



Chapter 13:

First Language Acquisition



LANE 321:

Introduction to Linguistics

Genie



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

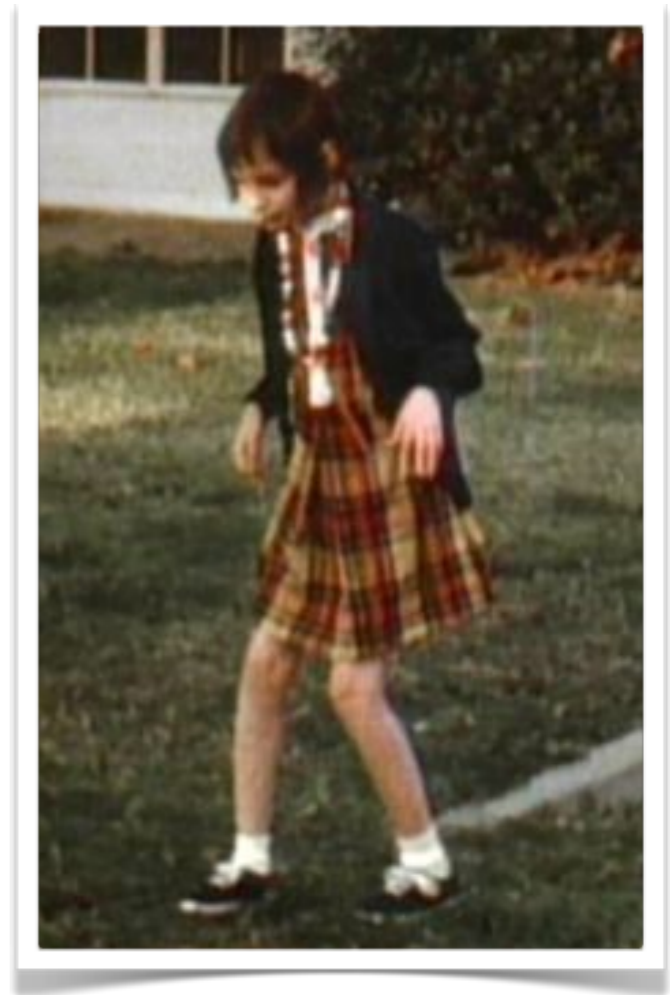


- 1970
- 13 years old
- Spent most of her life tied to a chair in a small closed room.
- Her father was intolerant of any kind of noise and had beaten her whenever she made a sound as a child.
- There had been no radio or television
- Genie's only other human contact was with her mother who was forbidden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



First Language Acquisition



The process of language acquisition has some basic requirements.

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



- **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*

Input



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*)

Input



- 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



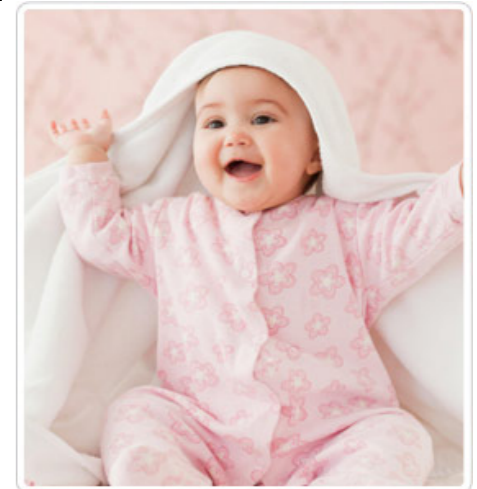
- The first few months: the child gradually becomes capable of producing sequences of vowel-like sounds (particularly high vowels [i] and [u])
- 4 months: the ability to bring the back of the tongue into regular contact with the back of the palate – producing sounds similar to velar consonants [k] & [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)



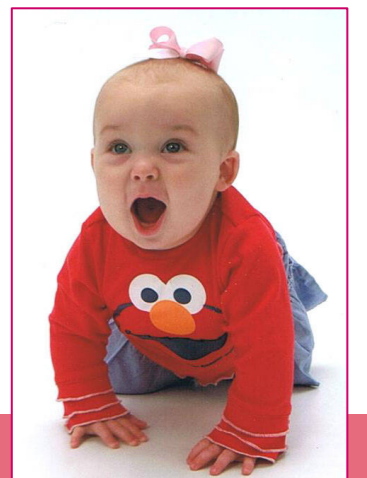
Babbling



- 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)
- 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*
- 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 **holded** 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 **holded** the baby rabbits and we patted them.*

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

*CHILD: No, she **holded** 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.*

Developing syntax



- 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

Forming questions



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?*

Forming questions



The 2nd stage

More complex expressions can be formed

- The rising intonation strategy continues to be used
- More Wh-forms come into use

e.g. *What book name?*

You want eat?

Why you smiling?

See my doggie?

Forming questions



The 3rd stage

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

e.g. *I can go → Can I go?*

- but the Wh-questions do not always undergo the required inversion.
- The 3rd stage questions are generally quite close to the adult model

e.g. *Can I have a piece?*

Did I caught it?

Will you help me?

How that opened?

What did you do?

Why kitty can't stand up?

Forming negative



The 1st stage

Involves a simple strategy of putting **no** or **not** at the beginning

e.g. *not a teddy bear*

no sit here

no fall

Forming negative



The 2nd stage:

- The additional negative forms *don't* and *can't* appear

e.g. *I don't want it*

You can't dance

- *no* and *not* are increasingly used in front of the verb rather than at the beginning of the sentence

e.g. *He no bite you*

Forming negative



The 3rd stage

The incorporation of other auxiliary forms such as *didn't* and *won't*

e.g. *I didn't caught it, She won't let go*

- The typical stage 1 forms disappear.
- 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. *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.

References



Yule, G. (2010). *The study of language*. (4th ed.) Cambridge: Cambridge University Press.



Thank you