Chapter 1: Language Learning in Early Childhood

Content adapted from Lightbown and Spada (2006)

What is the purpose of this chapter?

The first three years: Milestones and developmental sequences

- What are developmental sequences?

- The order in which certain features of a language (e.g. negation) are acquired in language learning. Also called developmental stages.

The first three years: Milestones and developmental sequences

- Baby crying

- Cooing sounds

- Babbling

- By twelve months

- By the age of two

- Telegraphic sentences

The first three years: Milestones and developmental sequences

Telegraphic sentences!

• Why are they called telegraphic?

• Because they leave out such things as articles, prepositions, and auxiliary verbs.

• Why are they called sentences?

• Because even though *function words* and *grammatical morphemes* are missing,

  • the word order reflects the word order of the language they are hearing

  • the combined words have a meaning relationship that makes them more than just a list of words.

The first three years: Milestones and developmental sequences

- **Word order:** Kiss baby # baby kiss

- **Creatively combine words:** More outside = I want to go outside again

- **Meaning can be interpreted depending on the situation:**

  - Daddy uh-oh =

    - Daddy fell down

    - Daddy dropped something

    - Daddy please do that funny thing where you pretend to drop me off your lap

The first three years: Milestones and developmental sequences

Developmental stages and cognitive development

Temporal adverbs (e.g. tomorrow, last week) = understanding of time

Understanding > mastery of the linguistic elements (e.g. Distinguishing between singular and plural before adding plural endings.)

Grammatical morphemes

- How do children acquire grammatical morphemes in English?

Longitudinal study # Cross-sectional study

- **Longitudinal study:** A study in which the same participants are studied over a period of time.

- **Cross-sectional study:** A study in which participants at different ages and/ or stages of development are studied.

Grammatical morphemes

Roger Brown's study

- A longitudinal study of the language development of 3 children (Adam, Eve, and Sarah)

- **Finding:** they found that 14 grammatical morphemes were acquired in a remarkably similar sequence
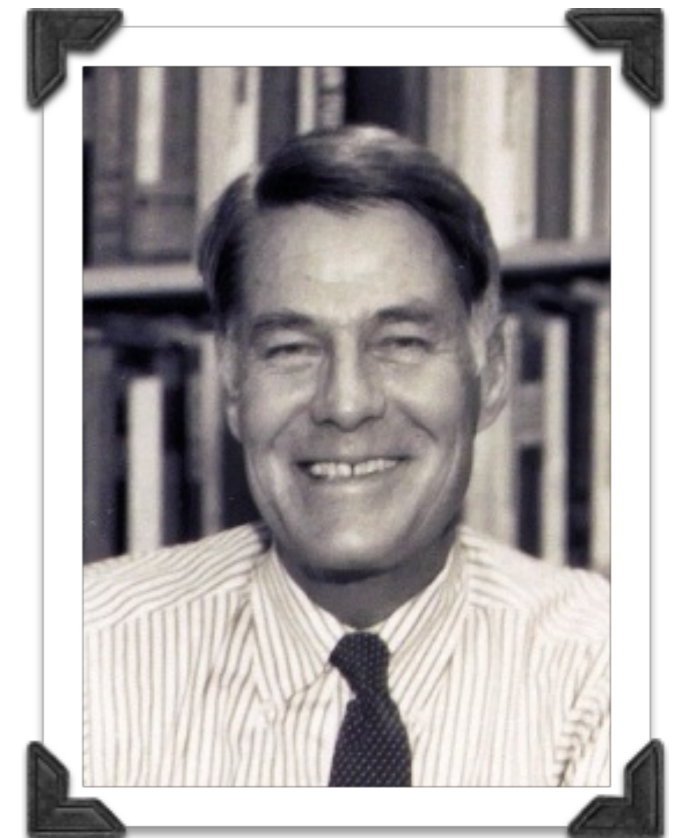
Grammatical morphemes

Present progressive -*ing* (Mommy runn*ing*)

Plural -*s* (Two book*s*)

Irregular past forms (Baby *went*)

Possessive *'s* (Daddy*'s* hat)

Copula (Annie *is* happy)

Article *the* and *a*

Regular past -*ed* (She walk*ed*)

3rd person singular simple present -*s* (She run*s*)

Auxiliary *be* (He *is* coming)

Grammatical morphemes

- A child who had mastered the grammatical morphemes at the bottom of the list was sure to have mastered those at the top (evidence for a developmental sequence or order of acquisition)

- Children didn't acquire the morphemes at the same age or rate

  - **Eve** > mastered all the morphemes before 2.5

  - **Sarah and Adam** > were still working on them at 3.5-4

Grammatical morphemes

Jill and Peter de Villiers' (1973) study

- A cross-sectional study of 21 children

- The study confirmed Brown's longitudinal study

Findings:

- Children who correctly used the morphemes that Adam, Eve, and Sarah had acquired late were also able to use the ones that Adam, Eve, and Sarah had acquired earlier.

- The children mastered the morphemes at different ages, just as Adam, Eve, and Sarah had done, but the order of their acquisition was very similar. They were similar to each other and similar to Adam, Eve, and Sarah.

Grammatical morphemes

Why are these grammatical morphemes acquired in this particular order?

• The frequency of the morphemes in parent's speech

• The cognitive complexity of the meaning of each morpheme

• The difficulty of perceiving or pronouncing them

Most researchers agree that the order is determined by an interaction among a number of different factors

Grammatical morphemes
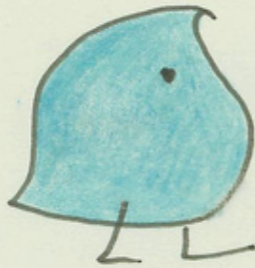
Testing children's knowledge of grammatical morphemes

