

# English Verbs in Hungarian/English Codeswitching

Agnes Bolonyai  
North Carolina State University

## 1. Introduction

This study examines the integration of English verbs in Hungarian-English language contact. While previous research indicates that codeswitching (CS) of verbs does not occur as readily as that of nouns, the conditioning factors that determine by what means and in what forms verbs can be incorporated into another language are not yet fully understood (e.g. Muysken 2000, Myers-Scotton 2002). The aim of this paper is to address two questions. First, I investigate why Hungarian employs a strategy of morphological integration in verb borrowing. Drawing on a corpus of adult bilinguals' naturalistic CS (Bolonyai 1997) and examples published in the literature (e.g. Kontra 1995), this paper specifically explores why English verbs need to be adapted with a derivational, denominal verbalizer (VBZ) suffix *-l* (*-ol*, *-el*, *-öl*) in Hungarian, as in (1). The second question concerns the status of the verbalizer in the grammar of the bilingual child. At issue is whether English verbs occur with the Hungarian verbalizer from early on in child bilingual speech, or if it takes time and exposure before adult-like integration of verbs appears in child CS. The investigation is based on the analysis of longitudinal CS data from an English-dominant bilingual child.

- (1) a. **cover-ol-ja**  
cover-VBZ-PRES/3SG/DEF  
'[it] covers [it]'
- b. **el-explain-el-ni**  
PV-explain-VBZ-INF  
'to explain'
- c. **fel-pick-ol-t-am**  
PV/up-pick-VBZ-PAST-1SG  
'I picked him up'  
(Clyne & Mocnay 1997)
- d. **fel-réz-ol-t-am**  
PV/up-raise-VBZ-PAST-1SG  
'[I] raised up'  
(Kontra 1995)

In what follows, I first give an overview of how the denominal verbalizer morpheme is used in monolingual and bilingual verb formation. This will be followed by a brief discussion of Moravcsik's (1975) claim that Hungarian can borrow only nouns, and that the verbalizer functions as an 'inflection carrier' light verb. Next, I present evidence that English (Embedded Language) verbs also can and must take the Hungarian (Matrix Language) verbalizing suffix, and propose that it serves as an overt morphological 'verb marker' expressing verbal categorial identity of the English lexeme. It is argued that a typologically-based well-formedness condition of Hungarian determines the obligatory morphological marking of *any* newly formed verb, and a unified account of monolingual and bilingual verb formation drawing on the Uniform Structure Principle (Myers-Scotton 2002) is offered.

In the second part of the paper, I will discuss the patterning of English Embedded Language verbs in a bilingual child's spontaneous CS data collected over seven years (from 3;7 to 11;3). I present developmental evidence to demonstrate that morphological marking of English Embedded Language lexemes for their verbal status is initially absent in the child's speech and appears only after a

relatively long exposure to and practice in CS. The paper concludes that adult-like switching of Embedded Language verbs requires that abstract features of the Matrix Language verbalizer are refined and extended from monolingual denominal derivation to bilingual verb formation—a subtle restructuring process, which may delay correct mapping of form to meaning and full lexical acquisition of bilingual verbs until later.

## 2. Terminology and theoretical assumptions

### 2.1. Codeswitching vs. borrowing

Embedded Language (English) forms in this data set occur, almost exclusively, as single words or lexical units inflected with Matrix Language (Hungarian) grammatical inflections. The term codeswitching refers to morphosyntactically integrated forms that occur with no (or minimal) phonological assimilation to Hungarian (i.e. there appears to be conscious retention or approximation of English pronunciation). Embedded Language forms that are both phonologically and morphosyntactically integrated forms as in (1d) will be referred to as borrowings.

### 2.2. Congruence

Following Myers-Scotton (2002), I assume that for an Embedded Language element to appear in a bilingual, mixed (Matrix Language + Embedded Language) constituent, it must be checked for congruence with its Matrix Language counterpart and/or with Matrix Language-specific *Generalized Lexical Knowledge* in the mental lexicon. Congruence checking occurs at the three levels of abstract grammatical structure in any lexical item: (1) for semantic-pragmatic features at the level of Lexical-Conceptual Structure; (2) for features of thematic role assignment at the level of Predicate-Argument Structure; and (3) for properties relevant in surface structure at the level of Morphological Realization Patterns. Further, the mixed constituent must meet the relevant well-formedness conditions of the Matrix Language frame—stored as Generalized Lexical Knowledge in the mental lexicon—in order to satisfy the *Uniform Structure Principle*:

‘A given constituent type in any language has a uniform abstract structure and the requirements of well-formedness for this constituent type must be observed whenever the constituent appears. In bilingual speech, the structures of the Matrix Language are always preferred, but some Embedded Language structures are allowed if certain conditions are met.’ (Myers-Scotton 2002:120).

