

**Why we should be impressed by first language acquisition**

Do you remember learning to...

tie your shoes?

ride a bicycle?

read?

talk?

## **Resistance to correction:**

Child: Want other one spoon, Daddy.

Father: You mean, you want **THE OTHER SPOON**.

Child: Yes, I want other one spoon, please, Daddy.

Father: Can you say "the other spoon"?

Child: Other ... one ... spoon.

Father: Say ... "other".

Child: Other.

Father: "Spoon".

Child: Spoon.

Father: "Other ... Spoon".

Child: Other ... spoon. Now give me other one spoon?

## Nature vs nurture: the great debate

What they know by age 4: Jill de Villiers experiments (at 6:32 in “Acquiring Human Language”)

Competence vs Performance AND Production vs Perception

Mistakes: windows into minds

Morphology – overgeneralization

**Progress backwards:**

walk / walked    go / went

open / opened    throw / threw

want / wanted    hold / held

**Children, at first:**

walk                      go

open                      throw

want                      hold

**Children, a bit later:**

walked

went

opened

threw

wanted

held

**Children, later still:**

goed

throwed

holded

Also: eated maked finded hitted falled doed speaked breaked goed runned

And: foots tooths childs mans mouses peoples

## Negative evidence?

Again, **resistant to correction**:

CHILD: My teacher **holded** the baby rabbits and we patted them.

ADULT: Did you say your teacher **held** the baby rabbits.

CHILD: Yes.

ADULT: What did you say she did?

CHILD: She **holded** the baby rabbits and we patted them.

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

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

Syntax – What do you think what's in here? (50:40)

## Human Language

Mistakes they never make (49:54 – 50:40 in “Acquiring Human Language”)

I painted the barn red => I saw the barn red

What did you eat your eggs and?

I baked Mary a cake => I baked two hours a cake

**Something is innate = Universal Grammar**

## Evidence for Universal Grammar

- Children's errors & linguistic creativity
- Stages of acquisition are universal  
e.g., deaf children babble, same milestones)
- Language universals; no “primitive” languages
- Creolization (e.g. Nicaraguan Sign Language) [http://www.pbs.org/wgbh/evolution/library/07/2/real/1\\_072\\_04.html](http://www.pbs.org/wgbh/evolution/library/07/2/real/1_072_04.html)  
children are incapable of learning non-UG-driven pidgin,  
so they impose extra grammar on it

## The Critical Period

before the age of 7 - perfect command;

between the ages of 8 and 15 - progressively less perfect command;

at a greater age - no advantage for relative youth.



**Genie** - isolated until 13 ½

Mike paint.

Applesauce buy store.

Neal come happy; Neal not come sad.

Genie have Momma have baby grow up.

I like elephant eat peanut.

**Isabelle** - isolated until 6 ½

Why does the paste come out if one upsets the jar?  
Do you go to Miss Mason's school at the university?

**ducklings**: ability to identify and follow the mother

**kittens**: ability to perceive visual images

**sparrows**: ability to learn the father's songs

## Stages of language learning

**Production** side: acquisition of **lexical and syntactic knowledge**.

Stage	Typical age	Description
Babbling	0;6 - 0;8	repetitive CV patterns
One-word	0;9 - 1;6	Single open-class words or word stems
Two-word	1;6 - 2;0	"mini-sentences" with simple semantic relations
Early multiword	2;0 - 2;6	"telegraphic" sentence structures of <i>lexical</i> rather than <i>functional</i> or <i>grammatical</i> morphemes
Later multiword	2;6 on	<i>Grammatical</i> or <i>functional</i> structures emerge

It is safe to say that except for constructions that are rare, predominantly used in written language, or mentally taxing even to an adult (like *The horse that the elephant tickled kissed the pig*), all parts of all languages are acquired before the child turns four.

(Dan Slobin, 1985, *The Crosslinguistic Study of Language Acquisition*; Steven Pinker, 1994, *The Language Instinct*)

The one-word (holophrastic) stage

At about **10 months**, first **recognizable words** appear (mostly in **naming**):

**Meanings too narrow or too broad:**

**bottle** - only plastic bottles      **teddy** - only one particular bear

**dog** used for lambs, cats, and cows as well as dogs

**kick** used for pushing and for wing-flapping as well as for kicking.

**Perception vs. production (yet again):**

Adult: **This is your *fis*?**

Child: **No, my *fis*.** (Rejects repeated imitations.)

