Developing Diagnostics: 
Word-Internal Code-Switching Versus Borrowing 
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In this paper I develop diagnostics for distinguishing word-internal code-switching and borrowing, which imply that a borrowed noun will acquire the specific properties of the recipient language, and a code-switched noun will retain its original characteristics. Based on differences in morphosyntactic features of Ukrainian (a fusional language) and English (an analytical one), and implementing quantitative variationist methodology, I show that English-origin nouns with overt Ukrainian morphology occurring in the otherwise Ukrainian context do not behave as if they are English. Instead, they replicate the patterns of behavior of monolingual Ukrainian nouns with respect to gender assignment, modifier-noun agreement and flagging. Hence, I find no evidence for word-internal single word code-switching, and conclude that all other-language utterances with the recipient language overt morphology are borrowed.

1. Introduction

Perhaps the most contentious debate in bilingual research has been the status of single-word utterances embedded in the morphological and syntactic structures of the other language. Consequently, an English-origin noun like store in (1) which appears within Ukrainian discourse can be potentially classified as either a 1) borrowing, 2) word-internal code-switch (CS), or 3) ‘hybrid’ belonging to both codes simultaneously, depending on the theoretical premises one exercises.

1.1 To ty jdes do store des’ iskupytysja. 
So you-sg go-2sg to store-M.Gen somewhere to-shop-Refl 
‘So you go somewhere to a store to shop’. (12/11)

The purpose of this paper is to develop diagnostics for distinguishing these two phenomena by employing quantitative variationist methodology. This research will be based on a typologically different language pair, involving an analytical language, i.e. English, and a fusional language, i.e. Ukrainian. I will first discuss the properties of word-internal code-switching and borrowing, then develop a test for distinguishing them, and finally show how it can be practically realized.

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1 Each example is identified by cassette number and count number. The data show phonological variability which is not necessarily represented in the orthography. All examples are glossed with the corresponding English lexical item with grammatical labels of a Ukrainian noun, unless the grammatical information is conveyed by the translation itself. Grammatical markers are coded in the following way: F = feminine, M = masculine, N = neuter; sg = singular, pl = plural; Nom = nominative, Acc = accusative, Gen = genitive, Dat = dative, Ins = instrumental, Loc = locative, Refl = reflexive, Inf = infinitive, p = person, Imp = imperative, Ø = missing overt inflection. Since grammatical gender is distinguished in most cases in singular, gender marks also imply singular, unless otherwise specified.
2. **Word-internal code-switching versus borrowing.**

Before one tries to differentiate the two phenomena, it would be wise to clarify the properties of each, and how they differ. It has been agreed that code-switching is the ‘exchange of passages of speech belonging to two different grammatical systems or subsystems’ (Gumperz 1982:59) in the same discourse. A word-internal CS, therefore, would entail the switch from one code to the other, occurring within the word. So, if numerous switches like the invented example shown in (2), in which one part is in English, then the switch occurs within the word boundary, and the rest of the phrase continues in Ukrainian, could be easily found, it would be good evidence for word-internal code-switching. No such utterances were found in my data. Most of the data consist of single-word English items as shown in (1).

2. *So you go to a store des’ iskupytyja.*
   -M.Gen somewhere to-shop-Refl

Note that most examples of word-internal code-switching found in the literature are also of the same type, i.e. they usually involve a single word utterance (as shown in 3-6). And although the Free Morpheme Constraint proposed by Poplack (1980) does not permit a switch between a free and bound morpheme, many scholars argue that this constraint does not hold for structurally different language pairs and/or for single-word utterances (see e.g. Backus 1992, Eliasson 1990). Therefore these examples should be considered word-internal code-switches. However, very few scholars advocating word-internal code-switching ever discuss why their examples represent word-internal code-switches and not borrowings. In fact, Gardner-Chloros (1991) and Treffers-Daller (1994) argue that the code-switching of a single item is indistinguishable from borrowing and, therefore, should not be differentiated. Carol Myers-Scotton (1992) agrees with them, concluding that ‘there is little reason to differentiate the two’, since they undergo the same processes for their surface realizations. Nevertheless, she still insists that *-time* in (5) is code-switched and not borrowed.