Applied to verb integration in Hungarian-English CS, this principle predicts that Hungarian-specific well-formedness conditions for denominal verb formation in monolingual Hungarian will be implicated in bilingual verb formation as well, with Hungarian providing a uniform structure for *all* newly derived verbs.

## 3. Data to be explained

### 3.1. Background notes on Hungarian

Unlike English, Hungarian is an agglutinative language with rich nominal and verbal morphology. Verbal morphology includes derivational suffixes, grammatical inflections, and preverbs. Derivational suffixes are used to express causativity, passive voice, and possibility. Inflectional suffixes mark person and number agreement with the subject, in/definiteness of the object, past tense, and mood. Aspectual meanings (perfectivity and Aktionsart) can be expressed by means of preverbs and derivational suffixes.

### 3.2. The denominal verbalizer in Standard Hungarian

Hungarian forms new verbs from nouns via derivational suffixes exclusively; there is no conversion or zero-derivation as in English. The two most productive denominal verbalizers are *-l* and

-z (and their post-consonantal, vowel-harmonizing variants *-ol*, *-el*, *-öl* and *-oz*, *-ez*, *-öz*, respectively), as shown in (2).

- |        |              |                 |
|--------|--------------|-----------------|
| (2) a. | tánc         | tánc-ol         |
|        | ‘dance’ (N)  | ‘dance’ (V)     |
| b.     | ének         | ének-el         |
|        | ‘song’       | ‘sing’          |
| c.     | torna        | torná-z-ik      |
|        | ‘gymnastics’ | ‘do gymnastics’ |

### 3.2.1. The verbalizer in monolingual verb formation

The denominal verbalizer is a multifunctional derivational morpheme, with both syntactic and semantic features. First, it participates in category-changing operations; it forms verbs out of nouns. It is also associated with semantic features, such as semantic roles and aspectual meanings. The verbalizer carries a generic verbal meaning such as ‘do’, ‘make’, ‘give’, ‘act’, ‘use’, and assigns the original nominal stem, its ‘inner’ argument, the semantic role of agent, theme, instrument, result, or locative (3).

- (3) a. ‘do/produce N’: *ének* vs. *ének-el*; ‘song’ vs. ‘to sing’  
 b. ‘give N’: *csók* vs. *csók-ol*; ‘kiss’ vs. ‘to kiss’  
 c. ‘use N’: *lapát* vs. *lapát-ol*; ‘shovel’ vs. ‘to shovel’  
 d. ‘act as N’: *pap* vs. *pap-ol*; ‘preach’ vs. ‘to preach’

In addition, the verbalizer contributes to the aspectual properties of the verb it helps to create. Verbs derived with the suffix *-l* are process or stative verbs, expressing an imperfective viewpoint aspect. As seen in (4), perfective and momentary verbs can be formed with adding preverbal prefixes (e.g. *el* and *meg*) to the denominal, stative verb (Kenesei, Vago, & Fenyvesi 1998).

- (4) a. *ének-el* (durative, imperf.) vs. *el-ének-el* (completion, perf.) ‘sing’  
 b. *csók-ol* (frequentative, imperf.) vs. *meg-csók-ol* (semelfactive, perf.) ‘kiss’

### 3.2.2. The verbalizer in Standard Hungarian borrowing

Verbal borrowings must be adapted with the verbalizer *-l* or *-z* when taken into monolingual Hungarian. According to Bartha (1991), borrowings from Latin and Slavic languages were marked with the denominal *-l* as early as in the 9th century. Today both suffixes are productive; monosyllabic consonant-final stems (except *-l/-r*) take *-l*, while stems ending in a vowel or *-l/-r* tend to be followed by *-z* (5).

- (5) *park-ol* ‘park’; *szkenn-el* ‘scan’; *emil-ez-ik* ‘email’ (Kiefer 1998)  
*szév-el* ‘save’; *lizing-el* ‘lease’; *sopping-ol* ‘shop’ (Dressler & Ladányi 2000)  
*mekdó-z-ik* ‘eat/hang out at MacDonald’s’ (Kiss & Pusztai 1999)

### 3.2.3. The verbalizer in Hungarian-English bilingualism

In Hungarian-English immigrant communities where CS and borrowing occur in spontaneous everyday conversations, bilingual adult speakers consistently integrate English (Embedded Language) forms into Hungarian (Matrix Language) with the denominal suffix. The resulting bilingual verb consists of an English verb stem immediately followed by the Matrix Language verbalizer; all necessary grammatical inflectional morphemes are attached to the verbalizer (6).

