

An Integrated Approach to How Children Acquire Language

CS784 Project Presentation
Srivani Narra (Y0342)

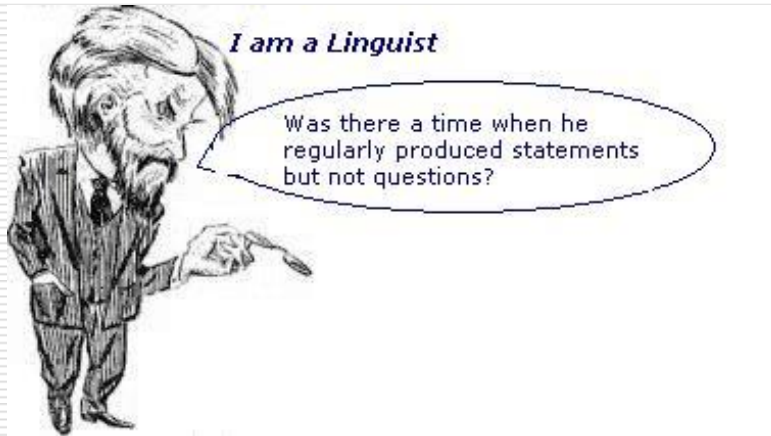
Contents

- Introduction
 - A Discussion of Various Theories
 - An Integrated Approach
 - Conclusions
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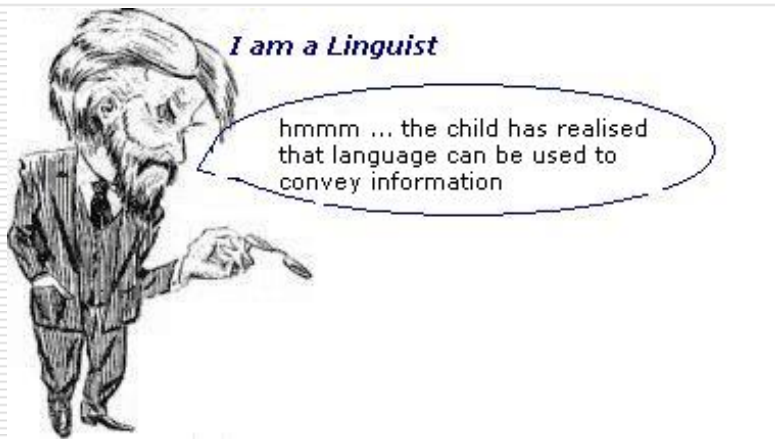
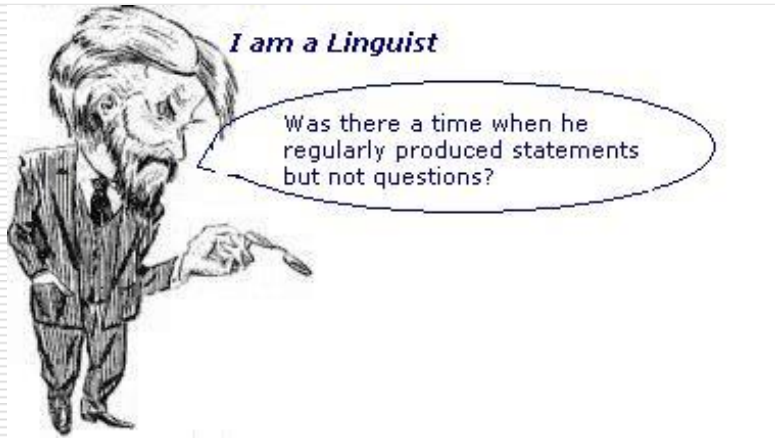
Introduction