3. **Mää** aina **kerron** sille **jokeja.**
   *I always tell* it+ALL +PL +PART
   *'I always tell him jokes'* (Finnish/English from Halmari 1993: 1057)

4. **shoppá** ‘shops’ (Panjabi/English from Romaine 1989: 113)
5. ... weve ulikuwa umejikunja kwa corner u-na-m-time tu.
   2nds-PROG-her-time just
   '... you had folded yourself in a corner (and) you were just ‘timing’ her’
   (Swahili/English from Myers-Scotton 1992: 25).

   That have-to you first connect-Inf.SUFFIX
   'You have to connect it first' (Dutch/Indonesian from Giesberg 1995: 85)

So, what are the properties of a word-internal CS involving a single word?
Since a CS in general entails the retention of its original grammar, it would be
logical to expect that the properties of a CS should not change depending on its
length. Therefore, it is reasonable to claim that a single-word CS would exhibit the
properties of its language of origin, and not those of the recipient language. This, of
course, is contrary to the properties of a borrowing, which has to be integrated into
the grammatical system of the recipient language (Poplack 1993), conforming to its
morphological and syntactic rules. Thus, if a single-word CS and a borrowing
represent two different languages, they would differ to the same degree as the
languages themselves would. In other words, the more distinct the alternating
languages are, the sharper the distinction between a single-word CS and a
borrowing.

Now, how can the item in question be tested as to whether or not it has
acquired new properties? Obviously, a language pair with very distinct properties is
needed. However, not every typologically different language pair will be helpful in
developing these diagnostics. Consider, for example, the situation in (5), where the
verbal markers on the word time are in no way dependent on inherent grammatical
or semantic properties of that word. Since neither the Swahili inflections nor the
English verb depend on each other, it is difficult to determine which language
system is in play and whether a particular item is code-switched or borrowed.

3. Code-switching/borrowing diagnostics

Fortunately, a fusional language like Ukrainian provides an ideal site for
this exercise. Let us consider the example in (1), repeated here as (7). The English
term store has an overt Ukrainian inflection -u. It denotes Genitive, the case
assigned to the noun by the preposition do. However, since Ukrainian is a fusional
language, the same inflection also indicates gender and number. Hence, -u in (7)
also means masculine and singular. Table 1 illustrates the range of possible
combinations for just two morphologically marked cases in Ukrainian.
7. To ty jdes do storu des' iskupytya.
   So you-sg go-2sg to store-M.Gen somewhere to-shop-Refl
   'So you go somewhere to a store to shop'. (12/111)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Genitive singular</th>
<th>Genitive plural</th>
<th>Instrumental singular</th>
<th>Instrumental plural</th>
<th>Declension</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASCULINE</td>
<td>-di, -dy, -do</td>
<td>-iv, -eij</td>
<td>-om, -ym</td>
<td>-(i)amy</td>
<td>II</td>
</tr>
<tr>
<td>FEMININE</td>
<td>-(i)ji</td>
<td>-gi</td>
<td>-ju</td>
<td>-(i)amy</td>
<td>III</td>
</tr>
<tr>
<td>NEUTER</td>
<td>-(CC)++-jia</td>
<td>-(CC)++-iv</td>
<td>-(i)em, -(i)am</td>
<td>-(CC)++-(i)amy</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>-(CC)++-jia</td>
<td>-(CC)++-iv</td>
<td>-(i)em, -(i)am</td>
<td>-(CC)++-(i)amy</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>-(j)at + -y</td>
<td>-(j)at</td>
<td>-(i)am</td>
<td>-(j)at ++(i)amy</td>
<td>IV</td>
</tr>
</tbody>
</table>

* CC - a geminate consonant

A Ukrainian noun also has to agree with a number of elements in each grammatical category, i.e. gender, number and case. For example, trava in (8) is a feminine noun in nominative singular. It agrees in all three grammatical categories with its two modifiers - the demonstrative pronoun taka and the adjective sorstka; and it also agrees with the verb buola and the relative pronoun jaku in gender and number. When a noun has a different gender as in (9), the inflections of the agreeing elements change. Therefore, the verb buola and the adjective dyvne in (9) exhibit different inflections than the ones in (8), since the noun vesillja they agree with is neuter.

8. To buola taka sorstka trava, jaku ne
   It was-F such-F.Nom coarse-F.Nom grass-F.Nom which-F.Acc not
   jila chudoba. (15/038)
   ate-F cattle-F.Nom
   'It was such coarse grass, that cattle did not eat it'.

