Chapter 13: First Language Acquisition

LANE 321: Introduction to Linguistics

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Content adapted from Yule (2010)
In one unfortunate but well-documented case, we have gained some insight into what happens when the critical period passes without adequate linguistic input.
Genie

- 1970
- 13 years old
- Spent most of her life tied to a chair in a small closed room.
- Her father was intolerant of any kind of noise and had beaten her whenever she made a sound as a child.
- There had been no radio or television
- Genie’s only other human contact was with her mother who was forbidden to spend more than a few minutes with the child to feed her.
Genie

- She was unable to use language when she was first brought into care.
- However, within a short period of time,
  - began to respond to the speech of others
  - try to imitate sounds
  - syntax remained very simple

Please watch the video titled *Secret of the Wild Child* on halroqi.kau.edu.sa
The process of language acquisition has some basic requirements.
1. A child requires interaction with other language-users in order to bring the general language capacity s/he has into operation.

- Genie
  - We have already seen that a child who doesn’t hear or is not allowed to use language will learn no language.

- Cultural transmission
  - The language a child learns is not genetically inherited, but is acquired in a particular language-using environment.
Basic requirements

2. The child must be **physically capable.**
   - Being able to speak
   - Being able to hear
   - All infants make ‘cooing’ and ‘babbling’ noises during their first year, but deaf infants stop after about six months.
Basic requirements

• So, is hearing enough?
  • In order to speak a language, a child must be able to hear that language **being used**.
  • By itself, however, hearing language sounds is not enough.
Basic requirements

One reported case has demonstrated that,

- with deaf parents who gave their normal-hearing son ample exposure to TV and radio programs, the boy did not acquire an ability to speak or understand English.

- What he did learn very effectively, by the age of 3, was ..... 

- ASL (The language he used to interact with his parents)

- So, the crucial requirement appears to be interaction with others via language.
• Input: The language that an acquirer/learner is exposed to, in contrast to output.

• How do we talk to babies/children?

Caregiver Speech: Speech addressed to young children by the adult(s) or older children who are looking after them.

• Also called Motherese, child-directed speech
Characteristics of Caregiver Speech

• The frequent use of questions
• Exaggerated intonation
• Extra loudness
• Slow rhythm with long pauses
• Simple sentence structure
• A lot or of repetition

Babytalk forms:
  • simplified words (*tummy, nana*)
  • alternative forms, with repeated simple sounds and syllables for things in the child’s environment (*nanna, nono, pee-pee, poo-poo, dada, haw-haw, cocococo, choo-choo*)
Built into a lot of caregiver speech is a type of conversational structure that seems to assign interactive roles to young children even before they become speaking participants.

- MOTHER: Look!
- CHILD: (touches picture)
- MOTHER: what are those?
- CHILD: (vocalizes a babble string and smiles)
- MOTHER: yes, there are rabbits
- CHILD: (vocalizes, smiles looks up at mother)
- MOTHER: (laughs) yes, rabbit
- CHILD: (vocalizes, smiles)
- MOTHER: Yes. (laughs)
The acquisition schedule

- All normal children develop language at roughly the same time, along the same schedule.
- The same applies to biological development and physical activities.
- The biological schedule is very much related to the maturation of the infant’s brain to cope with the linguistic input.
Cooing

- **The first few months**: the child gradually becomes capable of producing sequences of vowel-like sounds (particularly high vowels [i] and [u])

- **4 months**: the ability to bring the back of the tongue into regular contact with the back of the palate – producing sounds similar to velar consonants [k] & [g] (cooing & gooing)

- **5 months**: hear the difference between the vowels [a] and [i] and the syllables [ba] and [ga] -perception skills.
Babbling

- **6-8 months:** sitting up & producing a number of different vowels, consonants, and combinations like *ba-ba-ba* and *ga-ga-ga* (babbling)

- **9-10 months:**
  - recognizable intonation patterns to the consonant and vowel combinations being produced
  - Variation in the combinations (*ba-ba-da-da*)
  - Nasal sounds become common
  - Certain syllable sequences also appear (*ma-ma-ma* & *da-da-da*)
Babbling

10-11 months:

- Standing position
- Capable of using vocalization to express emotions & emphasis.
- More complex syllable combination (ma-da-ga-ba)
- A lot of sound play & attempted imitations.