- (6) Embedded Language verb stem + Verbalizer + Matrix Language inflections
- Order**-ol-t egy **bike-jack**-et  
order-VBZ-PAST/3SG/INDEF a bike-jack-ACC  
'He ordered a bike-jack.'
  - El-**miss**-ol-t-am  
PV/PERF-miss-VBZ-PAST-1SG  
'I missed it.'  
(Tóth 2002)
  - És utána te **decide**-ol-hat-sz  
and then you decide-VBZ-POT-PRES/2SG/INDEF  
'And then you can decide.'
  - Ki-**rent**-ol-ja nek-em a bázment-et  
PV/out-rent-VBZ-PRES/3SG/DEF DAT-POSS/1SG the basement-ACC  
'She rents the basement to me.'  
(Kontra 1995)

While in monolingual verb derivations the denominal *-l* attaches to a nominal (or an adjectival) base only, in bilingual verb formation Embedded Language verbal forms can also be verbalized. In (7), English phrasal verbs are shown to occur as a unit, with the verbalizer added to the whole verb-particle construction.

- (7) Embedded Language phrasal verb + Verbalizer + Matrix Language inflections
- A busz-ok föl-**pickup**-ol-ják a gyerek-et  
The bus-PL PV/up-pickup-VBZ-PRES/3PL/DEF the child-ACC  
'Buses pick up the kids [for you].'
  - ...ott **fularaund**-ol-t-ak, majd minden este  
...there fool around-VBZ-PAST-3PL/INDEF almost every evening  
'... they would fool around almost every evening'  
(Kontra 1995)
  - Na, **fajndaut**-ol-j-a ki!  
well find out-VBZ-IMP-3SG-PV/out  
'Well, find it out!'  
(Kontra 1995)

Non-finite Embedded Language verbs can also take the verbalizer, although these forms seem to occur less frequently (8).

- (8) Non-finite Embedded Language verb + Verbalizer + ML inflections
- Nem lenne jobb ott-marad-ni egy kicsi-t **socializing**-ol-ni  
not be/COND better there-stay-INF a little socializing-VBZ-INF  
'Wouldn't it be better to stay and socialize a little?'
  - Men-je-tek **fising**-el-ni  
go-IMP-2PL fishing-VBZ-INF  
'Go fishing.'  
(Kontra 1995)
  - ...**going**-ol-j-anak el a faking édes-any-j-uk-ba  
...going-VBZ-IMP-3PL PV the f\*\*\*ing sweet-mother-POSS-3PL-into  
'... they should go to f\*\*\*ing hell'  
(Garaczi 1999)
  - És amikor **finish**-öl-t-em iskolá-ba', én **married**-öl-t-em  
and when finish-VBZ-PAST-1SG school-in I married-VBZ-PAST-1SG  
'When I finished school, I got married.'  
(Kovács 2001)

## 4. Why do Embedded Language elements require the verbalizer?

### 4.1. The verbalizer as a ‘do’-verb & ‘inflection carrier’

The literature offers two ways of dealing with the obligatory presence of the verbalizer in alien verb incorporation. According to one view (Moravcsik 1975), foreign verbs are borrowed as nouns into Hungarian and therefore must be verbalized again. The assumption underlying Moravcsik’s claim is that foreign verbs are incongruent with native inflections. Example (9a) is ungrammatical, because the Hungarian past tense marker directly attaches to the English verb stem *lunch*. However, if *lunch* is assigned a nominal meaning (9b), it forms a grammatical, bi-morphemic verb with the Hungarian verbalizer functioning as a ‘do’ verb. That is, in the bilingual verb complex (9b), *lunch* as a noun provides a specific lexical meaning, whereas the verbalizer supplies a generic notion of verbality, and serves as an ‘inflection carrier’.

- (9) a. \***lunch**-t-unk  
lunch/V-PAST-1PL/INDEF  
b. **lunch**-ol-t-unk  
lunch/N-VBZ-PAST-1PL/INDEF  
‘lunch do’; ‘have lunch’

While this analysis is plausible and works for zero-derived English forms, it cannot explain why the structures in (10a) are grammatical, and those in (10b) are not. Contrary to Moravcsik’s prediction, these data—where the English nominal element and the corresponding verbal form are not identical in their surface forms—seem to suggest that it is in fact the nominal form that cannot be borrowed.