9. Vesillja buola dyvne. (25/043)
   Wedding-N.Nom was-N strange-N.Nom
   'The wedding was strange'.

2This table is based on the literary norm (Dietl’ 1993) and dialectal variation in some case forms is not accounted for.
Now let us consider the schema of morphological marking in a fusional language (see Figure 1). Since space is limited I will focus on case related issues only. Within Government and Binding theory (see e.g. Chomsky 1981), case is assigned by an external case assigner to a syntactic position occupied by a noun. It then percolates from a noun to its modifier, resulting in the same case marking, i.e. case agreement. Unlike English, some Ukrainian cases must be morphologically overt (as in (1/7)). Furthermore, unlike agglutinative languages, where a case marker is independent from any other categories, in a fusional language like Ukrainian the case marker is influenced by the noun itself, depending on its gender, phonological form and number. Thus, a noun generated by Ukrainian grammar has to possess all these properties in order to influence the inflection, and then pass this grammatical information to its modifier.
Now let us assume that an English-origin word inserted in a noun’s slot in Ukrainian is code-switched word-internally (see Figure 2). What would be expected in this situation? As an English noun it may be followed by an inflection. As a Ukrainian noun it also has to have an inherent gender, besides number and phonological form, in order to condition the form of an inflection and then pass it to its agreeing element. Thus, if the switch into English occurred immediately before the noun, the link between the noun and its modifier would be broken, and the noun would not be able to pass all the necessary information to the modifier. This conflict of features (i.e. the modifier requests information, but the noun cannot satisfy this request), will result in an increased incidence of non-agreement between the noun and its modifier, which I further refer to as nonstandard marking.

It has been shown by Budzhak-Jones & Poplack (1997), however, that there is inherent morphological variability in monolingual Ukrainian of Ukrainian-English bilinguals. Therefore, in this project, I will not only examine the distribution of Ukrainian inflectional marking with regard to English-origin nouns, and their correspondence to Ukrainian grammar, but I will also compare the patterns of morphological variability established by English-origin nouns to those featured by their monolingual counterparts in their recipient language, i.e. Ukrainian, as well as monolingual counterparts in their language of origin, i.e. English. This methodology is schematically illustrated in Figure 3 (following Poplack & Meechan 1995 and others).

![Diagram](image)

Figure 3. Schema of methodology.

4. Hypotheses

Based on the diagnostics and the comparative method, illustrated in Figures 1-3, I hypothesize that English-origin nouns with overt Ukrainian inflection which occur in an otherwise Ukrainian context will either appear more often in those structures where agreement is not required, and/or show significantly more nonstandard marking than monolingual Ukrainian nouns, in the structures with
required agreement, if the former are code-switched word-internally. Furthermore, since gender is not inherent to English nouns, I will expect a direct correlation between the noun’s phonological form and the assigned gender, since a Ukrainian inflection must exhibit all three grammatical categories, and its gender information can be based on the only available criterion, i.e. the phonological form. In addition, it is logical to expect that if the chain passing grammatical information between the noun and its agreeing elements is broken, the speakers will realize this in some way and signal it by some sort of metalinguistic speech or any other type of flagging (e.g. pause, false start, etc.).

5. Data

This research is based on data collected in the Ukrainian-English bilingual community in Lehighton, Pennsylvania (USA). I employed a short-term participant observation technique combined with one-to-one sociolinguistic interviews conducted in Ukrainian at speakers’ homes. English usage was neither encouraged nor discouraged. In all, 36 hours of natural conversations were tape-recorded, with at least one hour for each informant.

All 25 informants included in the final sample are native Ukrainian speakers who have lived in an English speaking environment for over 40 to 50 years.

6. Corpora

All English-origin nouns in an otherwise Ukrainian context were extracted to constitute my English-origin corpus. It includes single-word nouns like storu in (1), and compounds functioning as a single word like living-roomu in (10), irrespective of their being overtly marked for a Ukrainian inflection or not, as show in (11).

10. A v living-roomu to lysyly vse. (30/093)
And in living-room-M.Gen/Dat.? then left-Pl everything

'And we left everything in the living room'.

11. Ta vslijaki casom show je dobro. (06/1159)
Well various-pl.Nom sometimes show-∅ is/are good-pl.Nom

'Well, sometimes there are different good shows'.