Note:

- There is substantial variation among children in terms of the age at which particular features of linguistic development occur.
The one-word stage

- 12-18 months.
- Recognizable single-unit utterances
- Single terms are uttered for everyday objects ‘milk’, ‘cookie’, ‘cat’, ‘cup’, and ‘spoon’ [pun]
- Holophrastic (wasa = what's that) (single units not single words)

Holophrastic (utterance): A single form functioning as a phrase or sentence in the early speech of young children

- Produce utterances such as ‘Sara bed’ but not yet capable of producing a more complex phrase.
The two-word stage

- **18-20 months**: vocabulary moves beyond 50 words
- By **2 years old**, children produce utterances ‘baby chair’, ‘mommy eat’
- Interpretation depends on context.
  - *Baby chair* might mean:
    - This is baby’s chair
    - Put baby in chair
    - Baby is in the chair
- Adults behave as if communication is taking place.
- The child not only produces speech, but receives feedback confirming that the utterance worked as a contribution to the interaction.
- By this age, whether the child is producing 200 or 300 words, he or she will be capable of understanding 5 times as many.
Telegraphic speech

- **2-2½ years:**
  - The child produces ‘multiple-word’ speech.
  - Telegraphic Speech

  **Telegraphic Speech**: Strings of words (lexical morphemes without inflectional morphemes) in phrases (daddy go bye-bye) produced by two-year-old children.

  - The child has clearly developed sentence-building capacity & can get the word order correct (‘cat drink milk’, ‘daddy go bye-bye’)
  - A number of grammatical inflections begin to appear.
  - Simple prepositions (in, on) are also used
  - By the age 2½, vocabulary is expanding rapidly + the child is initiating more talk

- **3 years**:
  - Vocabulary has grown to hundreds of words
  - Better pronunciation
The acquisition process

- For most children, no one provides any instruction on how to speak the language.
- Children actively construct, from what is said to them, possible ways of using the language.
- Trying out constructions and testing whether they work or not.
The acquisition process

- So, children acquire language not only by imitating.
- They produce expressions adults never produced.

NOAH: (picking up a toy dog) This is Woodstock.
(He bobs the toy in Adam’s face)
ADAM: Hey Woodstock, don’t do that.
(Noah persists)
ADAM: I’m going home so you won’t Woodstock me.
The acquisition process

- It is also unlikely that adult’s ‘corrections’ are a very effective determiner of how the child speaks.

**Child:** My teacher *held* the baby rabbits and we patted them.

**Mother:** Did you say your teacher *held* the baby rabbits?

**Child:** Yes.

**Mother:** What did you say she did?

**Child:** She *held* the baby rabbits and we patted them.

**Mother:** Did you say she *held* them tightly?

**Child:** No, she *held* them loosely.
The acquisition process

- One important factor in the development of the child's linguistic repertoire is the actual use of sound and word combinations.
  - In interactions with others
  - In word play (p. 176)
    - *I go dis way ... way bay ... baby do dis bib ... all bib ... bib ... dere.*
Developing morphology

- By **2-2½ years**: use of some inflectional morphemes to indicate the grammatical function of nouns and verbs.
- The 1st inflection to appear is -**ing** (*cat sitting, mommy reading book*)
Developing morphology

• The next morphological development is typically the marking of regular plurals, (-s), as in boys and cats.
• The acquisition of the plural marker is often accompanied by a process of overgeneralization.
• The child overgeneralizes the rule of adding -s to form plurals and will talk about foots and mans.
• When the alternative pronunciation of the plural morpheme used in houses (i.e. ending in [-əz]) comes into use, overgeneralization happens again and forms such as boyses or footses can be heard.
• At the same time as this overgeneralization is taking place, some children also begin using irregular plurals such as men appropriately for a while, but then overgeneralize again and producing expressions like some mens and two feets, or even two feetses.
Developing morphology

