

Chapter 13:



First Language Acquisition

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

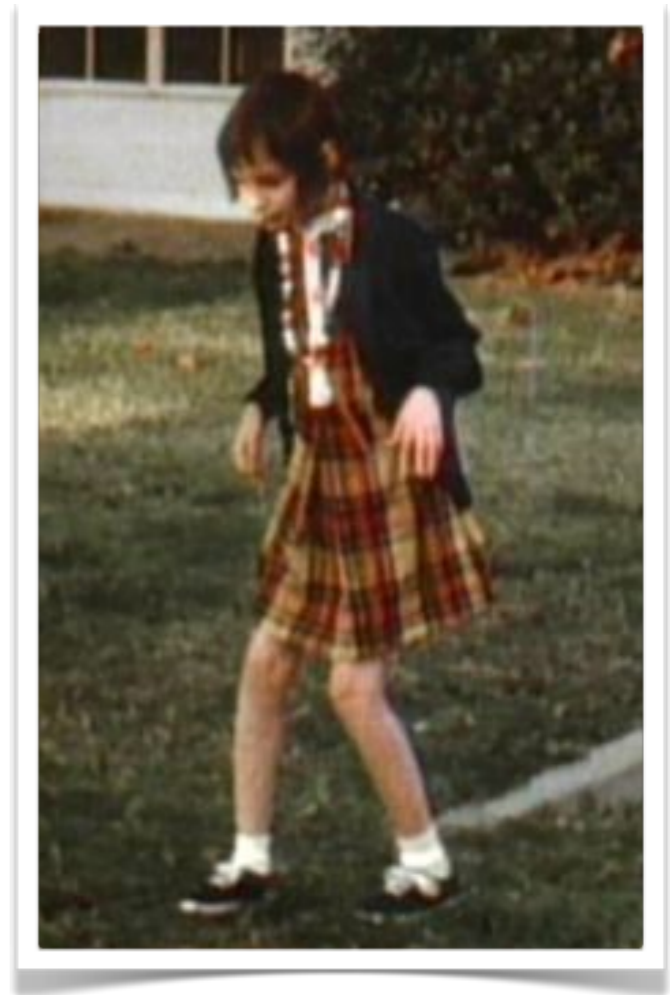


- 1970
- 13 years old
- Spent most of her life tied to a chair in a small closed room.
- Her father was intolerant of any kind of noise and had beaten her whenever she made a sound as a child.
- There had been no radio or television
- Genie's only other human contact was with her mother who was forbidden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



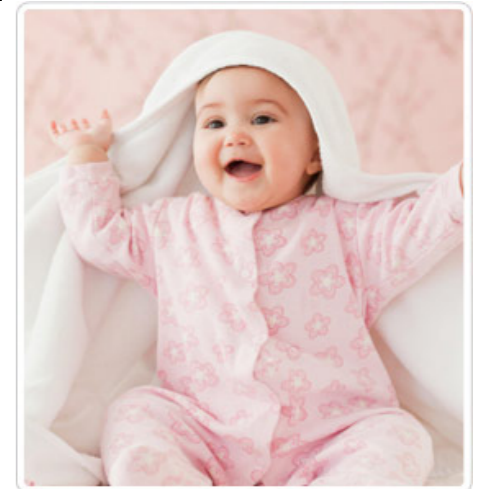
- The first few months: the child gradually becomes capable of producing sequences of vowel-like sounds (particularly high vowels [i] and [u])
- 4 months: the ability to bring the back of the tongue into regular contact with the back of the palate – producing sounds similar to velar consonants [k] &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



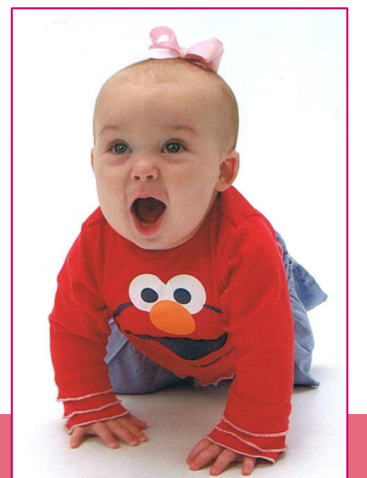
# Babbling



- 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)

**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 **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 3<sup>rd</sup> 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 1<sup>st</sup> 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 2<sup>nd</sup> 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 3<sup>rd</sup> stage

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

e.g. *I can go → Can I go?*

*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. *How that opened? / Why kitty can't stand up?*

3. The 3<sup>rd</sup> stage questions are generally quite close to the adult model

e.g. *What did you do? (Memorised as a chunk)*

# Forming negative



## The 1<sup>st</sup> 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 2<sup>nd</sup> stage:

1. The additional negative forms *don't* and *can't* appear

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

*You can't dance*

2. *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 3<sup>rd</sup> stage

1. 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*

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. *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