I did not include in this corpus interrupted, out of context tokens; interjections, abbreviations, proper, and geographical names (shown in 12 and 13).
12. Todi sluchaju v odynajcijatij, ale sluchaju eh... Current affair
then listen-1sg at eleven-F:Loc but listen-1sg eh Current affair
i sluchaju eh... se tam sos’ insc, ET cy sos’ (33/369)
and listen-1sg eh also there something other, ET or something
‘Then I listen at eleven, and I listen to eh... ‘A Current Affair’, and I also
listen to eh... something else, like ‘ET’ [Entertainment Tonight], or others’.

I went-F myself-F bus-M:Ins from Philadelphia-F:Gen to Buffalo
‘I went by myself from Philadelphia to Buffalo by myself’. (15/028)

Well-established loanwords with a Greek/Latin root, like harmoniju and akordion
in (14), were also excluded since they function in Ukrainian along with native
nouns, are registered in a Ukrainian dictionary (Bilodid 1977), and presumably
were not acquired by this particular community in an English/Ukrainian contact
situation.

14. Ja harmoniju duze ljubyla, tej akordion. (10/194)
I harmonica-F:Acc very loved-F that-M:Acc accordion-M:Acc
‘I liked harmonica very much, that accordion’.

However, nouns with a homonymous form in Ukrainian, but an entirely new
meaning in the conversations were included in this study. For example, the noun
caroju in (15) is used in the meaning of ‘a car’. The Ukrainian homonym kara
does not have this meaning. It denotes instead ‘a punishment’.

15. Ja sjohodni jichala caroju. (11/319)
I today went-F car-F:Ins
‘I went by car today’.

The resulting corpus consisted of 1637 nouns of English-origin used in an
otherwise Ukrainian context. I will further refer to them simply as English-origin
nouns.

These were systematically compared with an approximately equal number of
Ukrainian nouns (1950) extracted from the second half of the same interviews. I
also extracted all English nouns from extended fragments of monolingual English in
the speech of the same informants. This resulted in 174 tokens of monolingual
English.

For the purpose of this project, however, I had to limit my research to
nouns with an overt Ukrainian inflection only, as I concentrated on word-internal
code-switches which by definition require an overt other-language morphology.
Therefore, English-origin nouns like *show* in (11), as well as Ukrainian nouns with null morphology were excluded from the following calculations.

7. Coding

Every token in the English-origin and Ukrainian corpora has been analyzed according to whether its inflectional marking corresponds to all requirements of case, number and gender within a Ukrainian clause. Monolingual English nouns were coded according to the requirements of English grammar. Prescriptively marked tokens are exemplified by *storu* in (1/7), as well as by *elevatera* and *elevatery* in (16). I will further refer to such nouns as *standardly* marked.

16. Toj ukrajinec' vyviv nas znajete do
That-M.Nom Ukrainian-man.M.Nom led-out-M us you-know-pl to
takoho do elevatera, znajete elevatery velyki
such-M.Gen to elevator-M.Gen you-know-pl elevators-Nom big-pl.Nom
se v sudi znajete tak. (16/093)
still in court-house-M.Loc you-know-pl yes

‘That Ukrainian man led us out to such an elevator, you know, big
elevators, especially in the court house, you know, yes’.

Non-prescriptively marked tokens are exemplified by *living-roomu* in (10), and *toolmaker* in (17). In (10) the noun *living-room* should have been marked for Locative (i.e. *living-roomi*), but neither for Genitive nor Dative. In (17) the noun *toolmaker* is overtly marked for Genitive, instead of the required Instrumental (i.e. *toolmakerom*). I will refer to such nouns as *nonstandardly* marked.

17. Toolmaker vin buv. (18/062)
Toolmaker-M.Gen he was-M
‘He was a toolmaker’.

All tokens were then coded according to a number of morphosyntactic and discourse factors relevant to the assignment of an overt inflection in Ukrainian. With respect to modifier-noun agreement I distinguished between: 1) those nouns that had to participate in agreement, as *elevatera* in (13); and 2) those that did not need to do so, like the nouns in (1).

With respect to assigned gender I coded all nouns for their citation phonological form (i.e. Nominative singular). All nouns which end in a consonant

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3 The Ukrainian inflection -*a* can be used for marking either Genitive or Dative (see e.g. Ditei 1993).
(e.g. store in (1/7) or living-room in (10)) were coded as having a masculine-like form (since most Ukrainian masculine nouns have consonantal ending). Nouns ending in -a, -ja (i.e. typical feminine endings) were coded as having a feminine-like form (e.g. replica in (18)). Nouns with typically neuter endings (i.e. -o, -e) were coded as having a neuter-like form (e.g. bungalow in (19)). All other nouns with non-typical Ukrainian gender endings were coded as having a non-Ukrainian form (exemplified by trolley in (20)).

