Abstract morphology in code-switching and language change

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1. Introduction
2. Code-Switching Constraints
3. Inflectional Morphology in Historical Code-Switching Data
4. Functional heads and argument structure
5. Conclusion
Research Questions

1. What can language mixing patterns tell us about language processing and language change?

2. What can a model of modern oral CS tell us about historical written CS?

3. What can inflectional morphology in CS tell us about the role of functional heads?
Code-Switching Constraints
“CS tends not to produce utterances that contain monolingually ungrammatical sentence fragments.“

“Discovery of the mechanisms enabling such ‘grammatical’ CS is the major goal of current research. Central questions include locating permissible switch sites and ascertaining the nature (hierarchical or linear, variable or categorical) of the constraints on switching.“

(Poplack 2001a, p. 2062)

- Distinction between lexical and functional categories (Abney 1987).
- Only complements of functional heads are constrained.
- Specifics seem unclear. Theory does not match empirical data.
MacSwan et al. (2014). *Grammatical theory and bilingual codeswitching*.

- CS grammar is just like any other grammar; the only constraints are those of UG.
- Grammars are formally blind to the languages they generate.
- Not a CS theory; intended as a “program”, analogous to Minimalist Program. No testable hypotheses.

In a bilingual CP the distribution of languages is asymmetrical

Matrix Language (ML) \(\rightarrow\) syntactic frame
Embedded Language (EL) \(\rightarrow\) content words, islands
1. Syntax

The Morpheme-Order Principle

In ML+EL constituents consisting of singly occurring EL lexemes and any number of ML morphemes, surface morpheme order (reflecting surface syntactic relations) will be that of the ML.

→ Within a mixed constituent word order comes from the ML.
2. Morphology

The System Morpheme Principle

In ML+EL constituents, all system morphemes which have grammatical relations external to their head constituent (i.e. which participate in the sentence’s thematic role grid) will come from the ML.

→ ML morphology indicates the argument structure in a bilingual clause.
The 4-M-Model

• helps to explain why the MLF model works the way it does.
• is not a code-switching model but a model of morpheme classification applicable to language in general.
• divides morphemes into four groups according to semantic and syntactic information they add to the clause.
Four morpheme types

1. **Content morphemes**
   - *Jim*
   - *like -s*
   - *Sally ‘s*
   - *eye -s*

2. **Early system morphemes**
   - *Jim*
   - *like -s*
   - *Sally ‘s*
   - *eye -s*

3. **Late system morphemes (bridges)**
   - *Jim*
   - *like -s*
   - *Sally ‘s*
   - *eye -s*

4. **Late system morphemes (outsiders)**
   - *Jim*
   - *like -s*
   - *Sally ‘s*
   - *eye -s*
Outsiders indicate argument structure:

Puella  vide \(-t\)  flor \(-em\)

\begin{itemize}
  \item SUBJECT-VERB AGREEMENT
  \item CASE MARKING
\end{itemize}
“[T]he distribution of outsider late SMs should be the most defining feature of Classic CS” (Myers-Scotton & Jake 2009)

**System Morpheme Principle**
In mixed constituents, all outsider morphemes are supplied exclusively by the ML of the clause.

!! Not true for Latin case markers in historical CS: We also find EL case marking. (cf. Auer & Muhamedova 2005, McLelland 2004)

Q: What about verbal inflection and case assignment?
Inflectional Morphology in Historical Code-Switching
Macaronic Sermons (ca. 1400-1450)  
(MS Bodley 649, ed. Horner 2006)  
Luther’s *Tischreden* (1530s)  
(Weimarer Ausgabe 1912)

Substantial amount of intrasentential code-switching  
→ precondition for applying the MLF model

Recent addition: Aurifaber’s preface to his Table Talk edition from 1567  
→ Explicitly avoiding CS.
Macaronic Sermons

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3. Infl. Morphology
4. Functional heads
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(MS Bodley 649, f. 43r ; Horner 2006, 185 and Wenzel 1994, 276)
Vnam partem huius *cumpas*, scilicet benedictam deitatem, he set perfecte in vno puncto beatitudinis. ṃis was piȝt so sadlich in ṃis puncto quod nulla miseria huius mundi, no sikenes ne mischef myȝt hit touche ne meue. Altera parte istius *cumpas*, sua humanitate, he drow ṃis circulum vite. ṃis parti he drow aboute in hoc mundo in muche woo, payn, and travaill.

One leg of this compass, his blessed divinity, he placed perfectly at the center of his holiness. This was set so firmly at this point that no misery of this world, no sickness or misfortune, could touch or move it. With the other leg of this compass, his humanity, he drew this circle of life. This leg he drew around in this world in much woe, pain, and travail.
Das ist peccatum in Spiritum Sanctum. Sic kompt man ex secunda tabula in primam. Quando autem sentis, es sey vnrecht, vnd machst bos gewissen draus, hoc non est peccatum in Spiritum Sanctum; sed quando peccatur vnd macht noch ein gutt gewissen draus, hoc est peccatum in Spiritum Sanctum.