- (10) a. **sing**-el      **achieve**-el      **decide**-ol  
b. \*song-ol\*      achievement-el      \*decision-el

### 4.2. The verbalizer as a nativizer suffix

The other position holds that verb borrowings owe their structure to a process of nativization or language-specific adaptation. The obligatory integration of new loan words into Hungarian with the denominal verb-formation suffix is thought to be an indication of ‘the highest degree of derivational productivity’ (Dressler & Ladányi 2000:119) in the grammar of Hungarian. It is argued that alien word bases with which the denominal verbalizer co-occurs have system-adequate ‘fitting properties’, and do not present severe structural obstacles for Hungarian verb-formation rules to apply (Dressler & Ladányi 2000). Under this account, both nouns and verbs from English can be nativized with verbal derivational morphology. It is unclear, however, what makes the strategy of verbal derivation both suitable and necessary for adapting alien verbs in Hungarian, and why borrowing bare verbs is ungrammatical. The goal of the next section is to expand upon previous observations of denominal verb formation, and propose that the verbalizer can be treated as a morphological ‘verb marker’, which is in turn consistent with typological, system-internal characteristics of Hungarian.

### 4.3. The role of Matrix Language typology: the verbalizer as an overt ‘verb marker’

The data in (11) illustrate that the presence of verbalizer morpheme is obligatory both in monolingual and bilingual verb formation. The ungrammaticality of examples in (11a) follows from the fact that Hungarian does not allow zero-marking or conversion in denominal new verb formation; semantico-syntactic change (Lexical-derivation) that creates a different argument structure must be accompanied by morphological derivation. For any newly created verb to operate as a functional predicate, its categorial identity—that of a newly formed thematic role-assigner—must be realized through overt morphology. It is in this sense, then, that the verbalizer morpheme can be considered an overt ‘verb marker’ rather than simply a carrier of grammatical inflections.

- |         |  |  |
|---------|--|--|
| (11) a. | *ének-t-ünk<br>song-PAST-1PL/INDEF       | * <b>lunch</b> -t-unk<br>lunch-PAST-1PL/INDEF      |
| b.      | ének-el-t-ünk<br>song-VBZ-PAST-1PL/INDEF | <b>lunch</b> -ol-t-unk<br>lunch-VBZ-PAST-1PL/INDEF |

Additional evidence that supports this claim comes from the data in (12). As can be seen, Hungarian uses the same (homophonous) set of grammatical inflections in the nominal possessive paradigm (a) and the verbal paradigm (b). Since the inflections themselves can and do attach to bare noun stems such as *ének*, *csók*, *dance* in (a), it cannot be readily explained why the same forms would need an empty ‘carrier’ for the same, surface homophonous grammatical inflections in predicate formation (b). It seems, rather, that the verbalizer serves to express morphologically the structural identity of the derived verb complex. It is the overt verbalizer that marks an otherwise incomplete, defective lexical head as a complete and syntactically functional predicate. And thus, it is the overt verbalizer that defines and spells out the meaning difference between, for example, ‘my song’ and ‘I’m singing’ in (12).

- |         |   |  |  |
|---------|---|--|--|
| (12) a. | ének-em<br>song-POSS/1SG<br>‘my song’             | csók-od<br>kiss-POSS/2SG<br>‘your kiss’              | <b>dance</b> -ünk<br>dance-POSS/1PL<br>‘our dance’             |
| b.      | ének-el-em<br>song-VBZ-PRES/1SG<br>‘I am singing’ | csók-ol-od<br>kiss-VBZ-PRES/2SG<br>‘you are kissing’ | <b>dance</b> -el-ünk<br>dance-VBZ-PRES/1PL<br>‘we are dancing’ |

In terms of the Matrix Language Frame Model (Myers-Scotton 2002), the presence of the verbalizer satisfies a well-formedness condition of the Matrix Language (Hungarian) that provides the morphosyntactic frame in both monolingual and bilingual new verb-formation. The Matrix Language-specific requirement for the structure and morphological expression of newly created verbs is part of speakers’ Generalized Lexical Knowledge in the mental lexicon. The Uniform Structure Principle specifies that all newly formed predicates must have a uniform structure – that of a morphologically complex construction of type N+VBZ (in both monolingual and bilingual verb formations), or V+VBZ (only in bilingual verb formation), with the overt verbalizer marking the derived verb complex as syntactically active. The fact that in bilingual verb formations the Matrix Language verbalizer can combine with Embedded Language lexemes of category N or V (see finite and non-finite verb forms, phrasal verbs in (6) through (8)) suggests that ultimately it is the mixed, Matrix Language + Embedded Language constituent—the bilingual verb complex as a whole—that undergoes congruence checking with the Matrix Language Generalized Lexical Knowledge about overt marking of newly formed verbs.