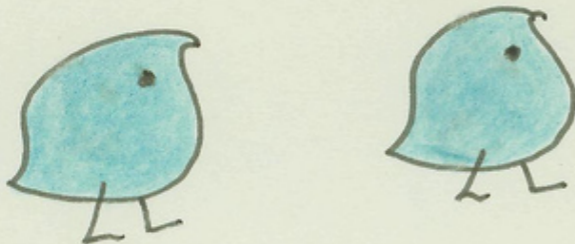**The Wug Test by Jean Berko Gleason**

Grammatical morphemes

The Wug Test by Jean Berko Gleason

Children are shown drawings of imaginary creatures with novel names or people performing mysterious actions.
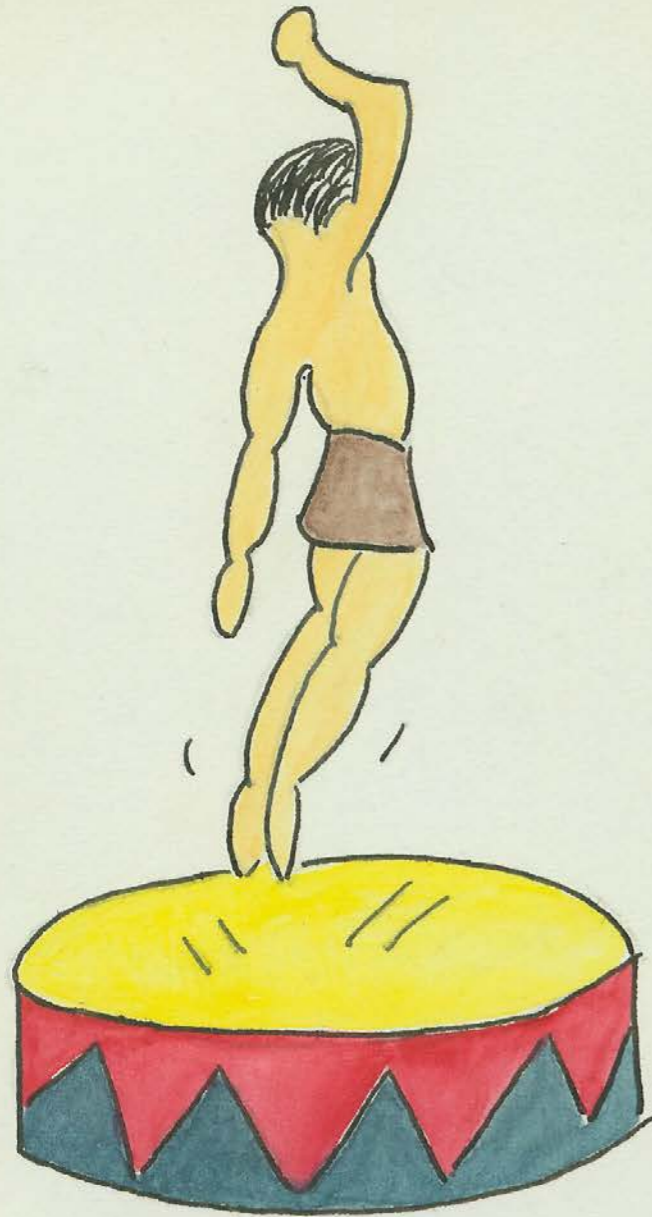
This is a WUG

Now there is another one.
There are two of them.
There are two _____.

This is a man who knows how to BOD.
He is BODDING. He did the same thing
yesterday. What did he do yesterday?
Yesterday he _____.

This is a man who knows how to GLING.
He is GLINGING. He did the same thing
yesterday. What did he do yesterday?
Yesterday he _____.

This is a man who knows how to SPOW.
He is SPOWING. He did the same thing
yesterday. What did he do yesterday?
Yesterday he _____.

Grammatical morphemes

- By completing these sentences with 'wugs' and 'boded', children demonstrate that they know rules for the formation of plural and simple past in English.

- By generalizing these patterns to words they have never heard before, they show that their language is not just a list of memorized word pairs such as book/ books.

Negation

- Children learn the function of negation very early, even at the single word stage.

- Although they understand it and express it with single words and gestures, it takes some time before they can express them in sentences using the appropriate words and word order.
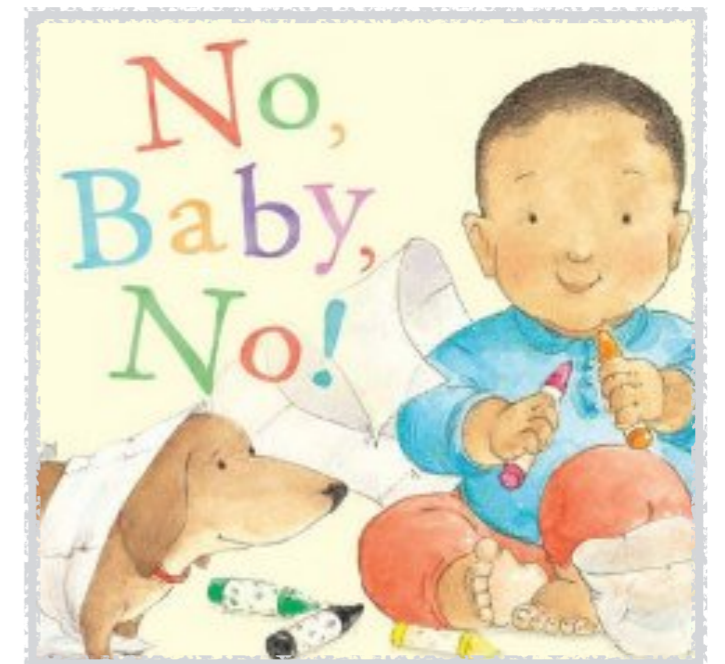
Negation

Stage 1

No. No cookie. No comb hair.

Negation is usually expressed by the word 'no', either all alone or as the first word in the utterance

Stage 2

Daddy no comb hair

Don't touch that!

- Utterances grow longer and the sentence subject may be included.

- The negative word appears just before the verb.

- Sentences expressing rejection or prohibition often use 'don't'

Negation

Stage 3

I can't do it. He don't want it.

- The negative element is inserted into a more complex sentence.

- Children may add forms of the negative other than 'no', including words like "can't" and "don't". These sentences appear to follow the correct English pattern of attaching the negative to the auxiliary or modal verb.

- However, the negative words do not yet vary these forms for different persons or tenses

Negation

Stage 4

- Children begin to attach the negative element to the correct form of auxiliary verbs such as 'do' and 'be':

You didn't have supper. She doesn't want it.

- Even though their language system is by now quite complex, they may still have difficulty with some other features related to negatives.

I don't have no more candies

Questions

There is a predictable order in which the 'wh-words' emerge (Bloom 1991).

- 'What' is generally the first wh- question word to be used. It is often learned as part of a chunk ('Whassat?')

- 'Where' and 'who' emerge very soon (locating and identifying people and objects). This is reinforced by the fact that adults tend to ask children just these types of questions in the early days of language learning (e.g. 'Where is Mommy?', or 'Who is that?')

Questions

- 'Why' emerges around the end of the second year and becomes a favorite for the next year or two!

- Finally, when the child begins to understand manner and time, 'how' and 'when' emerge.

Questions

In contrast to 'what', 'where', and 'who' questions, children sometimes ask the more cognitively difficult 'why', 'when', and 'how' questions without fully understanding their meaning, as the following conversation with a four-year-old clearly shows:

Child: When can we go outside?

Parent: In about five minutes.

Child: 1-2-3-4-5!! Can we go now?

Questions

Stage 1

Children's earliest questions are single words or simple two- or three-word sentences with rising intonation:

Cookie? Mommy book?

