GCOE PROGRAM WORKSHOP
MULTILINGUALISM AND CODE SWITCHING IN NETHERLANDS AND CANADA

INTRASENTENTIAL CODESWITCHING OF ENGLISH-JAPANESE BILINGUAL CHILDREN

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Simultaneous Bilingual Children’s Language Use

- **Background**
  - The number of simultaneous bilingual children is increasing because of interethnic / international marriage.

- **Problems**
  - Simultaneous bilingual children’s language use after L1A have not studied enough.
  - Intrasentential codeswitching of bilingual children have not documented and analysed enough.

This study will focus on preschool and school age simultaneous bilingual children’s intrasentential codeswitching.
Intrasentential Codeswitching

- Intrasentential codeswitching
  - The use of two languages in a sentence
    - ex) バスール no conversation て the appropriate?
    - (Is the conversation at bath time appropriate?)

- Studies on Codeswitching (CS)
  - In 1960s: intersentential CS from sociolinguistic aspects
    - (Fishman, 1965)
  - In 1970s: intrasentential CS from grammatical aspects
    - (Pfaff, 1979)
  - In 1980s: syntactic structure (Poplack, 1980)
  - In 1990s: language processing (Myers-Scotton, 1992)
Equivalence Constraint

- **Poplack (1980):** “CS occurs at points where juxtaposition of two languages does not violate a syntactic rule of either language.”
  - Syntactic rules of two languages are maintained.
  - Structural symmetry of two languages

**Ex) CS:** I told him that pa’que la trajera ligenro.

E: I told him that so that he would bring it fast.
S: (Yo) le dije eso pa’que (el) la trajeraligero.
Joshi (1985):

- **Matrix Language (ML)**: supplying the main grammatical frame of a sentence
- **Embedded Language (EL)**: content element(s) embedded into ML
  - structural *asymmetry* of two languages
Frame-Content Hypothesis

- Azuma (1993)
  1. planning frame-building stage
    - in ML
    - Closed-class items (ex. preposition)
  2. content-word insertion stage
    - in ML and EL
    - Open-class items (ex. noun, verb, adverb)
Matrix Language Frame Model

- **Myers-Scotton (1992)**
  - content morpheme / system morpheme
  - **ML:**
    1. the word order of a sentence
    2. all system morphemes having grammatical relations external to their head
      - ex) She likes...
  - **EL:** Distinction of “EL” and “EL Island”
    - EL: one EL morpheme
    - EL Island: some EL morphemes (ex: EL phrase)
    - ex) ofuro no conversation tte appropriate?
    - sixteen words de different datta no?

The 4-M model
- Content morpheme ex) book
- 3 system morphemes
  - Early system morpheme ex) books, look out
  - Bridge system morpheme ex) book of John, John’s books
  - Outsider system morpheme ex) The dog likes the bones.

The abstract level model
- Speaker’s intentions go to
  1. Lexical—conceptual structure level
  2. Predicate-argument structure level
  3. Morphological realization

And appear on the surface.
How are the intrasentential codeswitching uttered by young English-Japanese simultaneous bilingual children?
Analytical Framework

- Language processing model
  - Syntactic structure between English and Japanese are different in many aspects.
- ML/ EL & EL island
- Grammatical category (for EL analysis) / Morpheme (for EL island analysis)
- The abstract level model & The 4-M model (for language processing analysis)
4. Corpus: data & participants

- **Data**
  - Corpus based on natural conversations of 4 English-Japanese families in Vancouver (1.5-2 hours per family)

- **Participants**
  - 6 Children: Born in Vancouver
    - L1: Father (English), Mother (Japanese)
    - OPOL (One Parent – One Language Approach)
    - Age: 4 school-age boys & 2 preschool girls
    - Name: A-G5, A-G2, B-G3, C-G1, C-4yrs, D-4yrs
CS Frequency

- CS frequency is quite low.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>138</td>
<td>4.1%</td>
</tr>
<tr>
<td>A-G5</td>
<td>11</td>
<td>1.7%</td>
</tr>
<tr>
<td>A-G2</td>
<td>24</td>
<td>4.7%</td>
</tr>
<tr>
<td>B-G3</td>
<td>44</td>
<td>6.3%</td>
</tr>
<tr>
<td>C-G1</td>
<td>24</td>
<td>3%</td>
</tr>
<tr>
<td>C-4yrs</td>
<td>22</td>
<td>5.2%</td>
</tr>
<tr>
<td>D-4yrs</td>
<td>13</td>
<td>4%</td>
</tr>
</tbody>
</table>
### ML/EL Language Pair

