td>
<td>73.3%</td>
</tr>
<tr>
<td>English n=5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>42/61</td>
<td>4/7</td>
</tr>
<tr>
<td></td>
<td>68.9%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Afrikaans n=8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>39/72</td>
<td>2/19</td>
</tr>
<tr>
<td></td>
<td>54.2%</td>
<td>10.5%</td>
</tr>
</tbody>
</table>
Table 6. Summary of results (V2 vs. V3 and VOS vs. VSO): Grammaticality judgement task

<table>
<thead>
<tr>
<th></th>
<th>V2</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>AP/PP</strong></td>
<td></td>
<td><strong>VOS</strong></td>
<td><strong>VSO</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>V3</td>
<td>V2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IsiXhosa Adults n=4</td>
<td></td>
<td>35/36</td>
<td>23/25</td>
<td>2/25</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>97.2%</td>
<td>92%</td>
<td>8%</td>
<td></td>
<td>61.7%</td>
</tr>
<tr>
<td>IsiXhosa Adolescents n=4</td>
<td></td>
<td>36/36</td>
<td>21/27</td>
<td>6/27</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>77.8%</td>
<td>22.2%</td>
<td></td>
<td>60%</td>
</tr>
<tr>
<td>English n=5</td>
<td></td>
<td>44/45</td>
<td>12/27</td>
<td>15/27</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>97.8%</td>
<td>44.4%</td>
<td>55.6%</td>
<td></td>
<td>42.7%</td>
</tr>
<tr>
<td>Afrikaans n=8</td>
<td></td>
<td>49/63</td>
<td>3/36</td>
<td>33/36</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>77.8%</td>
<td>8.3%</td>
<td>91.7%</td>
<td></td>
<td>43.8%</td>
</tr>
</tbody>
</table>

4. Discussion

To summarise, (i) the L1 isiXhosa groups regarded both V2- and V3-NSIMCs as grammatical and they had a strong preference for the VOS order in V2-NSIMCs; (ii) the L1 English group showed a strong preference for V3-NSIMCs over V2-NSIMCs and did not show a strong preference for either the VOS or the VSO order; and (iii) the L1 Afrikaans group exhibited the same V2/V3 optionality as the L1 isiXhosa groups but preferred the VSO order in V2-NSIMCs.

Returning to the four hypotheses on the nature of the initial state in L2 acquisition, the results clearly support the Full Transfer hypothesis, since only this hypothesis predicts that the two different learner groups – the L1 English group and the L1 Afrikaans group – should perform differently from each other, which they clearly do.

The English group's V3 preference can easily be accounted for by referring to transfer from their L1, which is a [-V2] language. At first sight, the Afrikaans group's V2/V3 optionality seems target-like, but their preference for the VSO order indicates that their IL grammar for isiXhosa is not target-like. One might ask why the Afrikaans group did not show a V2 preference, based on the fact that their L1 is a [+V2] language and given that they had been receiving the same isiXhosa input from the same isiXhosa teacher for the same period of time as the English group. Research by Bohnacker (2004, 2006) is insightful in this regard: She investigated the L3 acquisition of German by L1 speakers of Swedish who had L2 English and argued that the V2/V3 optionality that these learners show is due to a combination of transfer of [+V2] from their L1 Swedish and transfer of [-V2] from their L2 English. (Her proposal is supported by the results of her additional investigation in which L2 learners of German with L1 Swedish but no L2 English did not exhibit a V2/V3 optionality; thus the V2/V3 optionality disappears when L2 English is removed.) In the same way, we suggest that the Afrikaans group's V2/V3 optionality is due to a combination of transfer of [+V2] from their L1 Afrikaans and transfer of [-V2] from their L2 English, since all of these participants were highly proficient in L2 English.

The next question would be why the English learners did not transfer [+V2] from their L2 Afrikaans. L2 transfer from English is probably more likely than L2 transfer from Afrikaans,
simply because Afrikaans-speaking adolescents are more exposed to English than English-speaking adolescents are exposed to Afrikaans (in the communities in which they live as well as via the media). In addition Afrikaans-speaking adolescents tend to make use of their L2 more frequently than their English-speaking peers make use of their L2 Afrikaans. Furthermore, even though both Afrikaans and English are official languages of South Africa (together with nine other languages), they do not have the same socio-political status. In this multilingual country, isiZulu, isiXhosa, seSotho and Afrikaans all have more native speakers than English (cf. Statistics South Africa 2001), but English is increasingly becoming the country's lingua franca and is also the language used to communicate with speakers from other countries. Parmegiani (2008:121) refers to English as "a precondition for professional employment" in South Africa and states that this is the main reason why we find "native speakers of African languages [including Afrikaans – SL and SC] resisting mother tongue instruction and going out of their way to send their children to monolingual English medium schools in order to make them as 'native' in English as possible". Some parents who are L1 speakers of Afrikaans choose to speak English to each other and to their children, despite the fact that their level of proficiency in L2 English is quite low, in an attempt to raise their children as native speakers of English. This is, of course, leading the way to a new native dialect of English – it is not an L2 variety of English since the children of these parents are monolingually English (they do not speak Afrikaans at all). Keeping this sociolinguistic context in mind, it is not surprising that transfer from L2 English should be more prevalent than transfer from L2 Afrikaans.