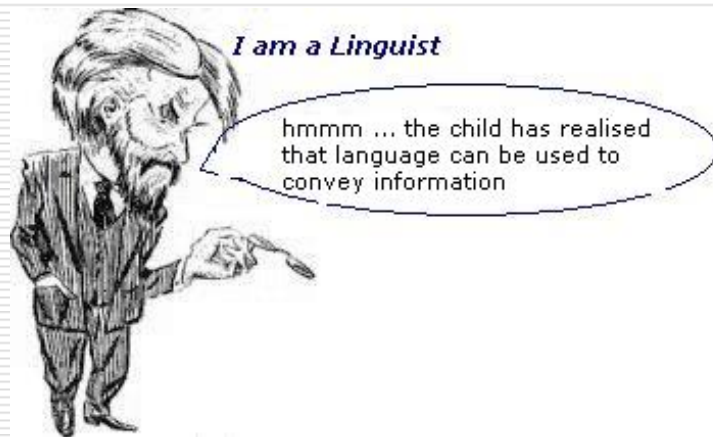
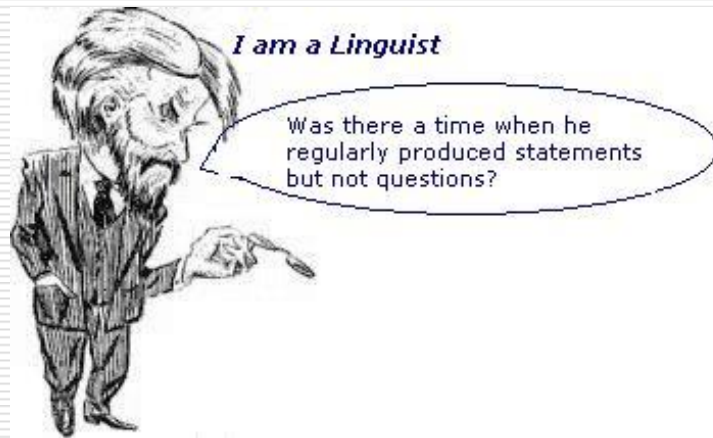
Two Psychologists and Two Linguists



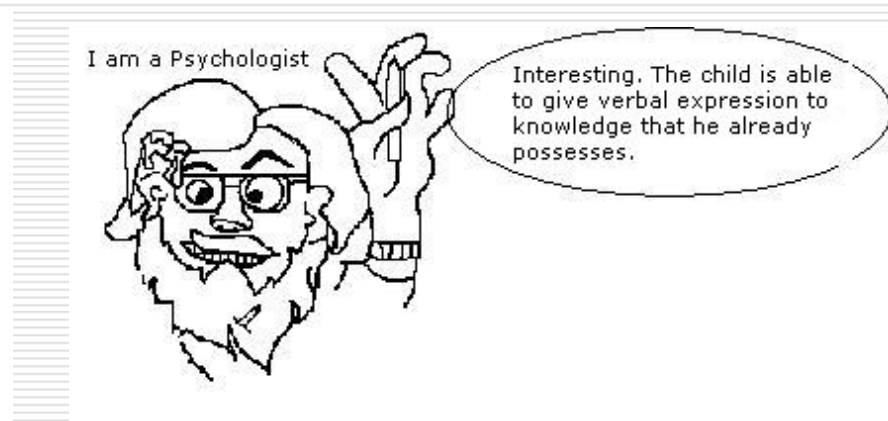
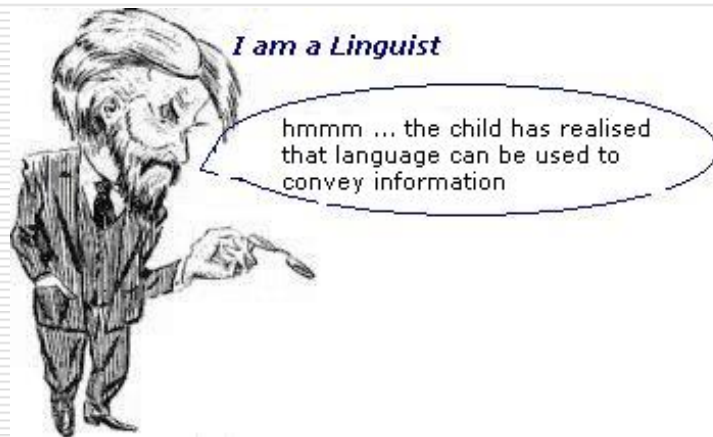
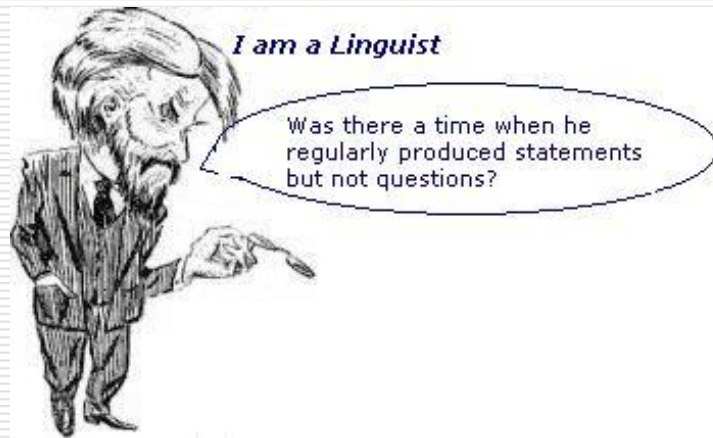
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Two Psychologists and Two Linguists

I am a Linguist



Was there a time when he regularly produced statements but not questions?