<table>
<thead>
<tr>
<th></th>
<th>ML: Japanese EL: English</th>
<th>ML: English EL: Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>90.2%</td>
<td>9.8%</td>
</tr>
<tr>
<td>A-G5</td>
<td>81.8%</td>
<td>18.2%</td>
</tr>
<tr>
<td>A-G2</td>
<td>58.3%</td>
<td>37.5%</td>
</tr>
<tr>
<td>B-G3</td>
<td>88.4%</td>
<td>11.6%</td>
</tr>
<tr>
<td>C-G1</td>
<td>87.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>C-4yrs</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>D-4yrs</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
ML/EL Language Pair (cont’d)

- **ML: Japanese, EL: English**
  - Kore zenbu same day ni shita. (A-G2)
    (I did all of them on the same day.)
  - Kougeki ha, ano, English. (B-G3)
    (The attack is, well, in English.)

- **ML: English, EL: Japanese**
  - Because it’s yasai. (A-G2)
    (Because it’s vegetable.)
## EL vs. EL Island

<table>
<thead>
<tr>
<th></th>
<th>EL</th>
<th>EL Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>71.2%</td>
<td>28.8%</td>
</tr>
<tr>
<td>A-G5</td>
<td>83.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td>A-G2</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>B-G3</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>C-G1</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>C-4yrs</td>
<td>79.1%</td>
<td>20.9%</td>
</tr>
<tr>
<td>D-4yrs</td>
<td>72.7%</td>
<td>27.3%</td>
</tr>
</tbody>
</table>
Minna, ano, eeto, Tuesday five o’clock kara, Wednesday no twelve o’clock, zutto hanasenai. (B-G3)
(Well, everyone cannot talk all the time from Tuesday five o’clock to Wednesday twelve o’clock.)

- EL: Wednesday
- EL Island: Tuesday five o’clock, twelve o’clock
EL: Grammatical category

- 73% of EL is **noun**.

<table>
<thead>
<tr>
<th></th>
<th>Noun</th>
<th>Verb</th>
<th>Discourse Marker</th>
<th>Adjective</th>
<th>Interrogative Pronoun</th>
<th>SUM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL</strong></td>
<td>73%</td>
<td>12.2%</td>
<td>7.9%</td>
<td>4.3%</td>
<td>2.6%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(84)</td>
<td>(14)</td>
<td>(9)</td>
<td>(5)</td>
<td>(3)</td>
<td>(115)</td>
</tr>
</tbody>
</table>

- kaizoku no **story**. (C-4yrs)
  (the story of pirates)

- Soshitara **white ni change**. (B-G3)
  (Then, I’ll change into white.)
87% of EL Island is **noun phrase**.

<table>
<thead>
<tr>
<th></th>
<th>Noun Phrase</th>
<th>Prepositional Phrase</th>
<th>others</th>
<th>SUM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL</strong></td>
<td>87%</td>
<td>4.3%</td>
<td>8.7%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(40)</td>
<td>(2)</td>
<td>(4)</td>
<td>(46)</td>
</tr>
</tbody>
</table>

Sonotoki ha **sixteen dollar haratta**. (B-G3)

(There, I paid sixteen dollars.)

Skating class de **onnaji no ko**. (B-G3)

(the child who is together at the skating class)
Nouns/Noun phrases appeared in EL are strongly related to EL (compared to ML).

<table>
<thead>
<tr>
<th>EL</th>
<th>Theme</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Food</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>9</td>
</tr>
<tr>
<td>Japanese</td>
<td>Meal at home</td>
<td>7</td>
</tr>
</tbody>
</table>
EL: English / Theme: Food

**Indian food suki jya nai.** (C-4yrs)
(I don’t like Indian food.)

EL: English / Theme: School

**Kindergartens, koko.** (C-G1)
(Kindergartens were here.)

EL: Japanese/ Theme: Meal at home

**You need ohashi?** (C-G1)
(You need chopsticks?)
Intrasentential CS uttered by young English-Japanese simultaneous bilingual children

- CS frequency is low.
  - Their sentences are mostly constructed in one language.
  - They develop the two languages enough to make a sentence in one language

- “ML:Japanese, EL:English” pattern is frequent.
  - Need to use English EL in making a sentence?

- Most of EL / EL island are nouns / noun phrases.

- Nouns/Noun phrases appeared in EL are strongly related to EL (compared to ML).
  - This seems the reason why EL noun/noun phrase appears on the surface.


