ELICITING HERITAGE SPEAKERS’ PRODUCTION

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**SOME TERMINOLOGY**

- **Heritage speaker (HS):** A person who grew up hearing (and possibly speaking) a language, who can understand and perhaps speak it to some degree, but who now feels more at home in another, more dominant language.

- **Baseline:** the language of exposure for a HS, *not necessarily the same as the standard* language.
PROBLEM

Some heritage speakers are reluctant to communicate in their language, which makes data collection more difficult

Solutions:

- focus on comprehension
- constrained production designed to elicit comparable data
OUTLINE OF THE PRESENTATION

A new methodology for HS production study

First results: baseline and heritage Mandarin
INTRODUCING A NEW METHODOLOGY FOR HS STUDIES
WHAT WE HAVE BEEN DOING SO FAR

Testing heritage speakers’ comprehension and overall receptive skills

Testing heritage speakers’ narrative ability (a very comfortable pedagogical strategy)
WHAT WE CAN ADD

Heritage language as an interactive tool: building dialogue and communication skills at different levels
FRUITCARTS

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Consider a scenario where Ann tells Bob where to move an apple:

**Mono-clausal**

A: Move the apple to the right
B: ok

**Bi-clausal**

A: Take the apple
B: ok
A: Move it to the right
QUESTIONS

What determines how speakers structure their message into clauses?

When do speakers decide to structure their message?

Do language specific properties affect message structure across clauses?

Does the degree of attainment (full acquisition vs. incomplete acquisition) message structure across clauses?
Speaker describes a map to a confederate who moves objects on the screen (Gómez Gallo et al. 2007, 2010)

Speaker produces spontaneous instructions to the confederate

Confederate does not give verbal feedback
SEE HOW IT WORKS
<table>
<thead>
<tr>
<th>Language</th>
<th>Word order</th>
<th>Left periphery</th>
<th>Right periphery</th>
<th>Case marking</th>
<th>Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>SVO</td>
<td>weak</td>
<td>weak</td>
<td>no</td>
<td>minimal</td>
</tr>
<tr>
<td>Spanish</td>
<td>SVO/VSO</td>
<td>strong</td>
<td>weak</td>
<td>minimal</td>
<td>rich</td>
</tr>
<tr>
<td>Turkish</td>
<td>SOV/OSV</td>
<td>weak</td>
<td>strong</td>
<td>rich</td>
<td>rich</td>
</tr>
<tr>
<td>Mandarin</td>
<td>SVO/SOV</td>
<td>strong</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Russian</td>
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<td>strong</td>
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<td>medium</td>
</tr>
</tbody>
</table>
CHINESE FRUITCARTS

Differences between native and heritage speakers of Mandarin in controlled production
CONTROLLED PRODUCTION

Mandarin Chinese, baseline: Beijing dialect

Ongoing: 13 native speakers and 11 heritage speakers of advanced proficiency in spoken Mandarin (however, five subjects do not have the knowledge of formal registers)
BASIC FACTS ABOUT WORD ORDER IN MANDARIN

§ Basic word order is SVO, but attributes including relative clauses precede the head noun
§ Nouns occur with classifiers
§ Use of numerals with nouns is associated with indefiniteness
§ Locative expressions: in most cases, location phrases are positioned before the VP
§ Serial verbs are widely used, and some serialization correlates with the presence of the ba-construction
# NATIVE SPEAKERS VS. HERITAGE SPEAKERS

<table>
<thead>
<tr>
<th></th>
<th>Native speakers</th>
<th>Heritage speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proxy construction</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Numerals</td>
<td>Less likely</td>
<td>More likely</td>
</tr>
</tbody>
</table>
| Word order                     | 1) ba-construction  
2) Attributes before head noun | 1) Rigid SVO  
2) Attributes after head noun |
| Verb complexity                | Verb compound   | Single verb      |
Proxy: **noun filling the gap after the relative clause when the real head precedes the relative clause.**

For instance,

-move the small triangle with a ball on its corner to Beijing.