In sum, bilingual verb formation is both similar to and different from monolingual new verb formation. The basic similarity is that both types of novel predicate formations are morphologically derived, with the monolingual and foreign base forms obligatorily taking the derivational verb marker. The pattern of new verb formation through overt morphological marking is in line with the overall typology of Hungarian—in this agglutinative, free word order language grammatical and semantic functions tend to be expressed through morphological means (e.g. agreement, case, semantic roles, aspect, Aktionsart, causative). The main difference lies in that the verbalizer has a wider range of application in bilingual new verb formation than in monolingual innovations. In creating bilingual verbs, the verbalizer is productive with alien bases of verbal and nominal category, whereas in indigenous novel derivations, it is restricted to nouns. This difference might be explained either in terms of grammaticalization or lexical polysemy of the verbalizer. However, an analysis of this issue, including the role of the verbalizer’s semantic properties in interaction with indigenous vs. alien bases is beyond the scope of this study. In the remainder of the paper, I will discuss how the bilingual child develops adult-like grammar of codeswitching in dealing with bilingual verb formation.

## 5. Method

### 5.1. Subject

The subject of the study is a Hungarian-English bilingual child living in the U.S. The child was born in Hungary and heard Hungarian from birth from both parents, who are native speakers of Hungarian. The child was first exposed to English at the age of 1;5 when her family moved to the U.S. The principal home language spoken to the child has always been Hungarian, but over the years, code-switching and English have become part of the linguistic repertoire used in the household. By the time of the first data collections (age 3;7), the child's stronger language was English.

### 5.2. Data

The data come from 30 hours of naturalistic bilingual conversations tape-recorded over a period of 7 years, from age 3;7 to age 11;3. The interactions between the child and members of her family were recorded in the child's home. The recordings range in length from 15 to 60 minutes. For the purpose of this paper, the corpus of data was divided in two sets, corresponding to two long periods of observation. Stage One (20 hours) includes recordings between the age of 3;7 and age 5;10, while Stage Two (10 hours) ranges from age 6;8 to age 11;3. The data were transcribed, and patterns of bilingual verb formation, that is morphological integration of English verbs into Hungarian, were examined across the two stages of observation.

## 6. Findings

Table 1 compares the production of Embedded Language verbs in the child's Hungarian-English codeswitching data at Stages One and Two. Two patterns stand out from the findings. First, there was a marked developmental progress in target-like production of the verbalizer. At Stage One, 93.5% (86/92) of English Embedded Language verbs occurred without the requisite Hungarian Matrix Language verbalizer. At Stage Two, a sharply reverse pattern showed that 95.5% (105/110) of English verbs carried the verbalizer as required in the adult grammar of bilingual verb formation. The other noteworthy fact is the significant increase of verbal switches over time; at Stage Two, the relative frequency of verbal switches was over twice as high as at Stage One. These results suggest that bilingual verbs are acquired gradually and relatively late, and the emergence of the overt verb marker on English Embedded Language verbs is related to an increase in the child's verbal switches.

Table 1. *Production of the Hungarian verbalizer on English verbs across Two Stages*

	Stage One (3;7-5;10) (20 hrs)		Stage Two (6;8-11;3) (10 hrs)	
	N	%	N	%
Total N of EL verbs	92	100	110	100
EL verb without verbalizer	86/92	93.5	5/110	4.5
EL verb with verbalizer	6/92	6.5	105/110	95.5

Table 2 indicates that the child's grammar regarding other aspects of bilingual verb production is largely adult-like from early on. With respect to English Embedded Language forms, singly-occurring verb stems occurred most frequently as a base for the bilingual verb, just as in adult codeswitching; in a few instances, non-finite verb forms, phrasal verbs, and complex predicates from English were used to create bilingual verbs. Examples are in (13) through (18). The only non-adult like construction in the child's early data involved the use of English verbs in their past tense form. In the discussion, I will

return to this finding. As far as verb inflectional morphology is concerned, the child made only a few errors. At Stage One, 90.2% (83/92) of the English Embedded Language forms were inserted into Hungarian with the Matrix Language-appropriate grammatical inflections (agreement, tense); by Stage Two, this percentage increased to 98.2% (108/110). These findings suggest that child gradually builds up the complex structure of bilingual verbs. In the development of adult-like codeswitching of verbs, she produces grammatical inflections (for morphosyntactic integration) well before she masters the derivational verbalizer morpheme (for derivational integration, or overt verb marking). In the next section, I consider possible explanations for the late development of the verbalizer morpheme in the bilingual child's production.