* language is a set of grammatical sentences

I am a Psychologist




Well, not so much. He is simply imitating versions of what he has previously heard.

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hmmm ... the child has realised that language can be used to convey information


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Interesting. The child is able to give verbal expression to knowledge that he already possesses.

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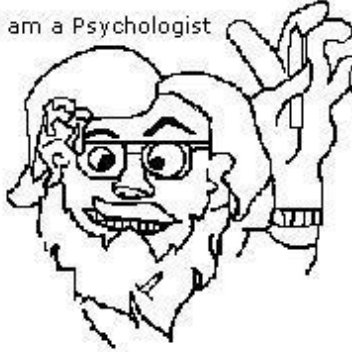
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- * we have a special skill for discovering rules of our language



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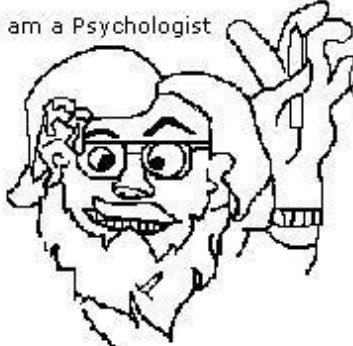
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- * each child creates language afresh in response to a need to communicate with others



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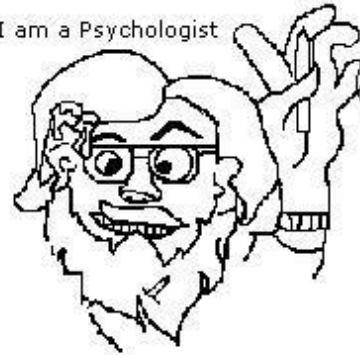


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- * we learn language as we learn everything else