At the same time, they may produce some correct questions (correct because they have been learned as chunks):

Where's Daddy? What's that?

Questions

Stage 2

As they begin to ask more new questions, children use the word order of the declarative sentence, with rising intonation.

You like this? I have some?

They continue to produce the correct chunk-learned forms such as 'What's that?' alongside their own created questions.

Questions

Stage 3

Gradually, children notice that the structure of questions is different and begin to produce questions such as:

Can I go? Are you happy?

This stage is called '**fronting**'. Why?

The child's rule seems to be that questions are formed by putting something (a verb form or question word) at the 'front' of a sentence, leaving the rest of the sentence in its statement form.

Is the teddy is tired? Do I can have a cookie?

Why you don't have one? Why you catched it?

Questions

Stage 4

Children begin to use subject-auxiliary inversion. The questions resemble those of stage 3, but there is more variety in the auxiliaries that appear before the subject.

Are you going to play with me?

At this stage, children can even add 'do' in sentences in which there would be no auxiliary in the declarative version of the sentence:

Do dogs like ice cream?

Even at this stage, children seem able to use either inversion or use a wh- word, but not both. Therefore, we may find inversion in 'yes/no' questions but not in wh- questions, unless they are formulaic units such as 'What's that?'

Can he eat the cookie? Where I can draw them?

Questions

Stage 5

Both wh- and 'yes/no' questions are formed correctly.

Are these your boots? Why did you do that? Does Daddy have a box?

Negative questions may still be a bit too difficult.

Why the teddy bear can't go outside?

Questions

Stage 6

Children are able to correctly form all question types

The pre-school years

By the age of four,

• Ask questions, give commands, report events, create stories (using correct word order and grammatical markers)

• Have mastered the basic structure of their language

• Learn vocabulary at the rate of several words a day

• Acquire less frequent and more complex linguistic structures

The pre-school years

- Most of late pre-schoolers' effort is spent on developing their ability to use language in a widening social environment.

- More interaction with unfamiliar adults

- Acquire the aggressive language needed to defend their toys in the playground

- Show that they know the difference between how adults talk to babies and how they talk to each other (can be observed in pretend play using different 'voices')

- Begin to understand how language varies

The pre-school years

- Develop *metalinguistic awareness*

Metalinguistic Awareness: the ability to treat language as an object, e.g. being able to define a word, or to say what sounds make up that word.

- Drink the chair # Cake the eat

- 3 year old # 5 year old

The school years

The school years

School setting brings new opportunities for language development

- Develop more sophisticated metalinguistic awareness (learning to read reinforces this)

  - Understanding that a 'word' is separate from the thing it represents/ Understanding that 'caterpillar' is a longer word than 'train', even though the object it represents is shorter!

  - Knowing that words and sentences can have multiple meanings (gives access to word jokes and riddles)

The school years

- Growth of vocabulary

  - at the rate of several hundreds to a thousand words a year

  - Depends on how much and how widely children read

  - Dee Gardener (2004) suggests that reading a variety of text types is an essential part of vocabulary growth

The school years

- The acquisition of different language registers

Register: A style or way of using language that is appropriate for a particular setting.

- speaking and writing require different registers;

- the register used in writing a research report is different from that used in writing a letter to a friend

- They learn how written language is different from spoken language

- They learn how the language used to speak to the principal is different form the language of the playground

- They learn how the language of a science report is different form the language of a narrative

- Speaking the standard variety in school instead of the ethnic or regional variety that is spoken at home
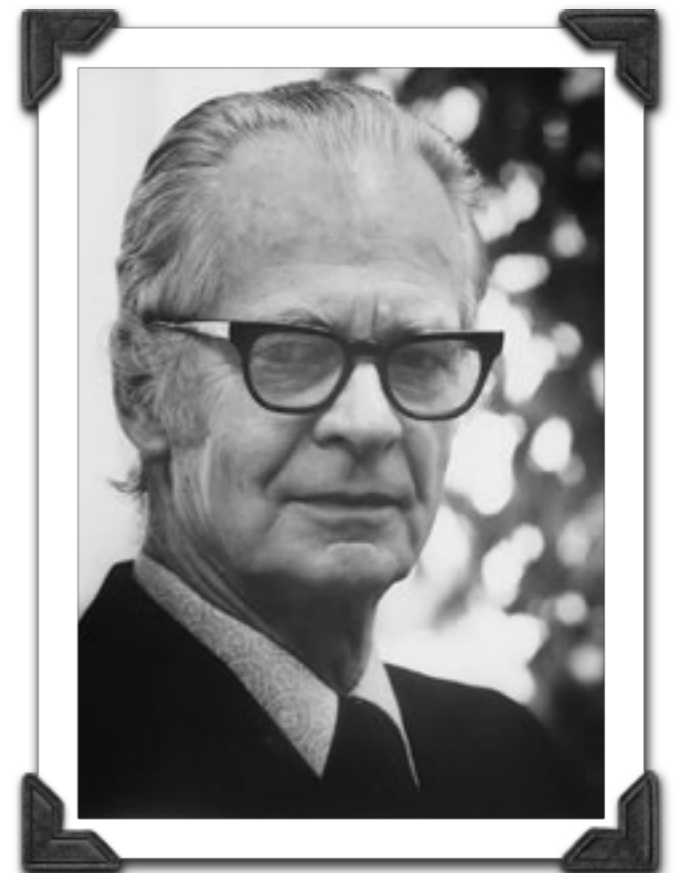
Explaining first language acquisition

Over the past 50 years, 3 main theoretical positions have been advanced to explain language development:

- Behaviorist

- Innatist

- Interactional/ developmental

The behaviorist perspective: Say what I say

- **Behaviorism** was very influential in the 1940s & 1950s

- The best-known proponent: B. F. Skinner

The behaviorist perspective:
Say what I say

- When children imitate the language they hear around them > receive 'positive reinforcement'

- Positive reinforcement = praise or just successful communication

- Thus encouraged by their environment, children continue to imitate and practice these sounds and patterns until they form 'habits' of correct language use

The behaviorist perspective

- This theory gives great importance to the environment as the source of everything the child needs to learn

- The behaviorists viewed imitation and practice as the primary processes in language development

The behaviorist perspective

- **Imitation**: word-for-word repetition of all or part of someone else's utterance.

  Mother: Shall we play with the dolls?

  Lucy: Play with dolls.

- **Practice**: repetitive manipulation of form.

  Cindy: He eat carrots. The other one eat carrots. They both eat carrots.

The behaviorist perspective

Example 1: Peter (24 months) is playing with a dump truck while two adults, Patsy and Lois, look on.

Peter: Get more.