Table 2. *Production of Embedded Language verb forms and Matrix Language inflections*

Embedded Language verb forms	Stage One (N out of 92)	Stage Two (N out of 110)	Total (N out of 202)
Embedded Language simple verbs			185
stem with ML infl.	71	96	
stem without ML infl.	4	1	
past tense form with ML infl.	6	1	
past tense form without ML infl.	1	0	
present participle form with ML infl.	0	1	
past participle form with ML infl.	0	2	
past participle form without ML infl.	1	1	
Embedded Language phrasal verbs			7
stem+particle with ML infl.	1	0	
stem+particle without ML infl.	3	0	
stem with ML infl. + particle	1	1	
past tense form + particle with ML infl.	1	0	
Embedded Language complex verbs			10
stem with ML infl.	3	7	
ML infl. on Embedded Language forms			
supplied	83/92 (90.2%)	108/110 (98.2%)	191/202 (94.6%)
missing	9/92 (9.8%)	2/110 (1.8%)	11/202 (5.4%)

- (13) Vol-t-ak    **words**-ok    ami-k    **missing**-el-t-ek  
 be-PAST-PL    words-PL    that-PL    missing-VBZ-PAST-3PL  
 'There were words that were missing.'  
 (S2:11;3)
- (14) Az-ért    vagy-ok    magyar,  
 that-CAUSE    be-PRES/1SG    Hungarian  
 mert    ott    **born**-ol-t-am  
 because there born-VBZ-PAST-1SG  
 'I'm Hungarian, because I was born there.'  
 (S2:11;3)

- (15) A Naomi már ki-**found-out**-Ø-t-a  
 the Naomi already PV/out-found-out-Ø-PAST-3SG/DEF  
 ‘Naomi has already found it out.’  
 (S2:3;7)
- (16) Amikor **take**-Ø-t-ünk egy **nap**-et  
 when take-Ø-PAST-1PL/INDEF a nap-ACC  
 ‘When we took a nap.’  
 (S1:4;2)
- (17) Akkor mindig a **left road**-ot kell **take**-el-ni  
 then always the left road-ACC must take-VBZ-INF  
 ‘Then you always have to take the left road.’  
 (S2:11;3)
- (18) **Marble**-ra **turn**-ol-t ki.  
 marble-SUBLAT turn-VBZ-PAST/3SG/INDEF PV/out  
 ‘It turned out marble.’  
 (S2:11;3)

## 7. Discussion

Why is the Hungarian verbalizer morpheme initially absent on codeswitched verbs? One possibility could be that the child has not acquired the verbalizer yet, and the attested errors result from difficulty with derivational verb formation in general, rather than bilingual verb formation in particular. Given that monolingual Hungarian-speaking children acquire the denominal verbalizer around age two (Clark 1993, MacWhinney 1985), failure to produce derived monolingual verbs in a target-like manner at her age would suggest a considerable delay in the acquisition of Hungarian. A closer examination of the data, however, indicated no errors in her production of verbs derived from Hungarian base forms. As shown in (19) and (20), she correctly uses the denominal verbalizer at the time of the earliest recordings, at age 3;7. Apparently, errors in verb marking are limited to bilingual verb formation.

- (19) Be-viz-ez  
 PV/PERF-water-VBZ/PRES/3SG/INDEF  
 ‘[He] is making me wet.’  
 (S2:3;7)
- (20) Firká-l-ok.  
 scribble-VBZ-PRES/1SG/INDEF  
 ‘I’m scribbling.’  
 (S2:3;7)

Another potential reason for the absence of the verbalizer could be cross-linguistic influence from English, manifested in the form of ‘composite codeswitching’ (Myers-Scotton 2002). Under this scenario, the child treats English Embedded Language lexemes as nouns—in line with Moravcsik’s claim—but verbalizes them following English well-formedness conditions of denominal verb formation—that is, through zero-derivation. However, (21) through (24) argue against this explanation and the assumption that the child applies a single strategy of borrowing all English lexemes as nouns. Some forms are clearly taken in as verbs, with a few showing ‘double morphology’ of past tense marking, as in (21) and (22).