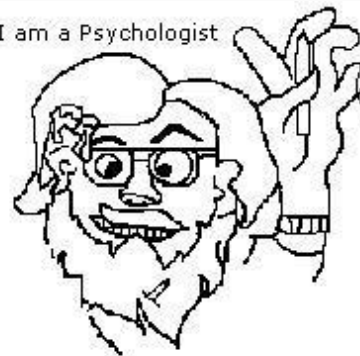


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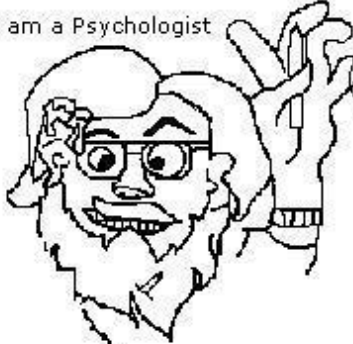
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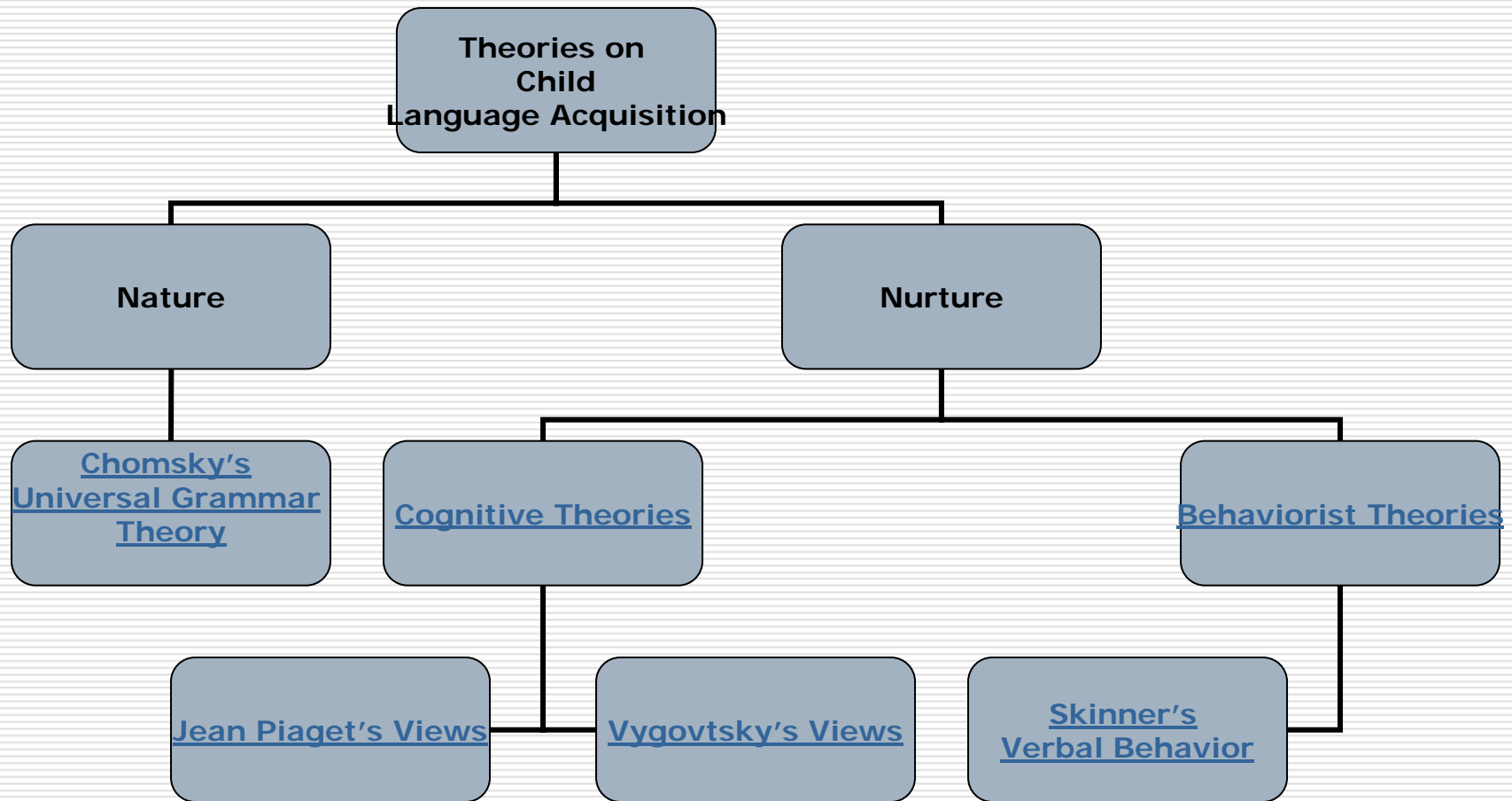
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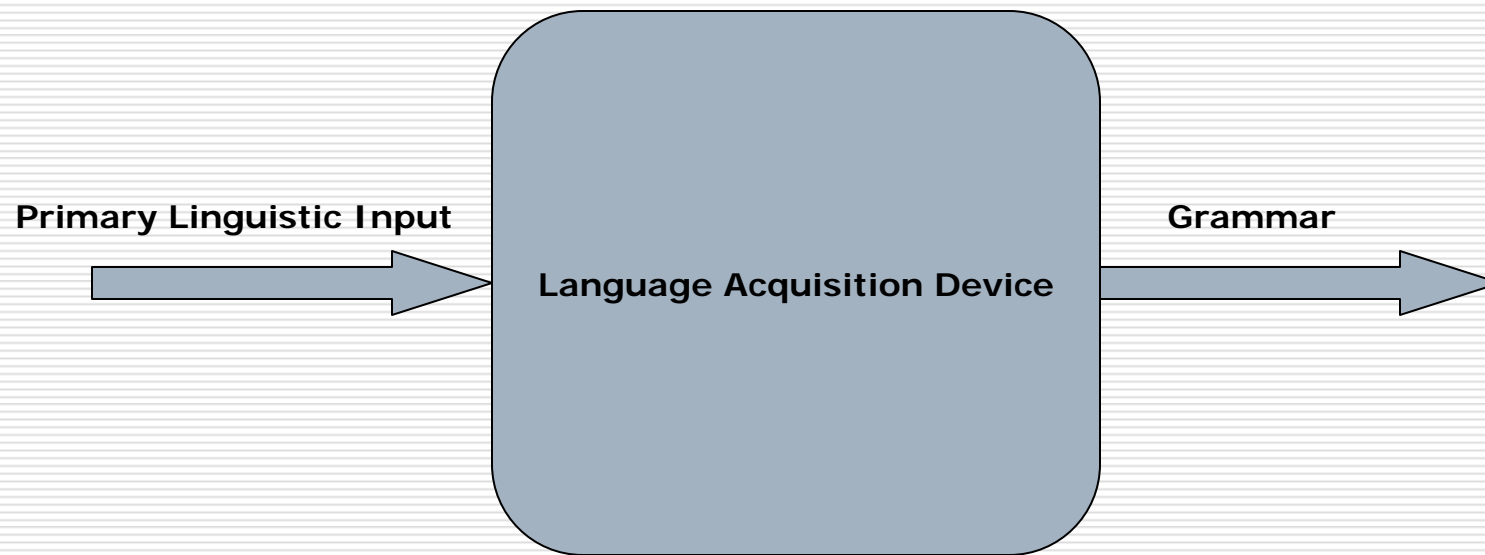
- * language is one example of symbolic functioning
- * learning consists in a constant restructuring of our understanding of the working of the world about us

