**SYNTACTIC ABILITIES OF BILINGUAL AND MONOLINGUAL CHILDREN WITH SLI – DEFINITENESS**

Language Acquisition in Special Circumstances
Dr. Sharon Armon-Lotem
Bar Ilan University

---

**What is definiteness?**

A grammatical marker of a relation (of coordination and differentiation) between:

- **Speaker**
- **Hearer**

(their knowledge about) a referent

---

**Definiteness in adult English (Schaeffer 1997)**

- **Referential definite ‘the’**: the referent is known to both speaker and hearer. Look, there is a parrot and a pigeon in my garden. The parrot is very colorful.
- **Referential indefinite ‘a’ (specific)**: the referent is known only to the speaker. ‘I saw a movie last night’.
- **Non-referential indefinite ‘a’**: the referent is unknown to both the speaker and hearer. ‘I haven’t read a book for weeks’

---

**What makes the referent known to both speaker and hearer?**

- The **speaker** introduces a referent to the **hearer**
- The **speaker** instructs the **hearer** to locate the referent in some shared set of objects (Hawkins 1977)
- **Speaker** knows about the **hearer’s** own knowledge when choosing an article - the concept of non-shared knowledge (self-other differentiation)

---

**Definiteness in English and Hebrew**

<table>
<thead>
<tr>
<th>English</th>
<th>Hebrew</th>
</tr>
</thead>
<tbody>
<tr>
<td>An indefinite article <em>a</em> and a definite article <em>the</em></td>
<td>Only a definite article <em>ha-</em></td>
</tr>
<tr>
<td>The definite article precedes the noun and the modifying adjective: <em>the beautiful boy</em></td>
<td>The definite article, like inflections, is doubled on modifying adjectives: <em>ha-yeladim ha-yafim</em></td>
</tr>
<tr>
<td>Definiteness is a binary feature [<em>ddef</em>] marked on D*</td>
<td>Definiteness is a grammatical monovalent feature [<em>ddef</em>] which can be marked on D*, N* or both (Danon 2001, 2002, 2006)</td>
</tr>
</tbody>
</table>

---

**Definiteness and Referentiality Marking in Syntax (Schaeffer 1997)**

- A referential definite nominal expression is marked on D with the features [speaker] and [hearer].
- A referential indefinite nominal expression is marked on D with the feature [speaker].
- A non-referential indefinite nominal expression is not marked with [speaker] or [hearer] features.

---

Sharon Armon-Lotem
Bar Ilan University
**Definiteness and acquisition**

Bare NP > specificity (marked by the = +specific, explaining overuse of the in specific indefinite contexts) > definiteness (Hawkins 2001)

**Definiteness and acquisition**

(Schaeffer, 1997)

- The acquisition of the concept of non-shared knowledge yields the acquisition of the properties of D.
- Additions of definite articles in referential indefinite contexts (specific) indicate lack of pragmatic knowledge.
- Dropping of the article in referential (definite and indefinite) contexts is due to lack of syntactic knowledge.

**Articles and bilingualism**

- Typological differences in the use of definite and indefinite articles can serve as locus for code interference in bilingual population, since it might requires feature reassembly (Lardiere 2000, 2005).


<table>
<thead>
<tr>
<th></th>
<th>+ref, +def</th>
<th>+ref, -def</th>
<th>-ref, -def</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>Hmong</td>
<td>Jap</td>
<td>Hmong</td>
</tr>
<tr>
<td>the</td>
<td>94</td>
<td>68</td>
<td>19</td>
</tr>
<tr>
<td>a</td>
<td>0</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td>32</td>
<td>54</td>
</tr>
</tbody>
</table>


- Learners across proficiency levels show at least some sensitivity to hearers knowledge (HK), marking [+HK] NPs with the definite article and [-HK] NPs with Ø or the indefinite article.
- For learners whose L1 lacks articles, Ø and the definite article often appear as competing options for the same NP contexts.


“The Article Choice Parameter (for two-article languages):

- A language that has two articles distinguishes them as follows:
  - The Definiteness Setting: Articles are distinguished on the basis of definiteness.
  - The Specificity Setting: Articles are distinguished on the basis of specificity.” (p.12)

“The Fluctuation Hypothesis:

- L2 learners have full access to Universal Grammar (UG) principles and parameter settings.
- L2 learners fluctuate between different parameter-settings until the input leads them to set the parameter to the appropriate value.” (p.16)

“Transfer overrides fluctuation: L2 learners whose L1s have articles should transfer article semantics from their L1 to their L2. The [-article] learners should fluctuate, since they have no parameter setting to transfer.”

