The Course of V-V Compound Acquisition in Child Japanese

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Introduction

- This paper reports new findings of a language development study examining V-V compound verbs in Japanese by Japanese-speaking children.
- Japanese is a language that has V-V compounds (henceforth, VVCs) (Kageyama 1993).
- VVCs are productively observed in Japanese, Korean, Mandarin Chinese and so force, while they are hardly observed in English and French (Kageyama 2014).

Research questions

(1) a. What course of VVC acquisition do children undergo?
b. What kinds of VCCs do children produce?

Previous Researches

- Okubo (1967), Murata (1970), and Maeda & Maeda (1996) among others demonstrate that the VVCs produced by children show very similar patterns despite divergent input.

- VVCs which involve geminates
  (a) hip-paru [pull-stretch] (drag) (Okubo 1967)
  (b) but-tukaruru [hit-attach] (catch on) (Murata 1970)
  (c) bukk-koura-wa [hit-break] (break) (Okubo 1967)
  (d) hik-kaku-pu [pull-scratch] (scratch) (Okubo 1967)
  (e) e-hik-kakaru [pull-hand] (be caught) (Okubo 1967)

- VVCs whose V2s are motion verbs
  (a) tobi-dasu [fly-bring-out] (fly out) (Okubo 1967)
  (b) moti-ageru [hold-raise] (lift up) (Okubo 1967)
  (c) nage-dasu [throw-bring-out] (throw out) (Okubo 1967)
  (d) kimi-tamu [bit-attach-to] (bite to) (Okubo 1967)
  (e) bura-sageru [dangle-descend] (hang down) (Okubo 1967)

- VVCs whose V2 is a motion verb were produced by nearly all children.

Interim Summary

- This suggests a potential acquisition order of VVCs.
  (a) All children produced VVCs from the age of two.
b. The earliest VVCs to appear are those which involve geminate consonants such as buk-kowasu (< bu-but-kowasu) 'hit-break'.
c. VVCs whose V2 is a motion verb were produced by nearly all children.

Problems to be solved

- However, the exact order has yet to be revealed.
- In order to clarify whether or not the aforementioned characteristics are correct, we need to verify other children’s production.

Research databases

- CHILDES database (MacWhinney 2000, Oshima-Takane 1998)
- Utilizing CLAN in order to extract data from CHILDES database

Theoretical Background

The characteristics of VCCs in Japanese are as follows:

- Akita (2014) reports there is VVCs which involve geminates due to regressive assimilation.
  (2a) bun-naguru- 'beat violently' (< bun- 'hit' + naguru- 'beat')
  (2b) tuk-komoru- 'thrust in' (< tuk- 'prick' + kom- 'put in')
  (2c) yop-parawu- 'get drunk' (< yow- 'get drunk' + haraw- 'brush off')

- V2 comprising VCCs is largely motion verbs.
  (3a) -dasu (bring out) e.g., tobi-dasu [fly-bring-out] (fly out)
  (3b) -kumu (into) e.g., hik-kumu [pull-into] (retire to)
  (3c) -ageru (raise) e.g., moti-ageru [hold-raise] (lift up)
  (3d) -sageru (descend) e.g., bura-sageru [dangle-descend] (hang down)
  (3e) -tuku/tukeru (attach) e.g., kimi-tuku [bit-attach to] (scratch)

Proposals

First, I propose that the three patterns presented in (6) can also be observed in other Japanese-speaking children’s production.

<table>
<thead>
<tr>
<th>Child's name</th>
<th>Relative frequency</th>
<th>Significance probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tai</td>
<td>0.774</td>
<td>p &lt; .05</td>
</tr>
<tr>
<td>Sumihare</td>
<td>0.595</td>
<td>p &lt; .01</td>
</tr>
<tr>
<td>Child (unified by Miyata and Maeda 1996)</td>
<td>0.489</td>
<td>p &lt; .01</td>
</tr>
</tbody>
</table>

Second, the fact that children produce VVCs which involve geminate consonants in the earliest stage of acquisition, is also supported from a quantitative perspective (binomial test, p < .05 (Snyder 2007))

(b) tuku (attach to) (2;3) > kut-tuku (attachment to) (2;5)
  (c) dasu (bring out) (2;4) > tobi-dasu (jump out) (2;7)

Third, all VVCs whose V2s are motion verbs appear later than the V2 used as a single-word verb. (11) is Aki’s, (12) is Tai’s, and (13) is Sumihare’s data.

(11a) tuku (attach to) (2;3) > kut-tuku (attachment to) (2;5) / hit-tuku (attachment to) (2;7)
(12a) dasu (bring out) (2;4) > tobi-dasu (jump out) (2;7) / hami-dasu (stay onto) (2;7)
(13a) tuku (attach to) (2;3) > kut-tuku (attachment to) (2;5)
(13b) dasu (bring out) (2;4) > tobi-dasu (jump out) (2;10)

Fourth, While the VVCs produced by children are observed in adult speech, child-directed adult speech included a variety of VVCs not observed in child speech.

Subjects

<table>
<thead>
<tr>
<th>Child's name</th>
<th>Age</th>
<th># of session</th>
<th># of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aki</td>
<td>1;05-7-3;00:00</td>
<td>56</td>
<td>14,553</td>
</tr>
<tr>
<td>Tai</td>
<td>1;05-7-3;00:29</td>
<td>75</td>
<td>23,048</td>
</tr>
<tr>
<td>Sumihare</td>
<td>1;05-7-3;11:01</td>
<td>88</td>
<td>29,187</td>
</tr>
<tr>
<td>Sumihare</td>
<td>0;01-3;6-11:28</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

Total
219 66,788

Summary

- I propose the following course of VVC acquisition. Children produce...

- VVCs which involve geminate consonants and whose V2 is a motion verb.
- VVCs which do not involve geminate consonants and whose V2 is a motion verb.

Consequently, I would support Brown’s (1973) proposal, from the viewpoint of acquisition of Japanese VVCs, that children gradually acquire words (i.e., single word > complex word).