-
- There are many facets to the problem of language acquisition
 - Hence, An Integrated Approach
-

A Discussion of Various Theories

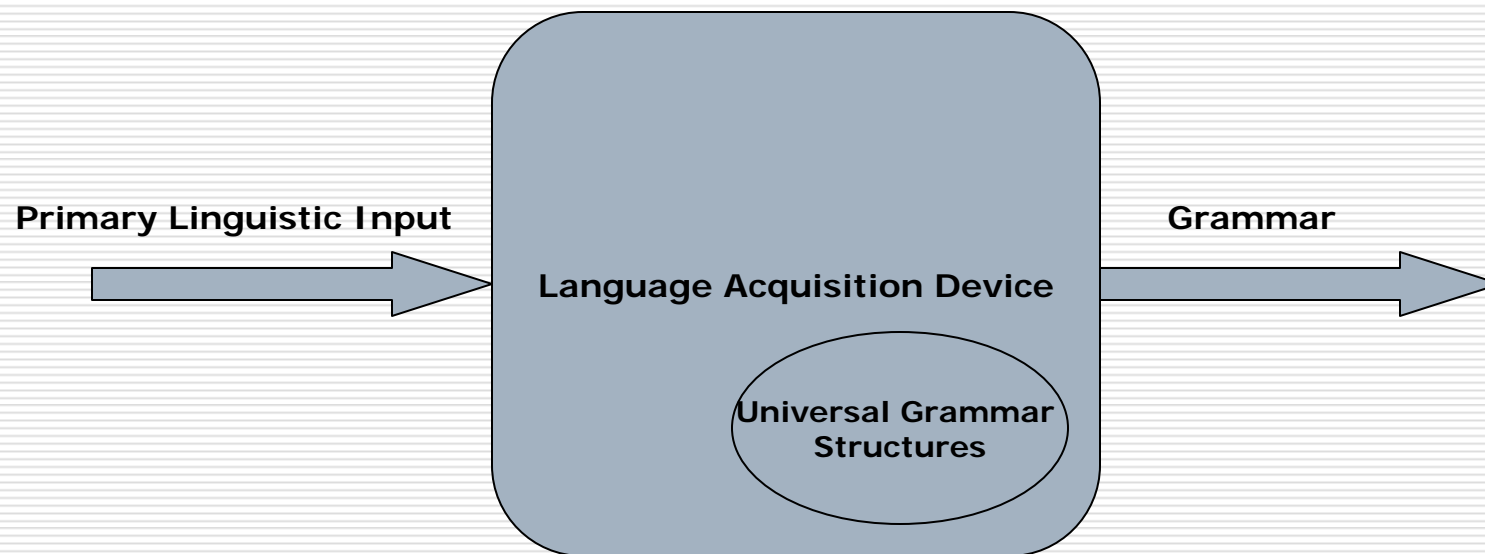


Noam Chomsky's Universal Grammar Theory



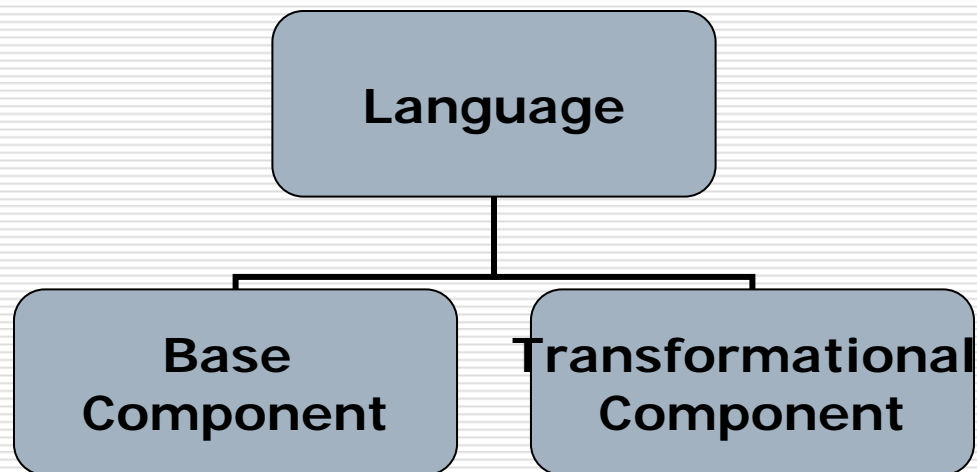