- (21) Csak ki-**fell**-Ø-t ez  
 just PV/out-fell-Ø-PAST/3sg this  
 ‘This just fell out.’  
 (S1:3;7)

- (22) Csak a **Miss Christine** **saw-Ø-t-a**, és **nobody else**  
 only the Miss Christine saw-Ø-PAST-3SG/DEF and nobody else  
 ‘Only Miss Christine saw it, and nobody else.’  
 (S1:3;7)
- (23) És az Orsi-val **live-Ø-t-ünk** meg a Gabi-val  
 and the Orsi-COMIT/with live-Ø-PAST-1PL and the Gabi-COMIT/with  
 ‘And we lived with Orsi and Gabi.’  
 (S1:5;10)
- (24) Szeret-n-ém meg-**hear-Ø-ni**  
 like-COND-1SG PV/PERF-hear-Ø-INF  
 ‘I’d like to hear it.’  
 (S1:5;10)

A third possibility for the omission of the verbalizer in codeswitching is that the child treats English forms as verbs and at the same time assumes that the verbalizer only operates on nominal forms—as in monolingual denominal verb formation. Under this assumption, neither ambiguous zero-derived Embedded Language forms ((25) and (26)), nor unambiguous Embedded Language verbs (27) would need to be ‘changed’ into verbs.

- (25) **Read-Ø-ek** **book-s-ok-at**  
 read-Ø-PRES/SG/INDEF book-PL-PL-ACC  
 ‘I’m reading books.’  
 (S1:4;2)
- (26) A Ken meg-**wet-Ø-t-e**  
 the Ken PV/Perf-wet-Ø-PAST-3SG/DEF  
 a **golden brown hair-em-et**  
 the golden brown hair-POSS/1SG-ACC  
 ‘Ken has made my golden brown hair wet.’  
 (S1:4;2)
- (27) Én akar-om meg-**sing-Ø-ni**  
 I want-PRES/1SG/DEF PV-sing-Ø-INF  
 a Mr. F-nek a **song-já-t**  
 the Mr. F-DAT the song-POSS/3SG/ACC  
 ‘I want to sing Mr. F’s song.’  
 (S1:5;10)

In sum, the conclusion one seems driven to is that the child starts out with a conservative hypothesis that only lexical items with the features [+Hungarian], [+N] can and must take the verbalizer morpheme in verb formation. In the child’s grammar, the verbalizer is initially underspecified for the features of [+ Foreign], [+V], and English Embedded Language elements occur without the requisite verb marking morpheme. As the child acquires greater competence in both languages and figures out that bilingual verbs have a complex morphological structure in which Embedded Language lexemes must be overtly marked for their verbal status, non-adult like verb switches disappear from her production. Interestingly, it appears to take a long time before the child refines and reorganizes her knowledge of the features of the Matrix Language denominal verbalizer, and extends its use to English Embedded Language lexemes. It is possible that semantico-syntactic complexity associated with the features of the derivational verb formation morpheme, and structural complexity of the entire bilingual verb add sufficient difficulty to cause a delay in the production of adult-like switches. Further, insofar as these data reflect general properties of child language acquisition, they seem to support a lexicalist approach to learning (e.g. Clahsen 1992), where developmental changes in the grammar are linked to the availability of particular lexical items in the environmental input. Accordingly, the late development of target-like bilingual verbs can be associated with the fact that initially (including Stage One of data collection) codeswitching was reportedly rare in the child’s environment. In light of previous research (e.g. Myers-Scotton 2002, Van Hout &

Muysken 1994) indicating that verbs are generally less readily borrowed than nouns, it may be that switched verbs were particularly scarce in the input the child was exposed to in the early years of her bilingual development. The fact, however, that inflectional morphology appeared on Embedded Language verbs much earlier than did the verbalizer morpheme suggests that positive environmental input containing verb switching is more necessary for the development of the verbalizer and the related bilingual verb structure. Not only is the pattern of morphological development—inflectional morphemes emerging before derivational morphemes—consistent with that found in monolingual acquisition (Berman 1995, Clark 1993), but it also indicates that strategies of lexical creativity, such as implicated in bilingual verb formation, are rule-governed and largely determined by typological characteristics of the Matrix Language in monolingual and bilingual production alike.