L1 Russian – Fluctuation
L1 Spanish – no Fluctuation


Definiteness in Hebrew and Russian (Armon-Lotem, Natalia Brusinenko and Anna Krivorutsky, 2005)

- Definiteness was chosen for this study due to a sharp typological difference between the two languages
- Russian does not mark definiteness by a definite article, whereas Hebrew does.
- Knowing the system in L1 does not facilitate its learning in L2. Rather, the opposite is true.

Use of the Definite article by Russian-Hebrew teenagers (Rom 1999)

- No ceiling effects among subjects even after three years of exposure
- No correlation between length of exposure to L2 (0.5-3 years) and level of success
- The definite article is used more in writing than speech
- Rate of acquisition varies across tasks
- Rate of acquisition varies across categories

Method

Subjects:

- Russian immigrant children aged 10 to 12, who have been exposed to Hebrew for six or seven years
- Three groups of L2 Hebrew children, according to age of arrival (3, 4.5, and 6)
- Two groups of L1 Hebrew controls (aged 10 and 12).
- All children study at the same school and are from middle SES

Two tasks:

- A yes/no judgment task
- A picture elicitation task
May 22, 2013

Findings - Judgment Task

Percentage of correct results: a cross-group comparison

Findings - Picture Elicitation Task

Percentage of correct results: a cross-sectional comparison

Similar results of a negative correlation between success and age were found on the picture elicitation task, with the 3/7 group scoring significantly better then the other two groups.

Conclusion

- Given the young age of arrival for all three groups and the long period of exposure, the differences are striking.
- The major factor for success in L2 acquisition by children is age of first exposure rather than length of residence, difference in learning style, or difference in task.
- For children, the critical period is most critical, though it’s effects might fade away with time.

Articles and SLI

Children with SLI often omit articles in their spontaneous language productions

“Under-specificity of TNS is likely to be related to under-specificity of representation of determiners that appear in the Noun Phrase”

Rice & Wexler (1996)
Percentage of correct use of articles in obligatory contexts in spontaneous utterances:
SLI – 62%  3N – 75%  5N – 90%
Better than verbal inflections, worse than nominal plural, prepositions or –ing)


Scheaffer at al 2003

- Article drop is an indicator of difficulties within the computational system of SLI children (Scheaffer at al 2003).
- In children with SLI (14 Subjects: 3;11-4;10), pragmatic principles develop normally as a function of age, rather than as a function of grammar developmental stage.
- Grammatically, 4-year old children with SLI make errors comparable fo younger normally developing children.

<table>
<thead>
<tr>
<th></th>
<th>SLI</th>
<th>N-MLU</th>
<th>N-AGE</th>
<th>N-2-year olds (Schaeffer, 1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>article drop in sentence鲨鱼</td>
<td>(14/156)</td>
<td>(14/166)</td>
<td>1%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>1%</td>
<td>9%</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>
Spontaneous sample - Summary
- Both TD and At-Risk bilingual children omit the indefinite article in English.
- This error reflects the typological difference between Hebrew and English, and the process of feature reassembly.
- Only the At-Risk children drop the definite article in obligatory contexts in both languages: 8% in English naturalistic, 12% in Hebrew naturalistic data.
- This error resembles Scheaffer at al’s (2003) for English monolingual SLI children.
- Omission of indefinite articles cannot serve as indicator of SLI for English-Hebrew bilinguals.

Definiteness as an indicator of SLI in English-Hebrew bilinguals
- At-risk children omit the definite article in obligatory contexts in both languages: around 8% and 12% in English and Hebrew naturalistic data respectively, but much less in the controlled data.
- This kind of error, as shown by Scheaffer et al (2003), is indicative of SLI in monolingual populations, indicating a difficulty within the computational system.
- Omission of definite articles might serve as an indicator of SLI for English-Hebrew bilinguals.

Another angle on Definiteness
5 conditions:
1. Familiar - David bought a poster and a chair for his room. He hung one of them on the wall. Guess which.
2. Partitive - John wanted to drive his car but something was broken so the car wouldn’t start. What did John have to fix/repair?
3. Specific - John is in his room drawing something. What is it?
4. Predicational - Think of a tennis player. What does he have?
5. Non-referential - Fred wants to have some tea. What can he use to pour the tea in?

Chondrogianni, V. and T. Marinis. To appear. Production of definite articles in typically developing English-speaking children and children with SLI. Ms. – to be obtained from me, Temima

T. Marinis and Chondrogianni, V. submitted. Production and on-line comprehension of definiteness in English and Dutch by monolingual and sequential bilingual children. Ms. – to be obtained from me, Michael

Sharon Armon-Lotem
Bar Ilan University