18. To taka replica takoj toj sukony.
   It such-F.Nom replica-F.Nom such-F.Gen that-F.Gen dress-F.Gen
   'And it was such a replica of that dress'. (17/170)

19. Nase pere psyche tam je take
    Our-N.Nom first-N.Nom place-N.Nom there is such-N.Nom
    bungalow [bangalo].
    bungalow-N.Nom
    'There is such a bungalow there, our first place'. (18/548)

20. A trolley jsia. (12/345)
    And trolley-Ø went-F
    'Well, the trolley went [there]'.

I also distinguished animate from inanimate nouns, since the gender of animate nouns can be semantically determined based on the biological sex of the referent in both languages, whereas the gender of inanimate nouns is inherent to Ukrainian nouns only.

And finally, with respect to flagging, for this project nouns were coded into 1) those which appear in non-smooth speech, interrupted by any kind of flagging (as e.g. in 16), and 2) those nouns which were not flagged, and were uttered in fluent speech, as e.g. in (20).

8. Results

8.1 Modifier-noun agreement

I first examine the crucial part of my code-switching/borrowing diagnostics, i.e. the pattern of inflectional variability established by the English-origin nouns with respect to modifier-noun agreement (see Table 2). The monolingual English corpus had to be excluded from the following calculations since English nouns do not participate in such agreement.

10
Table 2. Distribution of nouns and their nonstandard marking with respect to modifier-noun agreement.

<table>
<thead>
<tr>
<th>AGREEMENT</th>
<th>Ukrainian (monolingual)</th>
<th>English-origin in Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Required</td>
<td>603</td>
<td>37</td>
</tr>
<tr>
<td>Not required</td>
<td>1036</td>
<td>63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NON-STANDARD MARKING</th>
<th>English-origin in Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required agreement</td>
<td>93/603</td>
</tr>
<tr>
<td>Not required agr.</td>
<td>84/1036</td>
</tr>
</tbody>
</table>

Contrary to my hypothesis, English-origin nouns do not avoid modifier-noun agreement structures. They occur in agreement required constructions as often as their monolingual Ukrainian counterparts (36% vs. 37% correspondingly). Furthermore, not only is their frequency of distribution the same with respect to modifier-noun agreement, but, more tellingly, their ratio of nonstandard marking with respect to each type of agreement structure is strikingly similar to the one exhibited by monolingual Ukrainian nouns. In fact, the incidence of nonstandard marking in those constructions where the modifier-noun agreement is required is identical in both corpora (i.e. 15% each).

These results suggest that the link between the noun and its modifier has been preserved and the necessary grammatical information has been delivered. This is important evidence that English-origin nouns with overt Ukrainian inflections do not retain their original grammar.

8.2 Gender

To make sure that the results in Table 2 are not coincidental, I next examine the correlation between the noun’s phonological form and the Ukrainian inflection. Since English-origin nouns do not possess an inherent category of gender, their phonological form should be used instead, and would be the major determinant of the type of a Ukrainian inflection. Table 3, however, shows the opposite.

Most English-origin nouns, irrespective of animacy, resemble masculine nouns in Ukrainian, by virtue of ending in a consonant (i.e. 89% and 98%). If these nouns are code-switched, we would expect them to be assigned masculine gender in Ukrainian on the basis of their phonological form. However, according to Table 3, neither animate nor inanimate nouns are exclusively assigned masculine gender. Note, for example, that 42% of inanimate nouns with masculine-like form receive overt feminine inflection.
Table 3. The correspondence of initial phonological form of English-origin nouns to their assigned genders across corpora.