Language contact within one home is also illustrated by the case of the four L1 isiXhosa adolescents who participated in this study. All of these participants' parents were native speakers of isiXhosa. Two of the adolescents had spoken some Afrikaans at home (together with isiXhosa) as young children, and both of them had also attended Afrikaans-medium primary schools. The other two adolescents had spoken only isiXhosa while growing up and had attended isiXhosa-medium primary schools. At the time that the research was conducted, all four of these adolescents were attending secondary schools in which Afrikaans and/or English was the language of instruction. On the background questionnaire all of them indicated that they now spoke only isiXhosa at home and that they spoke isiXhosa and English (and Afrikaans to a lesser extent) at school and in social situations.

What struck us in conducting this research was the complex learning environment with which the language teacher was faced – she had to teach the "basics" of isiXhosa to a class that consisted of learners who were from various different language backgrounds and who were at various levels of proficiency in the language. Compare, for example, the isiXhosa proficiency of a "learner" who has been exposed to the language for 16 years at home (the isiXhosa adolescents) to that of a learner who only started receiving exposure to isiXhosa 3 years ago and whose only exposure to the language is during class (which, as mentioned, amounts to approximately 30 hours per year). This study has also shown that learners from different language backgrounds follow different developmental paths (because they start out with different IL grammars, as proposed by the Full Transfer hypothesis) in acquiring the same L2 on the basis of the same L2 input. Consequently, such learners have different needs regarding instruction on the language.

The task facing the L2 teacher in a country as linguistically diverse as South Africa is clearly a challenging one. However, this also means that some of the most interesting research on the acquisition and teaching of an additional language can be conducted in this country. We
would like to see more research on what L2 teachers experience as the most significant challenges in multilingual, multicultural classrooms and how they deal with these challenges.

Notes
1. The most recent theory of Universal Grammar within the Principles and Parameters framework is known as "Minimalist Syntax", which developed from Chomsky's (1995) Minimalist Programme. The details of Minimalist Syntax will not be discussed here – the interested reader is referred to, amongst many other works, Adger (2003); Chomsky (2005); Hornstein, Nunes and Grohman (2005); and Radford (2009). Suffice it to say that, although the discussion of the verb placement properties of English, Afrikaans and isiXhosa (section 3.1) would be worded differently within Minimalist Syntax, this has no effect on the surface word order of the three languages or the interpretation of the results of the L2 acquisition study reported in section 3.

2. The literature referred to in this short description of the four initial state hypotheses is admittedly not recent, but they do represent pioneering work on the nature of the initial state in L2 acquisition. For more recent work on the role of the L1 in L2 acquisition, see Juffs 2005; Sabourin, Stowe and de Haan 2006; Bohnacker 2004, 2006; and Pienemann and Håkansson 2007. For a recent debate regarding the role of UG in L2 acquisition, see Song and Schwartz 2009; Montrul 2009; Belikova and White 2009; and Bley-Vroman 2009.

3. The subject clitic and the object clitic of any noun are identical, except in cases where the subject clitic consists of a vowel only, e.g. $u$-. In such cases, the object clitic is changed to $ku$- (Kirsch et al. 2002:116) or $wu$- (according to the anonymous isiXhosa-speaking reviewer).

4. *Egoli* is the name of a popular South African television programme. The anonymous isiXhosa-speaking reviewer noted that (s)he would use $u$-*Egoli* rather than $i$-Egoli. (S)he also found examples (8b) and (9b) unacceptable. This judgement about the unacceptability of the V2-VSOs in (8b) and (9b) fits with the V2-VOS preference exhibited by the L1 isiXhosa adult and adolescent participants of this study.

5. One of the reviewers noted that it might be significant that the study was conducted in the Western Cape and that different results might be found if the study were to be replicated in the Eastern Cape, the latter being the South African province with the highest number and the largest proportion of isiXhosa L1 speakers – almost five times more than the Western Cape, which is the province with the next largest isiXhosa L1 speaker base (Statistics South Africa 2001).

6. Teaching a separate isiXhosa class in each of the three schools is not viable given the fact that, in total, only seventeen Grade 10 learners in the three schools have isiXhosa as second additional language as subject.

7. Note that the school attended by these four isiXhosa adolescents did offer isiXhosa as first additional language but that the four adolescents were placed in the isiXhosa as second additional language class on the basis of their performance on a placement test. Although these were L1 speakers of isiXhosa, they did not use the language for academic purposes and rarely wrote in the language. Therefore, although they were fluent speakers of isiXhosa, they did not perform well on the written placement test, since it tests for knowledge of grammatical aspects of isiXhosa.

8. See also Leung 2007 and Bardel and Falk 2007 on the role of the L2 in L3 acquisition.

9. On language shift from Afrikaans to English, see Anthonissen and George 2003; De Klerk and Bosch 1998; and Dyers 2008a, 2008b.
References


**Biographical note**
The current paper is based on Shona Lombard's Master's thesis, supervised by Simone Conradie. In her thesis research, Ms Lombard combined her passion for teaching with her love of isiXhosa, something which she inherited growing up in the Eastern Cape. Ms Lombard has taught at various schools and remains on stand-by as a substitute teacher. Dr Conradie is currently a lecturer in the Department of General Linguistics at Stellenbosch University and has a special interest in second language studies.