

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.

 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.

- 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.

- 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.

#### 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)
- <u>5 months:</u> 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

#### • 10-11months:

- 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

- 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.

- 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.



 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.

- 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 <u>2-2½ years:</u> 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 [-ez]) 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 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 2<sup>nd</sup> 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 3<sup>rd</sup> stage

The required inversion of subject and verb in English questions appears

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e.g. I can go \rightarrow Can I go?
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- ·but the Wh-questions do not always undergo the required inversion.
- •The 3<sup>rd</sup> stage questions are generally quite close to the adult model

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e.g. Can I have a piece?
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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 2<sup>nd</sup> 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 3<sup>rd</sup> 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.