Adult: **Oh, that is your *fish*.**

Child: **Yes, my *fis*.**

Early combinations **tend to have the correct word order:**

**All dry.**

**All messy.**

**All wet.**

**I sit.**

**I shut.**

**No bed.**

**No pee.**

**See baby.**

**See pretty.**

**More cereal. More hot.**

**Hi Calico.**

**Other pocket. Boot off.**

**Siren by.**

**Mail come. Airplane allgone. Byebye car.**

**Our car. Papa away. Dry pants.**

At about 1.5, children in all languages produce **two-unit sentences**.

**German**

<b>buch da</b>	"book there"
<b>bitte apfel</b>	"please apple"
<b>wo ball?</b>	"where ball?"

**Russian**

<b>baba kreslo</b>	"grandma armchair"
<b>daj chasy</b>	"give watch"
<b>vady net</b>	"water no"=no water

**Finnish**

<b>ei susi</b>	"not wolf"
<b>torni iso</b>	"tower big"
<b>missd pallo?</b>	"where ball?"

**Samoan**

<b>fia moe</b>	"want eat"
<b>mai pepe</b>	"give doll"
<b>tapale 'oe</b>	"hit you"

**Telegraphic speech** : Omitting “grammatical” words:

Original

I can see a cow

The doggy will bite

Where does Daddy go?

Where is the car going?

Repeated

**See cow**

**Doggy bite**

**Daddy go?**

**Car going?**

(child)

Eve, 25 months

Adam, 28 months

Daniel, 23 months

Jem, 21 months

More adult structure is chopped down to its essential elements:

<u>AGENT</u>	<u>VERB</u>	<u>RECIPIENT</u>	<u>OBJECT</u>	<u>LOCATION</u>
<i>Mother</i>	<i>gave</i>	<i>John</i>	<i>lunch</i>	<i>in the kitchen</i>
<b>Mommy</b>	<b>fix</b>			
<b>Mommy</b>			<b>pumpkin</b>	
<b>Baby</b>	<b>cry</b>			
<b>Baby</b>				<b>table</b>
	<b>Give</b>		<b>doggie</b>	
	<b>Put</b>		<b>light</b>	
	<b>Put</b>			<b>floor</b>
<b>Tractor</b>	<b>go</b>			<b>floor</b>
<b>I</b>	<b>ride</b>		<b>horsie</b>	
	<b>Give</b>	<b>doggie</b>	<b>paper</b>	
	<b>Put</b>		<b>truck</b>	<b>window</b>
<b>Adam</b>	<b>put</b>		<b>it</b>	<b>box</b>

## Grammatical elements and corresponding structures

At about the **age of 2**, children start using **grammatical elements**

- finite auxiliaries (*is, was*)
- verbal tense and agreement affixes (*-ed, -s*)
- nominative pronouns (*I, she*)
- complementizers (*that, where*)
- determiners (*the, a*).

Telegraphic patterns alternate with adult or adult-like forms:

**She's gone.**

Domenico, 24 months

**Her gone school.**

**I having this.**

Olivia, 27 months

**I'm having 'nana.** (banana)

**I'm having this little one.**

Betty, 30 months

**Me'll have that.**

**Mummy haven't finished yet,  
has she?**

Olivia, 36 months

As grammar becomes more complex, **the elements of the sentence develop internal complexity.**    **Big doggie**    **Give doggie paper**    **Give big doggie paper**

Children learn categories of morphemes in a **consistent order**:

**Possible influences** on the relative ease of learning:

- **contribution to overall meaning** (past tense vs. third person)
- **frequency of irregularity** (past tense verb vs. plural noun)
- **variation in pronunciation** (cf. allomorphy of plural, past tense)
- **identifiability of a morpheme** (contracted vs. uncontracted)
- **complexity of meaning** (past tense vs. 3<sup>rd</sup>p. + singular + present)