REAL HEAD          RELATIVE CLAUSE          PROXY
NO PROXIES IN HS PRODUCTION
NUMERAL PHRASES

In Mandarin, numeral phrases include numerals and classifiers:

一 个 三角形 ‘a triangle’

yi      ge  sanjiaoxing
NUM   CLF    NOUN

Generally, numeral phrases are considered indefinite

In our corpus, native controls used numerals less, esp. when the theme expression had modifiers (hence, was more likely to be definite)

Heritage speakers show lack of awareness of this subtle semantic feature
WORD ORDER

• Controls use the ba-construction, which is problematic for heritage speakers
• Controls use prenominal relative clauses, heritage speakers use postnominal relatives
BA-CONSTRUCTION

The canonical word order in Mandarin is SVO. However, there are other alternative word orders due to various semantic and pragmatic needs. One of these alternatives: \( ba \)-construction

§ Syntactically, the function of \( ba \)-construction is to move the postverbal NP to a preverbal position:

\[
\begin{align*}
\text{NP}_1 \text{ V } \text{NP}_2 & \rightarrow \\
\text{NP}_1 + ba + \text{NP}_2 + \text{Compound Verb}
\end{align*}
\]
**BA-CONSTRUCTION**

Semantically, “the ba-construction expresses an object being affected, dealt with, or disposed of.” (Li & Thompson, 1972; Huang, Li & Li, 2009)

Typically used to describe the object of spatial displacement (or change of location) (Zhang, 2001)

Extremely appropriate in the fruitcart situations
THE USE OF BA-CONSTRUCTION: NATIVE SPEAKERS

§ Native speakers tend to use ba-construction to both complex object and location, e.g.,

把角上有菱形的小正方形放到北京。

BA corner has diamond ADN small square put Beijing.

‘Put a small square that has a diamond at its corner in Beijing.’

放到: verb compound, literally “put and arrive”
THE USE OF BA-CONSTRUCTION:
HERITAGE SPEAKERS

Poor control of *ba*-construction
Instead, heritage speakers use multiple short utterances with canonical SVO word order, e.g.,

在北京 放一个正方形. 正方形 角上 有一个菱形.
to Beijing put a square. Square’s corner has a diamond.

Is a small one.

‘Put a square in Beijing. There is a diamond at the corner of the square. It is a small one.’
RELATIVE CLAUSE PLACEMENT: NATIVE SPEAKERS

Relative clauses (RC) precede the head noun

Most native speakers strictly follow this rule:

\[
[\text{RC} \text{角上 有 菱形 的 小}] [\text{Head Noun 正方形}]
\]

corner has a diamond de small square
‘a small square that has a diamond at its corner’
RELATIVE CLAUSE PLACEMENT: HERITAGE SPEAKERS

Heritage speakers tend to put the relative clause after the head noun, e.g.,

在 北京，放一个大的三角形 边上 有一个点的
In Beijing, put a big triangle the hypotenuse has a dot de

In Beijing, put a big triangle that has a dot on its hypotenuse

Possible reasons:
--late planning in production, due to the overall complexity of the theme description
--interference from English
VERBS VS. VERB COMPOUNDS

Another difficulty contributing to the lack of *ba*-construction in heritage speakers: use of verb compounds

Heritage speakers show a strong tendency to use simplex verbs in all their constructions
COMPOUND VERBS: CONTROLS VS HSs
“PROOF OF THE CONCEPT”

• The Fruitcart experimental design is an effective method if eliciting production form heritage speakers in such a way that their output is well constrained
LINGUISTIC CONCLUSIONS

• Heritage speakers have problems with creating and maintaining dependencies at a distance:
  – Proxy construction
  – Definiteness/indefiniteness of a DP without overt marking
  – $Ba$-construction
  – Multiple simple clauses without embeddings

• Dependencies at a distance seem problematic for other heritage languages as well, and the Chinese results add new evidence to this observation
LINGUISTIC CONCLUSIONS

• Heritage speakers show transfer effects:
  – no problem with the canonical word order, SVO, but difficulty in word orders that are different from SVO
  – difficulty in relative clause placement

These effects may also be due to interference from English: the deficient areas are exactly the ones where the two languages differ structurally
**Next set of questions**

- Are these observable differences the result of interference from English or do they follow from more general principles of language attrition and change?

- Do the difficulties we observe in heritage speakers follow from the timing problem (online performance) or are they a side effect of a more general language restructuring?
THANK YOU!