[Back to Theories](#)

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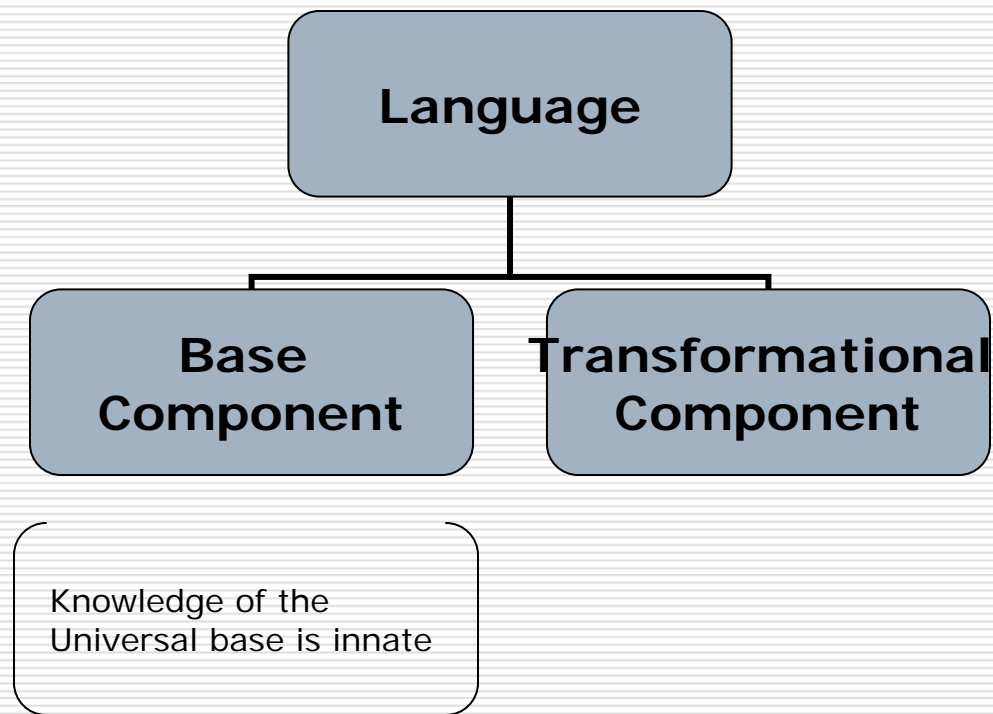
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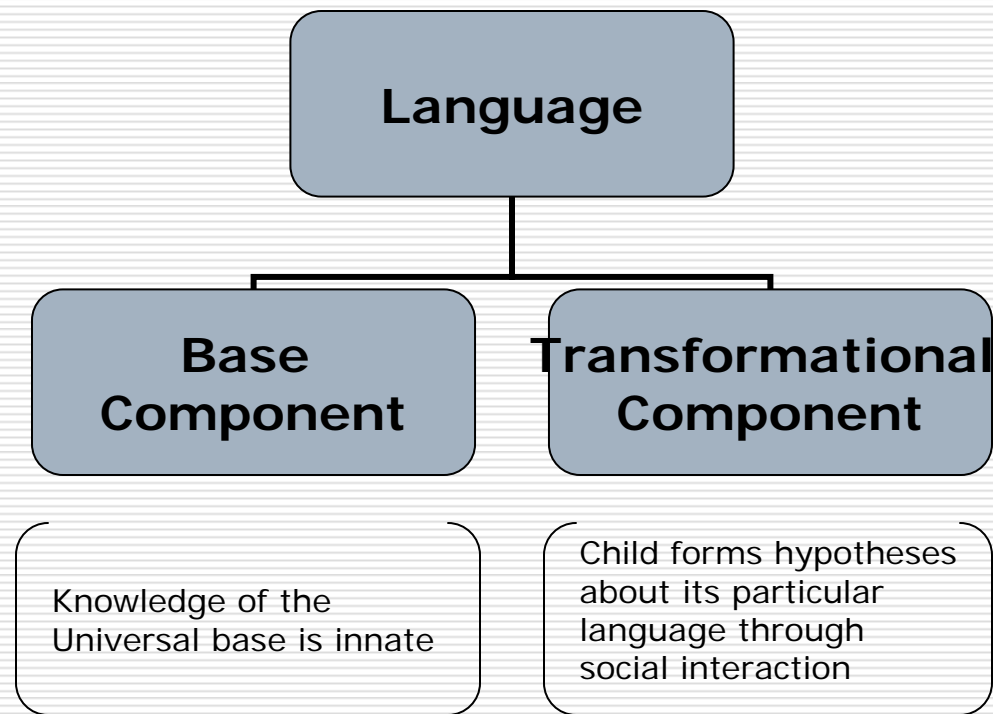
[Back to Theories](#)