(Tischreden, 1. Band, Sammlungen Veit Dietrichs und Rörers, p. 168)
... auf Bitte des Königs von Egypten Ptolomei Philadelphi ...

Three kinds of “Genitive“ marking:
des Königs – ML case markers on D and N
von Egypten – ML prepositional Dative phrase
Ptolomei Philadelphi – EL case marking on proper name
Dative after preposition

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Two kinds of Dative marking:
diesem – ML case marker on D
Tomo – EL case marking on N
Dative as direct object

... und dieneten Baalim ...

Baalim – EL case marking on N (proper name)
Accusative direct object

... ein **Bellum Grammaticale** führten ...

Two kinds of Accusative marking:
ein – ML case marking on D
Bellum – EL case marking on N
... durch die Wenden und Longobarder, die Italiam zerstört haben ...

Italiam – EL case marking on N (geogr. name)
Variation in Aurifaber

Genitive:
... Doctor Martin Luthers Leere ...
... der leere Lutheri ...

Accusative:
... wider diesen Mann Lutherum ...
... durch Doctor Luthern ...
[Vnam partem huius cumpas, scilicet benedictam deitatem,]

Dir. Obj.

[he]_Subj. [set]_V [perfecte] [in vno puncto beatitudinis]_Abl. Loc.

[bis]_Subj. [was piȝt]_V [so sadlich] [in bis puncto]_Abl. Loc.

[quod]_Conj. [nulla miseria huius mundi, no sikenes ne mischef]_Subj. [myȝt hit touche ne meue]_V.
S-V-Agreement

[Altera parte istius cumpas, sua humanitate,]\textsubscript{Abl.Instr.}

[he]\textsubscript{Subj.} [drow]\textsubscript{V} [bis circulum vite]\textsubscript{Dir.Obj.}

[bis parti]\textsubscript{Dir.Obj.} [he]\textsubscript{Subj.} [drow aboute]\textsubscript{Vfin}

[in hoc mundo]\textsubscript{Abl.Loc.} [in muche woo, payn, and trauail]\textsubscript{Adverbial of manner/Abl.Mod.}

(De celo querebant, f.43)
S-V-Agreement

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[Das]_{Subj.} [ist]_{V} [peccatum in Spiritum Sanctum].

[Sic] [kompt]_{V} [man]_{Subj.} [ex secunda tabula in primam].
Quando autem sentis,
es sey vnrecht,
vnd machst bos gewissen draus,
hoc non est peccatum in Spiritum Sanctum;
sed quando peccatur
vnd macht noch ein gutt gewissen draus,
hoc est peccatum in Spiritum Sanctum.

Indicating Argument Structure in Bilingual Clauses
Late outsiders make argument structure transparent (Myers-Scotton 2008, 26).

- Relation between subject and predicate is marked only once, on the IP head (or via affix hopping on V).
- Relation between verb and phrasal complements is marked morphologically on all DP elements in Latin and German (in Middle English it is indicated syntactically via word order; exception: pronouns).
Late outsiders

... in mixed DPs:

- Case marking on the N (lexical head) can come from the EL in historical CS.
- Case marking on the D (functional head) always comes from the ML (or remains empty if the ML does not require an overt D element)
Late outsiders

... in **mixed** IPs:

- Inflection on a non-finite V (lexical head) can come from the EL in historical CS.

- Inflection on I (functional head), indicating S-V agreement, always comes from the ML.
Conclusion
The same kind of Latin EL case marking in all texts:

• Very few instances in the Sermons: ML predominantly Latin, so not a lot of opportunity for Latin EL marking to appear.

• More instances in Table Talk. ML predominantly German.

• Surprisingly many instances in Aurifaber‘s preface. ML German, except for about 5 Latin quotes.
The functional heads of I and D seem to be the relevant nodes for marking argument structure in accordance with ML morpho-syntactic requirements.

Case marking on the NP elements is influenced by Latin EL. If there is an overt DP head in a mixed constituent, the D element needs to appear in the ML.

The (prescriptive?) Latin influence on the NP elements in CS texts is synchronically relevant but does not leave any lasting imprint on the vernacular.
• The “Functional Head Constraint“ might be about the heads themselves more than about their complements.

• The MP without the Matrix Language cannot account for the observed patterns, especially the restriction concerning D heads (see also Parafita Couto & Stadthagen-Gonzalez 2017)

• The MLF model can account for most of the data, but the definition of late outsiders is not precise enough to account for the differences between case/concord and agreement marking.
What’s the point of all this?

The MLF model is based on the processing of syntactic structures in the bilingual mind. Applying its core assumptions also to written (historical) CS can

• enhance our understanding of the interaction between abstract structure and pragmatic considerations in specific bilingual settings
• show us which elements are resistant to L2 influence and which ones are more vulnerable synchronically
• shine a light on what is essential for CS over time
THANK YOU FOR YOUR ATTENTION

References