<table>
<thead>
<tr>
<th>Assigned gender</th>
<th>PHONOCHEMICAL FORM</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Masculine-(like)</td>
<td>Feminine-(like)</td>
<td>Neuter-(like)</td>
<td>Ambigious</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td><strong>INANIMATE NOUNS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>127</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feminine</td>
<td>258</td>
<td>42</td>
<td>14</td>
<td>88</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Neuter</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>70</td>
</tr>
<tr>
<td>Ambigious</td>
<td>219</td>
<td>36</td>
<td>2</td>
<td>12</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>617/886</td>
<td>89</td>
<td>16/886</td>
<td>2</td>
<td>27/886</td>
<td>4</td>
</tr>
<tr>
<td><strong>ANIMATE NOUNS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>59</td>
<td>51</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feminine</td>
<td>14</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Neuter</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ambigious</td>
<td>42</td>
<td>37</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>115/117</td>
<td>98</td>
<td>0/117</td>
<td>0</td>
<td>0/117</td>
<td>0</td>
</tr>
</tbody>
</table>

In Table 4 the distribution of assigned genders in the English-origin and monolingual Ukrainian corpora is compared. Note that English-origin nouns exhibit a strikingly similar distribution of genders assigned to them and their monolingual Ukrainian counterparts. With the exception of ambiguous gender assignment, the hierarchy of assigned genders to inanimate nouns is exactly the same in both corpora, i.e. most overtly marked nouns are feminine (43% and 53%), followed by masculine and then neuter nouns.

Table 4. Distribution of actually assigned gender across corpora.

<table>
<thead>
<tr>
<th></th>
<th>Ukrainian monolingual</th>
<th>English-origin in Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td><strong>INANIMATE NOUNS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>381</td>
<td>24</td>
</tr>
<tr>
<td>Feminine</td>
<td>670</td>
<td>53</td>
</tr>
<tr>
<td>Neuter</td>
<td>175</td>
<td>14</td>
</tr>
<tr>
<td>Ambigious</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1259</td>
<td>686</td>
</tr>
<tr>
<td><strong>ANIMATE NOUNS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>136</td>
<td>36</td>
</tr>
<tr>
<td>Feminine</td>
<td>115</td>
<td>30</td>
</tr>
<tr>
<td>Neuter</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ambigious</td>
<td>129</td>
<td>34</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>380</td>
<td>117</td>
</tr>
</tbody>
</table>

With respect to animate nouns, the hierarchy is also preserved, although there is a sharper difference in the proportion of masculine and feminine nouns in
Developing Diagnostics

the English-origin corpus. Since animate nouns receive their gender semantically, it is possible that the gender of animate nouns was largely determined by the context.

Thus, my two predictions with respect to English-origin nouns code-switched word-externally have been falsified. Neither modifier-noun agreement nor correlation between phonological form and gender support my expectations. I will finally check the possibility of more frequent flagging in the vicinity of code-switched English-origin nouns, especially with respect to nonstandard marking.

8.3 Flagging.

Table 5 shows that English-origin nouns are flagged just as often as their Ukrainian counterparts are (20% vs. 17%). Note that monolingual English nouns are flagged more than twice as often as either English-origin or Ukrainian nouns (49% vs. 20% and 17%). Furthermore, the pattern of flagging nonstandard marking is again the same for both English-origin and monolingual Ukrainian nouns (22% vs. 20%). This definitely refutes my expectation that some English-origin nouns in my data are code-switched.

Table 5. Distribution of ‘flagging’ with respect to morphological marking across all corpora.

<table>
<thead>
<tr>
<th></th>
<th>Ukrainian monolingual</th>
<th>English-origin in Ukrainian</th>
<th>English monolingual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>All nouns</td>
<td>275/1639</td>
<td>17</td>
<td>158/803</td>
</tr>
<tr>
<td>Non-standard only</td>
<td>35/177</td>
<td>20</td>
<td>22/98</td>
</tr>
</tbody>
</table>

9. Conclusion

To conclude, I have developed diagnostics for determining the status of English-origin nouns occurring in otherwise Ukrainian discourse. Based on morphosyntactic features of Ukrainian I have illustrated that such nouns acquired not only the properties of the recipient language but also its inflectional variability. The patterns of morphological variability of English-origin nouns were shown to be parallel to their Ukrainian counterparts with respect to modifier-noun agreement. Furthermore, their gender assignment was the same as for the native nouns. And finally, additional evidence was provided by a discourse factor of ‘flagging’ showing that the English-origin nouns in my corpus patterned in the same manner as the monolingual Ukrainian but not monolingual English nouns. Given these arguments, it is obvious that all nouns of L_A occurring in the context of L_B and featuring its overt morphology are the product of that (L_B) language. Thus, I find
no evidence for word-internal code-switching and conclude that English-origin nouns featuring overt Ukrainian morphology in Ukrainian contexts are borrowed.

References