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[Back to Theories](#)

Noam Chomsky's Universal Grammar Theory



[Back to Theories](#)

Nothing

Cognitive Theories

- ❑ Children can learn things when they are developmentally ready to do so.
- ❑ Learning follows development.
- ❑ Cognitive psychologists emphasized the importance of meaning, knowing and understanding.
- ❑ Learning is a meaningful process of relating new events or items to already existing cognitive concepts.

[Back to Theories](#)

Jean Piaget's Views on Child Language Acquisition

- *“Language depends on thought for its development”*
-

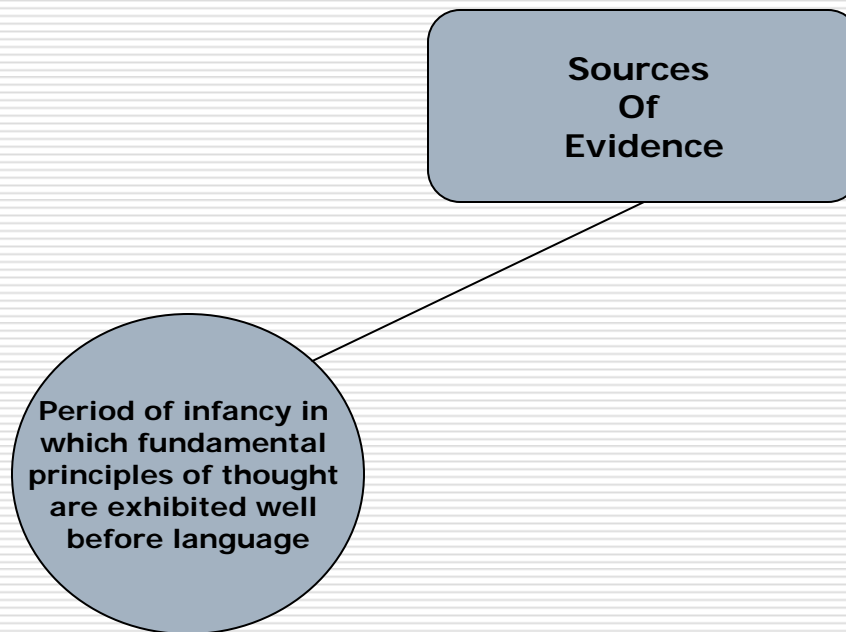
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Sources
Of
Evidence