Lois: You're gonna put more wheels in the dump truck?

Peter: Dump truck. Wheels. Dump truck.

(later)

Patsy: What happened to it (the truck)?

Peter: (looking under chair for it) Lose it. Dump truck! Dump truck! Fall! Fall!

Lois: Yes, the dump truck fell down.

Peter: Dump truck fell down. Dump truck.

The behaviorist perspective

Analysis

- 30-40% of his sentences were imitations of what someone else had just said

- His imitations were not random

- He imitated words and sentence structures that were just beginning to appear in his speech

- Once these elements became solidly grounded in his language system, he stopped imitating them and went on to imitate others

- Children appear to imitate selectively.

- The choice of what to imitate seems to be based on something new that they have just begun to understand and use, not only on what is 'available' in the environment.

Example 2: Cindy (24 months) is looking at a picture of a carrot in a book and trying to get Patsy's attention.

Cindy: Kawo? kawo? kawo? kawo? kawo?

Patsy: What are the rabbits eating?

Cindy: They eating … kando?

Patsy: No, that's a carrot.

Cindy: Carrot. (pointing to each carrot on the page) The other … carrot. The other carrot. The other carrot. (a few minutes later, Cindy brings Patsy a stuffed toy rabbit.)

Patsy: What does this rabbit like to eat?

Cindy: (incomprehensible) eat the carrots.

(Cindy gets another stuffed rabbit.)

Cindy: He (incomprehensible) eat carrots. The other one eat carrots. They both eat carrots.

(One week later, Cindy opens the book to the same page.)

Cindy: Here's the carrots. (pointing) Is that a carrot?

Patsy: yes.

The behaviorist perspective

- She remembers the 'language lesson' a week later and turns to the page in the book she hadn't seen since Patsy's last visit

- Like Peter, her imitation and practice appear to be focused on what she is currently 'working on'

The behaviorist perspective

- Support the behaviorists explanation

- The choice of what to imitate and practice seems to be determined by something inside the child rather than by the environment

- The amount of imitation in the speech of other children = less than 10%

Lois: Did you see the toys I brought?

Kathryn: I bring toys? Choo choo? Lois brought the choo choo train?

Lois: Yes, Lois brought the choo choo train.

Kathryn: (reaching for bag) I want play with choo choo train. I want play with choo choo train. (taking out slide). Want play. What's this?

Lois: Oh you know what that is.

Kathryn: Put down on floor. This. I do this.

(Kathryn puts slide on the floor).

Kathryn: (taking out two train cars). Do this. I want do this. (trying to put train together) I do this. I do this.

Lois: OK. You can do it. You can do it. Look I'll show you how.

(Lois puts it together.)

Kathryn: (searching in box) I get more. Get a more. No more choo choo train. Get truck. (taking out truck) Kathryn truck. Where? Where a more choo choo train?

Lois: inside. It's in the box.

Kathryn: A choo choo? (taking out part of train) This is a choo choo train.

The behaviorist perspective

- Like Cindy, Kathryn sometimes repeats herself or produces a series of related 'practice' sentences, but she rarely imitates the other speaker.

The behaviorist perspective

- Thus, children vary in the amount of imitation they do.

- Many of the things they say show that they are using language creatively, not just repeating what they've heard.

The behaviorist perspective

Patterns in language

Overgeneralization

Example:

Randall (36 months) had a sore on his hand

Mother: Maybe we need to take you to the doctor

Randall: Why? So he can doc my little bump?

The behaviorist perspective

Unfamiliar formulas

When familiar language is used in unfamiliar ways

<u>Example:</u>

David is 5 years old. At his sister's birthday party,

Father (raises a grape juice glass): I'd like to propose a toast.

Several minutes later,

David raised his glass and said: I'd like to propose a piece of bread.

The behaviorist perspective

Question formation

<u>Example:</u>

Randall (2 years, 9 months) asked the following question in various situations over the course of a day.

Are dogs can wiggle their tails?

Are those my boots?

Are this is hot?

Randall had concluded that the trick of asking questions was to put 'are' at the beginning of the sentence. (Stage 3 in question development)

The behaviorist perspective

Order of events

Example:

Randall (3 years, 5 months) was looking for a towel.

You took all the towels away because I can't dry my hands

- Children at this stage tend to mention events in the order of their occurrence

  - Towels disappeared > Randall attempted to dry his hands

- So that's what he said first. He didn't yet understand how a word like 'before' or 'because' changes the order of cause and effect.

The behaviorist perspective

- Imitation & practice alone cannot explain some of the forms created by children

- They are not merely repetitions of sentences they've heard from adults

- Children appear to pick out patterns and generalize them to new contexts.

- They create new forms or new uses of words.

- Behaviorism offers a reasonable way of understanding how children learn some of the routine aspects of language, especially at the eraly stages.

- However, children who do little imitation acquire language as fully and rapidly as those who imitate a lot.

- Behaviorism is not a satisfactory explanation for the acquisition of the more complex grammar children acquire.

The innatist perspective: It's all in your mind

- All human languages are fundamentally innate

- The same universal principles apply to all languages

Noam Chomsky

The innatist perspective

- He challenged the behaviorist explanation for language acquisition

He argued that:

- children are biologically programmed for language

- language develops in the child in just the same way that other biological functions develop.

- the environment makes only a basic contribution (the availability of people who speak to the child)

- the child's biological endowment will do the rest

The innatist perspective

- He also argued that the behaviorist theory failed to account for the logical problem of language acquisition

  - the fact that children come to know more about the structure of their language than they could reasonably be expected to learn on the basis of the samples of <u>language they hear</u>)

- What's wrong with the language they hear?

- It includes false starts, incomplete sentences, and slips of the tongue

- Yet they learn to distinguish between grammatical and ungrammatical sentences

The innatist perspective

- children's minds are not blank slates to be filled by imitating language they hear in the environment

- children are born with a specific innate ability to discover for themselves the underlying rules of a language system on the basis of the samples they are exposed to.

- This innate endowment is like a template containing the principles that are universal to all human languages.