## 7. Conclusion

This paper investigated verb integration in Hungarian-English language contact. Drawing on evidence from adult bilingual speech, it was demonstrated that Hungarian uses a derivational verbalizer morpheme to form bilingual complex predicates out of English nominal and verbal base forms. I suggested that, due to a typologically-based well-formedness condition of Hungarian, the verbalizer serves as a ‘verb marker’ whose function is to express the categorial status of all newly-formed predicates through overt morphology. The paper also aimed to explore whether bilingual verb formation represents an area of difficulty in child bilingual development. The findings suggested that it takes a while before the child learns how to form complex bilingual verbs correctly; initially, codeswitched verbs occurred without the requisite verbalizer morpheme, indicating incomplete lexical learning. It was argued that for adult-like verb switching to occur abstract features of the verbalizer need to be refined and expanded from monolingual denominal derivation to bilingual verb formation. The late development of the verb formation morpheme was attributed to factors such as structural complexity of bilingual verbs, lack of copious input for verb switching, and cross-linguistic influence from English.

## References

- Berman, Ruth. 1995. Word-formation as evidence. *Proceedings of BUCLD*, ed. by Dawn MacLaughlin & Susan McEwen, 19.82-95. Somerville, MA: Cascadilla Press.
- Bolonyai, Agnes. 1997. Hungarian/English corpus.
- Clark, Eve. 1993. *The lexicon in acquisition*. Cambridge: Cambridge University Press.
- Clahsen, Harald. 1992. Learnability theory and the problem of development in language acquisition. *Theoretical Issues in language acquisition: Continuity and change in development*, ed. by Jürgen Weissenborn, Helen Goodluck, & Thomas Roeper. 53-76. Hillsdale, NJ: Lawrence Erlbaum.
- Clyne, Michael & Eugenia Mocnay. 1999. Zur ungarisch-deutsch-englischen dreisprachigkeit in Australien. *Sprachtheorie und sprachliches Handeln*, ed. by K. Bührig & Y. Matras. 159-169. Tübingen: Stauffenburg.
- Dressler, Wolfgang & Mária Ladányi. 2000. Productivity in word formation (WF): A morphological approach. *Acta Linguistica Hungarica*, 47.103-144.
- Kenesei, István, Robert Vago, & Anna Fenyevesi. 1998. *Hungarian*. London: Routledge.
- Kontra, Miklós. (ed.) 1995. *Túl a Kecegárdán/Beyond Castle Garden. An American dictionary of the Calumet region*, comp. by Andrew Vázsonyi. Budapest: Teleki László Alapítvány.
- Kovács, Magdolna. Code-switching and language shift in Australian Finnish in comparison with Australian Hungarian. Åbo: Åbo Akademi University Press.
- MacWhinney, Brian. 1985. Hungarian language acquisition as an exemplification of general rules of language acquisition. *The cross-linguistic study of language acquisition 2: Theoretical issues*, ed. by Dan Slobin, 1069-1155. Hillsdale, NJ: Lawrence Erlbaum.
- Moravcsik, Edit. 1975. Borrowed verbs. *Wiener linguistische Gazette* 8.3-30.
- Muysken, Pieter. 2000. *Bilingual speech: A typology of code-mixing*. Cambridge: Cambridge University Press.
- Myers-Scotton, Carol. 2002. *Contact linguistics: Bilingual encounters and grammatical outcomes*. Oxford: Oxford University Press.
- Van Hout, Roland & Pieter Muysken. 1994. Modeling lexical borrowability. *Language Variation and Change* 6.39-62. Cambridge: Cambridge University Press.

# **ISB4: Proceedings of the 4th International Symposium on Bilingualism**

edited by James Cohen, Kara T. McAlister,  
Kellie Rolstad, and Jeff MacSwan

**Cascadilla Press   Somerville, MA   2005**

## **Copyright information**

ISB4: Proceedings of the 4th International Symposium on Bilingualism  
© 2005 Cascadilla Press, Somerville, MA. All rights reserved

ISBN 978-1-57473-210-8 CD-ROM  
ISBN 978-1-57473-107-1 library binding (5-volume set)

A copyright notice for each paper is located at the bottom of the first page of the paper.  
Reprints for course packs can be authorized by Cascadilla Press.

## **Ordering information**

To order a copy of the proceedings, contact:

Cascadilla Press  
P.O. Box 440355  
Somerville, MA 02144, USA

phone: 1-617-776-2370  
fax: 1-617-776-2271  
sales@cascadilla.com  
www.cascadilla.com

## **Web access and citation information**

This paper is available from [www.cascadilla.com/isb4.html](http://www.cascadilla.com/isb4.html) and is identical  
to the version published by Cascadilla Press on CD-ROM and in library binding.