- Not long after, the use of possessive ‘s’ appears (*mommy’s bag*)
- At about the same time, forms of verb *to be* appear (*is, are, was*)
- At about the same time of the appearance of *was*, irregular verbs (*went, came*) appear.
- Then, the -ed for past tense appears (*played, walked*).
- Once it appears, the irregular verb forms disappear for a while, replaced by overgeneralized versions (*goed, comed*)
- For a period, the -ed inflection may be added to everything (*walkeded, wented*)
- The child works out (after the age of 4) which forms are regular and which are not.
- Finally, the -s marker for 3rd person singular present tense verbs appears with full verbs first (*comes, looks*) then with auxiliaries (*does, has*)
Developing syntax

- Similar evidence against “imitation” as the basis of the child’s speech production has been found in studies of the syntactic structures used by young children.
- A child was asked to say *the owl who eats candy runs fast* and she said *the owl eat candy and he run fast.*
We will look at the development of two structures that seem to be acquired in a regular way by most English-speaking children.

In the formation of questions and the use of negatives, there appear to be three identifiable stages.

The ages at which children go through these stages can vary quite a bit, but the general pattern seems to be that:

- Stage 1 occurs between 18 and 26 months
- Stage 2 occurs between 22 and 30 months
- Stage 3 occurs between 24 and 40 months
The 1st stage

1. Simply add a Wh-form (*Where, Who*) to the beginning of the expression

   e.g.  *Where kitty?*

   *Where Doggie?*

   *Where horse go?*

2. Utter the expression with a rise in intonation towards the end

   e.g.  *Sit chair?*
The 2nd stage

1. More complex expressions can be formed
2. rising intonation strategy continues to be used
e.g. *You want eat?/ See my doggie?*
3. More Wh-forms come into use
e.g. *What book name? / Why you smiling?*
Forming questions

The 3rd stage

1. The required **inversion** of subject and verb in English questions appears

   e.g.  \[ I \text{ can go} \rightarrow \text{Can I go?} \]

   \[ \text{Can I have a piece? / Did I caught it?/ Will you help me?} \]

2. but the Wh-questions do not always undergo the required inversion.

   e.g.  \[ \text{How that opened?/ Why kitty can’t stand up?} \]

3. The 3rd stage questions are generally quite close to the adult model

   e.g.  \[ \text{What did you do? (Memorised as a chunk)} \]
Forming negative

The 1\textsuperscript{st} stage

Involves a simple strategy of putting \textit{no} or \textit{not} at the beginning

e.g. \textit{not a teddy bear}

\textit{no sit here}

\textit{no fall}
The 2\textsuperscript{nd} stage:

1. The additional negative forms \textit{don’t} and \textit{can’t} appear

\textit{e.g.} \textit{I don’t want it}

\textit{You can’t dance}

2. \textit{no} and \textit{not} are increasingly used \textit{in front of the verb} rather than at the beginning of the sentence

\textit{e.g.} \textit{He no bite you}
Forming negative

The 3\textsuperscript{rd} stage

1. The incorporation of other auxiliary forms such as didn’t and won’t
   
   e.g.  \textit{I didn’t caught it, She won’t let go}

2. The typical stage 1 forms disappear.

3. A very late acquisition is the negative form isn’t, with the result that some stage 2 forms (with not instead of isn’t) continue to be used for quite a long time
   
   e.g.  \textit{He not taking it/ This not ice cream}
Developing Semantics

- During the two-word stage children use their limited vocabulary to refer to a large number of unrelated objects.
- **Overextension**: overextending the meaning of a word on the basis of similarities of shape, sound, or size.
  
  e.g. use ball to refer to an apple, an egg, a grape and a ball.

- This is followed by a gradual process of narrowing down.
- **Antonymous relations** are acquired late (After the age of 5)
- The distinction between more/less, before/after seems to be later acquisition.
Thank you