- **Universal Grammar**

The innatist perspective

- **What is Universal Grammar (UG)?**

- An innate linguistic knowledge that consists of a set of principles common to all languages
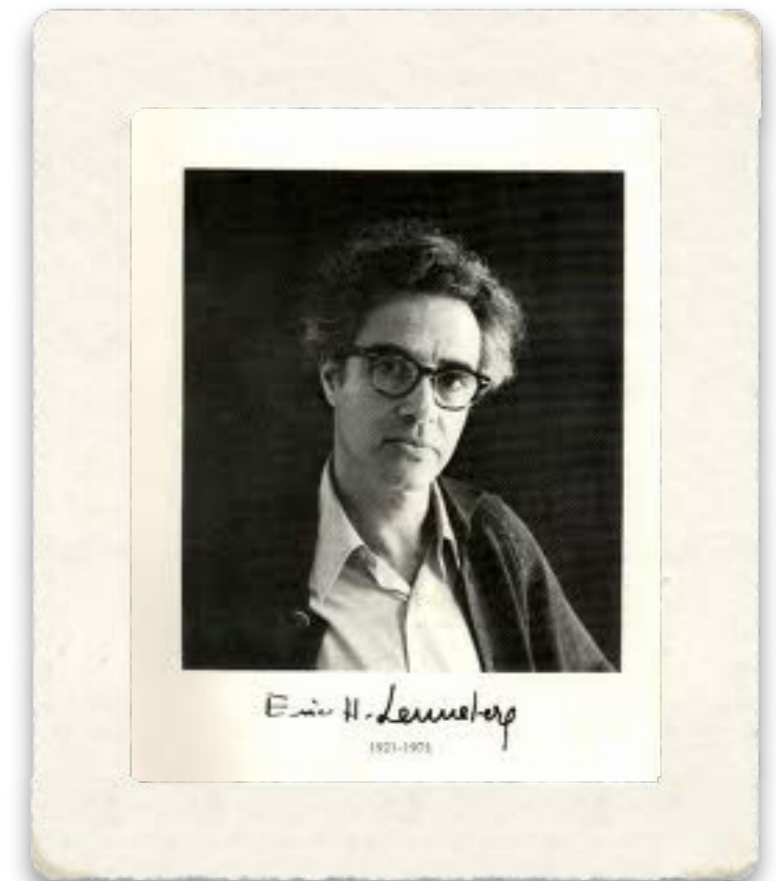
The innatist perspective

- If children are pre-equipped with UG, then what they have to learn is the ways in which the language they are acquiring makes use of these principles.

- Innatists argue that complex grammar could never be learned purely on the basis of imitating and practicing sentences available in the input.

The innatist perspective

The Critical Period Hypothesis

The proposal that there is a limited period during which language acquisition can occur.

- The strong version of the CPH

- The weak version of the CPH

The innatist perspective

The strong version of the CPH

There are biological mechanisms specifically designed for language acquisition and that these cease to be available at or even before puberty
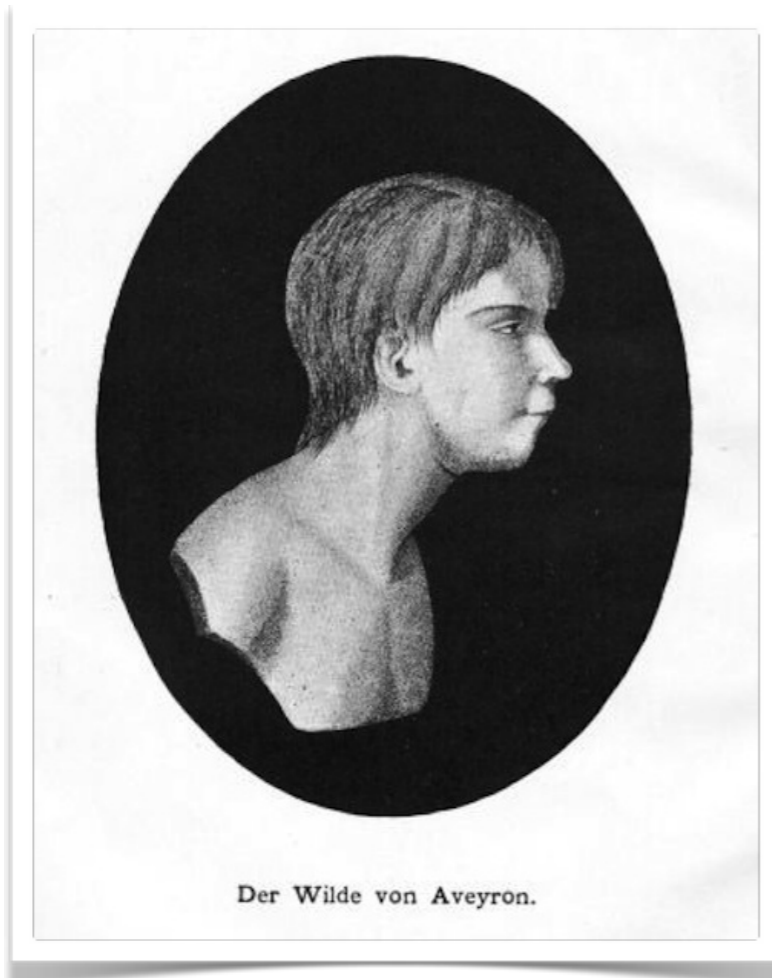
The weak version of the CPH

Even though the same learning mechanisms are involved, second language learning will be more difficult for older learners.

The innatist perspective

CPH for first language acquisition!

Victor and Genie

Der Wilde von Aveyron.

The innatist perspective

Victor

- 1799 - France - 12 years old

- Had no contact with humans

- A doctor (Marc-Gaspard Itard) devoted 5 years teaching him.

- He succeeded in developing Victor's sociability, memory, and judgment. What about language?

- There was little progress in his language ability

The innatist perspective

- Victor responded only to sounds that had had meaning for him in the forest.

    - Cracking of a nut

    - Animal sounds

    - The sound of rain

- He eventually spoke only 2 words (milk/ Oh, God!)

The innatist perspective

<u>Genie</u>

- California - 13 years old

- Isolated in a darkened room

- Beaten when she made any noise

- Was undeveloped physically, emotionally, and intellectually

- She had no language

The innatist perspective

- Was cared for and educated

- She made a remarkable progress in becoming socialized and cognitively aware

- After 5 years of exposure to language, her language wasn't like that of a typical 5-year old.

- There was larger than normal gap between comprehension and production

- She used grammatical forms inconsistently

- She overused formulaic and routine speech

The innatist perspective

Support for CPH

• Victor and Genie learning their first language

• Deaf children learning sign language

The innatist perspective

- **Elissa Newport (1990)** and her colleagues studied deaf users of ASL

- Only 5-10% of the deaf children are born to deaf parents

- Only these children are likely to be exposed to ASL from birth

- The remainder of the deaf children begin learning ASL at different ages

The innatist perspective

- Like oral and written languages, ASL makes use of grammatical markers to indicate time (e.g. past tense) and number

- These markers are expressed through specific hand or body movements

- The researchers studied the ability to produce and comprehend grammatical markers in:

    - Native signers (who were exposed to ASL from birth),

    - Early learners (who began using ASL between 4 and 6 years),

    - Late learners (who began learning ASL after age 12)

The innatist perspective

<u>Findings:</u>

- They found no difference between the groups in some aspects of their use of ASL.

- However, on tests focusing on grammatical markers, the Native group used the forms more consistently than the Early group who, in turn, used them more consistently than the Late group.

<u>Conclusion</u>:

The researchers concluded that their study supports the hypothesis that there is a critical period for first language acquisition, whether that language is oral or gestural

The interactionist/ developmental perspective: learning from inside & out

Behaviorists > environment

Innatist > innate ability

Interactionist > environment + innate ability

The interactionist perspective:

In their view,

- language acquisition is an example of the human child's remarkable ability to learn from experience,

- There is no need to assume that there are specific brain structures devoted to language acquisition.

- What children need to know is available in the language they are exposed to as they hear it used in thousands of hours of interactions with the people and objects around them
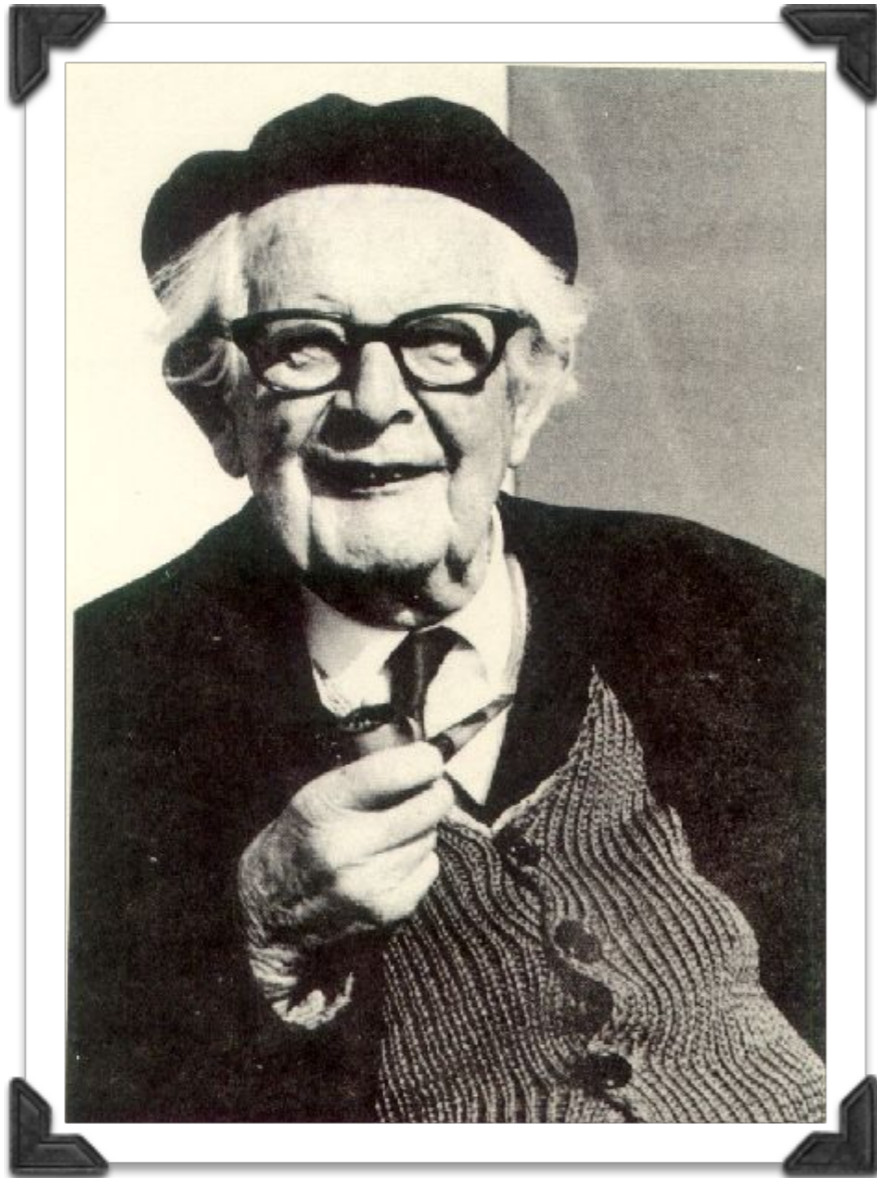
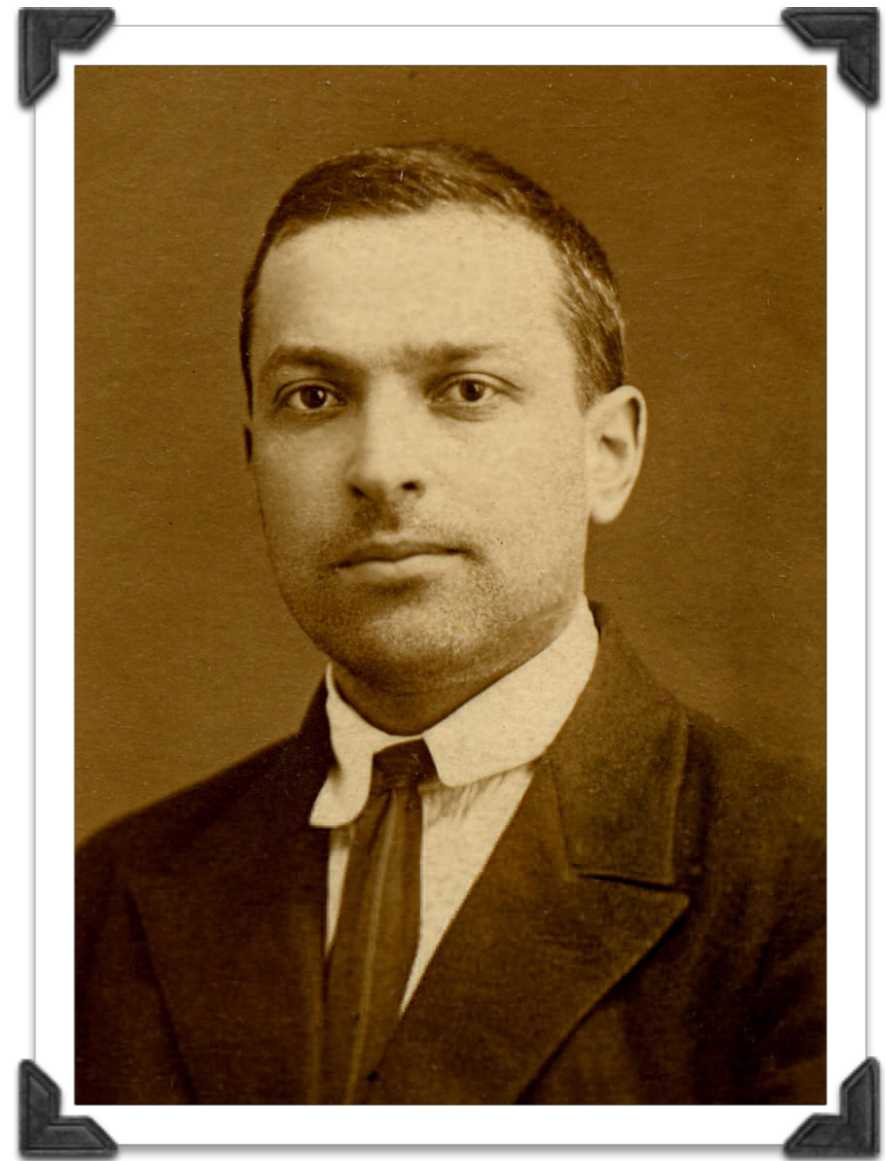# The interactionist perspective

Dan Slobin (1973) has long emphasized the close relationship between children's cognitive development and their acquisition of language

Dan Slobin

The interactionist perspective

Jean Piaget

Lev Vygotsky

The interactionist perspective

- The Swiss psychologist Jean Piaget (1951/1946) was one of the earliest proponents of the view that:

    - Children's language is built on their cognitive development

- Piaget observed infants and children in their play and in their interaction with objects and people.

- He was able to trace the development of their cognitive understanding of such things as:

    - object permanence (knowing that things hidden from sight are still there)

    - the stability of quantities regardless of changes in their appearance (knowing that ten pennies spread out to form a longline are not more numerous than ten pennies in a tightly squeezed line}

    - and logical inferencing (figuring out which properties of a set of rods—size, weight, material. etc.-—cause some rods to sink and others to float on water).

The interactionist perspective

- children's cognitive development would partly determine how they use language.

  - e.g. the use of certain terms such as 'bigger' or 'more' depend on the children's understanding of the concepts they represent.

- For Piaget, language was one of many symbol systems that are developed in childhood.

- Language can be used to represent knowledge that children have acquired through physical interaction with the environment

The interactionist perspective

- Another influential student of child development was the psychologist Lev Vygotsky (1978)

- He observed interactions among children and also between children and adults in schools in the Soviet Union in the 1920s and 1930s.

- He concluded that language develops primarily from social interaction.

- He argued that in a supportive interactive environment, children are able to advance to a higher level of knowledge and performance.

- Vygotsky referred to this metaphorical place in which the children could do more than they would be capable of independently as the **ZONE OF PROXIMAL DEVELOPMENT (ZPD).**

The interactionist perspective

The Zone of Proximal Development (ZPD)

The metaphorical place in which a learner is capable of a higher level of performance because there is support from interaction with an interlocutor

- In Vygotsky's theory, learning takes place through and during interaction in the learner's ZPD

The interactionist perspective

- Vygotsky observed the importance of conversations that children have with adults and with other children and saw in these conversations the origins of both language and thought.

Vygotsky view differs from Piaget's.

- For Piaget, language was seen as a symbol system that could be used to express knowledge acquired through interaction with the physical world.

- For Vygotsky, thought was essentially internalized speech, and speech emerged in social interaction

The interactionist perspective

Cross-cultural research

- **Catherine Snow (1995)** and others have studied the effects of the ways in which adults talk to and interact with young children on language acquisition.

- In middle-class North American homes, researchers observed that adults often modify the way they speak when talking to little children.

- **Child-directed speech**

The interactionist perspective

What are the characteristics of this child-directed speech?

• slower rate of delivery/ higher pitch/ more varied intonation/ shorter, simpler sentence patterns/ stress on key words/ frequent repetition/ paraphrase

• topics of conversation emphasize the child's immediate environment (the here and now) or experiences that the adult knows the child has had.

• Adults often repeat the content of a child's utterance, but they expand or recast it into a grammatically correct sentence.

   • e.g. when Peter says, 'Dump truck! Dump truck! Fall! Fall!', Lois responds, 'Yes, the dump truck fell down'

The interactionist perspective

This was observed in middle-class American homes. **Is it universal to all societies?**

No

- In some societies. adults do not engage in conversation or verbal play with very young children

The interactionist perspective

For examples,

- **Bambi Schieffelin (1990)** found that Kaluli mothers in Papua New Guinea did not consider their children to be appropriate conversational partners.

The interactionist perspective

- **Martha Crago (1992)** observed that in traditional Inuit society, children are expected to watch and listen to adults. They are not expected or encouraged to participate in conversations with adults until they are older and have more developed language skills

The interactionist perspective

- Other researchers have observed that in some societies. young children interact primarily with older siblings who serve as their caregivers.

- Even within the United States, **Shirley Brice Heath (1983)** and others have documented substantial differences in the ways in which parents in different socioeconomic and ethnic groups interact with their children.

The interactionist perspective

- Thus, the patterns of parent-child interaction and child-directed speech that were first observed in middle-class North American families are far from universal.

- Nevertheless, in every society, children are in situations in which they hear language that is meaningful to them in their environment. And they achieve full competence in the community language.

- Thus, it is difficult to judge the long-term effect of the modifications that some adults make in speech addressed to children

The interactionist perspective

The importance of interaction

- The role of interaction between a language-learning child and an interlocutor who responds in some way to the child is illuminated by cases where such interaction is missing.

The interactionist perspective

Jacqueline Sachs (1981) study:

- They studied the language development of a child they called Jim.

- He was a hearing child of deaf parents

- His only contact with oral language was through TV, which he watched frequently.

- The family was unusual in that the parents did not use sign language with Jim.

- Thus, although in other respects he was well cared for, Jim did not begin his linguistic development in a normal environment in which a parent communicated with him in either oral or sign language.

- A language assessment at 3 years and 9 months indicated that he was well below age level in all aspects of language.

- Although he attempted to express ideas appropriate to his age, he used unusual, ungrammatical word order.

The interactionist perspective

- When Jim began conversational sessions with an adult, his expressive abilities began to improve.

- By the age of 4 years and 2 months most of the unusual speech patterns had disappeared, replaced by structures more typical of his age.

- Jim's younger brother Glenn did not display the same type of language delay.

- Glenn's linguistic environment was different in that he had his older brother as a conversational partner

The interactionist perspective

- Jim showed very rapid acquisition of the structures of English once he began to interact with an adult on a one-to-one basis.

- The fact that he had failed to acquire language normally prior to this experience suggests that impersonal sources of language such as television or radio alone are not sufficient.

- One-to-one interaction gives the child access to language that is adjusted to his or her level of comprehension.

  - When a child does not understand, the adult may repeat or paraphrase.

  - The response of the adult may also allow children to find out when their own utterances are understood.

The interactionist perspective

- Television, for obvious reasons, does not provide such interaction

- Even in children's programmes, where simpler language is used and topics are relevant to younger viewers, no immediate adjustment is made for the needs of an individual child.

- Once children have acquired some language, however, television can be a source of language and cultural information

The interactionist perspective

Connectionism

- Researchers such as **Jeffrey Elman and his colleagues (1996)** explain language acquisition in terms of how children acquire **links** or '**connections**' between words and phrases and the situations in which they occur.

- They claim that when children hear a word or phrase in the context of a specific object, event, or person, an association is created in the child's mind between the word or phrase and what it represents.

- Thus, hearing a word brings to mind the object, and seeing the object brings to mind the word or phrase.

- Eventually any of the characteristics of the object or event may trigger the retrieval of the associated word or phrase from memory.

The interactionist perspective

For example,

- A child may first recognize the word 'cat' only in reference to the family pet and only when the cat is miaowing beside the kitchen door.

- As the word is heard in more contexts (picture books, furry toys, someone else's cat), the child recognizes and uses the word as the label for all these cats.

- However, at a later point, the word may be generalized to other furry creatures as well, indicating that connections have been made to characteristics of the cat and not to an entity that adults know as 'cat'.

- Then there is another learning process involved in 'pruning' the connections so that 'cat' applies only to felines.

The interactionist perspective

In connectionism, language acquisition is not just a process of associating words with objects.

- associating words and phrases with the other words and phrases that occur with them - لونه احمر
  سكين تقطع

- or associating words with grammatical morphemes that occur with them.

  For example,

  children learning languages in which nouns have grammatical gender learn to associate the appropriate article and adjective forms with nouns (لعبة كبيرة - حصان ابيض).

- Similarly, they learn to associate pronouns with the verb forms that mark person and number (he goes/ they go).

- They learn which temporal adverbs go with which verb tenses. (while I was playing.../ when I went)

According to connectionist theory, all this is possible because of the child's general ability to develop associations between things that occur together.

Language disorders and delays

- While most children produce recognizable first words by 12 months,some may not speak before the age of 3 years.

- In very young children, one way to determine whether delayed language reflects a problem or simply an individual difference within the normal range is to determine whether the child responds to language and appears to understand even if he or she is not speaking.

Language disorders and delays

- As **Jim Cummins (1984, 2000)** and others have pointed out, one particular group of children who have often been misdiagnosed as having language delays or disorders are children who arrive at their first day of school without an age-appropriate knowledge of the language of the school. This includes:

  - immigrant children who speak another language at home

  - minority language children whose home language is different from the school language

  - children who speak a different variety of the school language

- Unfortunately, it often happens that these children's knowledge of a different language is interpreted as a lack of knowledge of language in general.

- As a result, they are sometimes placed in special education classes.

- Researchers have recently made important progress in providing guidelines that can help educators distinguish between disability and diversity

Childhood bilingualism

- Some children learn multiple languages from earliest childhood; others acquire additional languages when they go to school.

- Children who learn more than one language from earliest childhood are referred to as '**simultaneous bilinguals**',

- whereas those who learn another language later can be called '**sequential bilinguals**'.

Childhood bilingualism

- We sometimes hear people express the opinion that it is too difficult for children to cope with two languages. They fear that the children will be confused or will not learn either language well.

- Is this true?

- There is little support for the myth that learning more than one language in early childhood is a problem for children

- Although some studies show minor early delays for simultaneous bilinguals, there is no evidence that learning two languages substantially slows down their linguistic development or interferes with cognitive and academic development.

- Indeed many simultaneous bilinguals achieve high levels of proficiency in both languages.

Childhood bilingualism

- **Ellen Bialystok (1991, 2001)** and other developmental psychologists have found convincing evidence that bilingualism can have positive effects on abilities that are related to academic success, such as metalinguistic awareness.

- Limitations that may be observed in the language of bilingual individuals are more likely to be related to the circumstances in which each language is learned than to any limitation in the human capacity to learn more than one language.

- For example, if one language is heard much more often than the other or is more highly valued in the community, that language may eventually be used better than, or in preference to, the other.
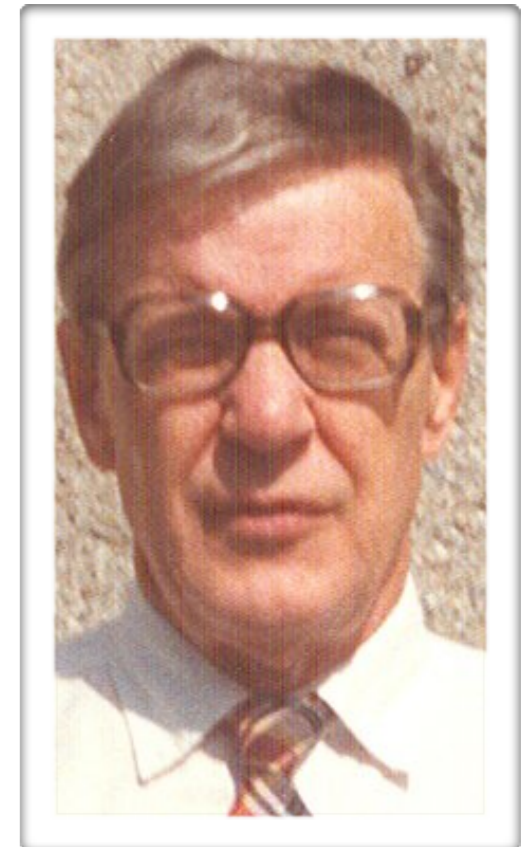
Childhood bilingualism

- There may be reason to be concerned, however, about situations where children are cut off from their family language when they are very young.

- **Lily Wong-Fillmore (1991)** observed that when children are 'submerged' in a different language for long periods in pre-school or day care, their development of the family language may be slowed down before they have developed an age-appropriate mastery of the new language.

- Eventually they may stop speaking the family language altogether

Childhood bilingualism

- **Wallace Lambert (1987)** called this loss of one language on the way to learning another **subtractive bilingualism**.

- negative consequences for children's self-esteem

- their relationships with family members are likely to be affected

- they may fall behind in their academic learning

In these cases, children seem to continue to be caught between two languages: they have not yet mastered the one language, and they have not continued to develop the other.

Childhood bilingualism

- the 'solution' educators propose to parents...............!

- a better solution is to strive for **additive bilingualism** (the maintenance of the home language while the second language is being learned)

- This is especially true if the parents are also learners of the second language.

- If parents continue to use the language that they know best, they are able to express their knowledge and ideas in ways that are richer and more elaborate than they can manage in a language they do not know as well.

- Using their own language in family settings is also a way for parents to maintain their own self-esteem, especially as they may be struggling with the new language outside the home.

Thank you