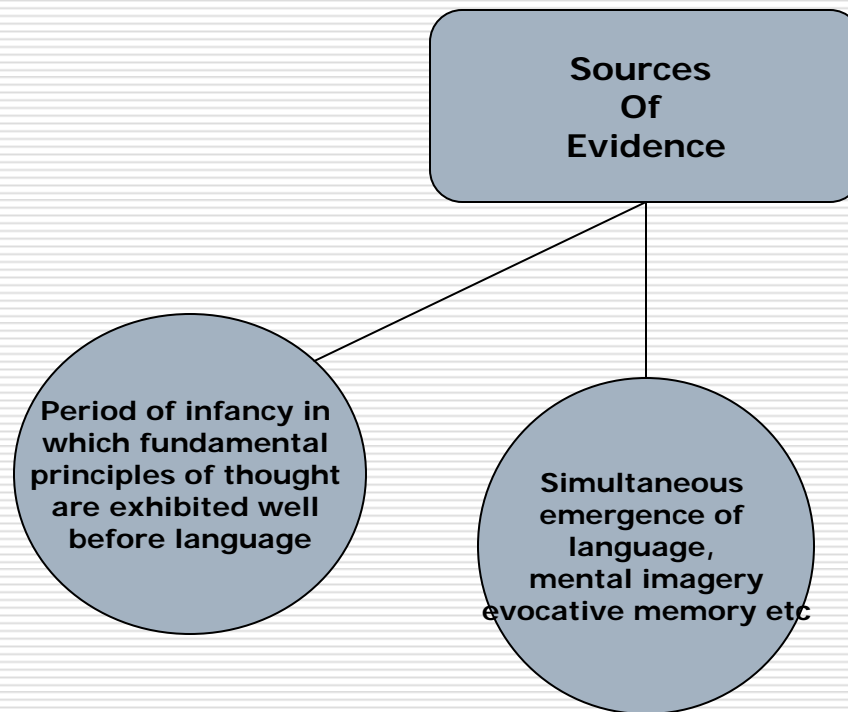
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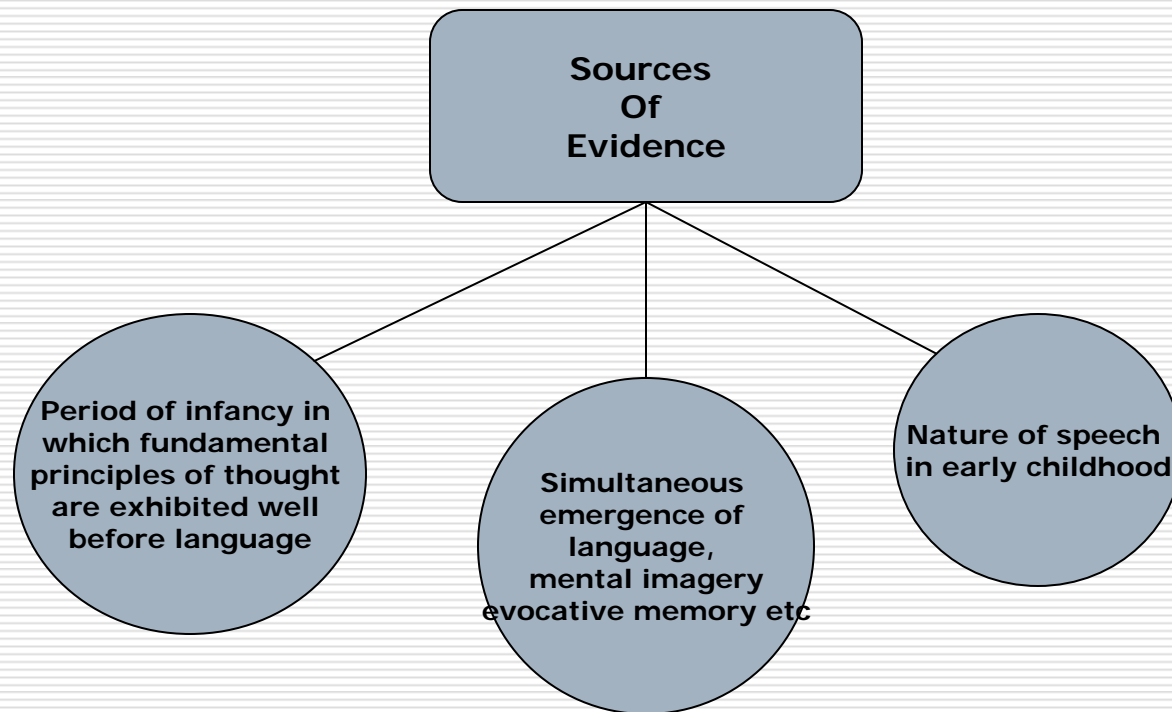
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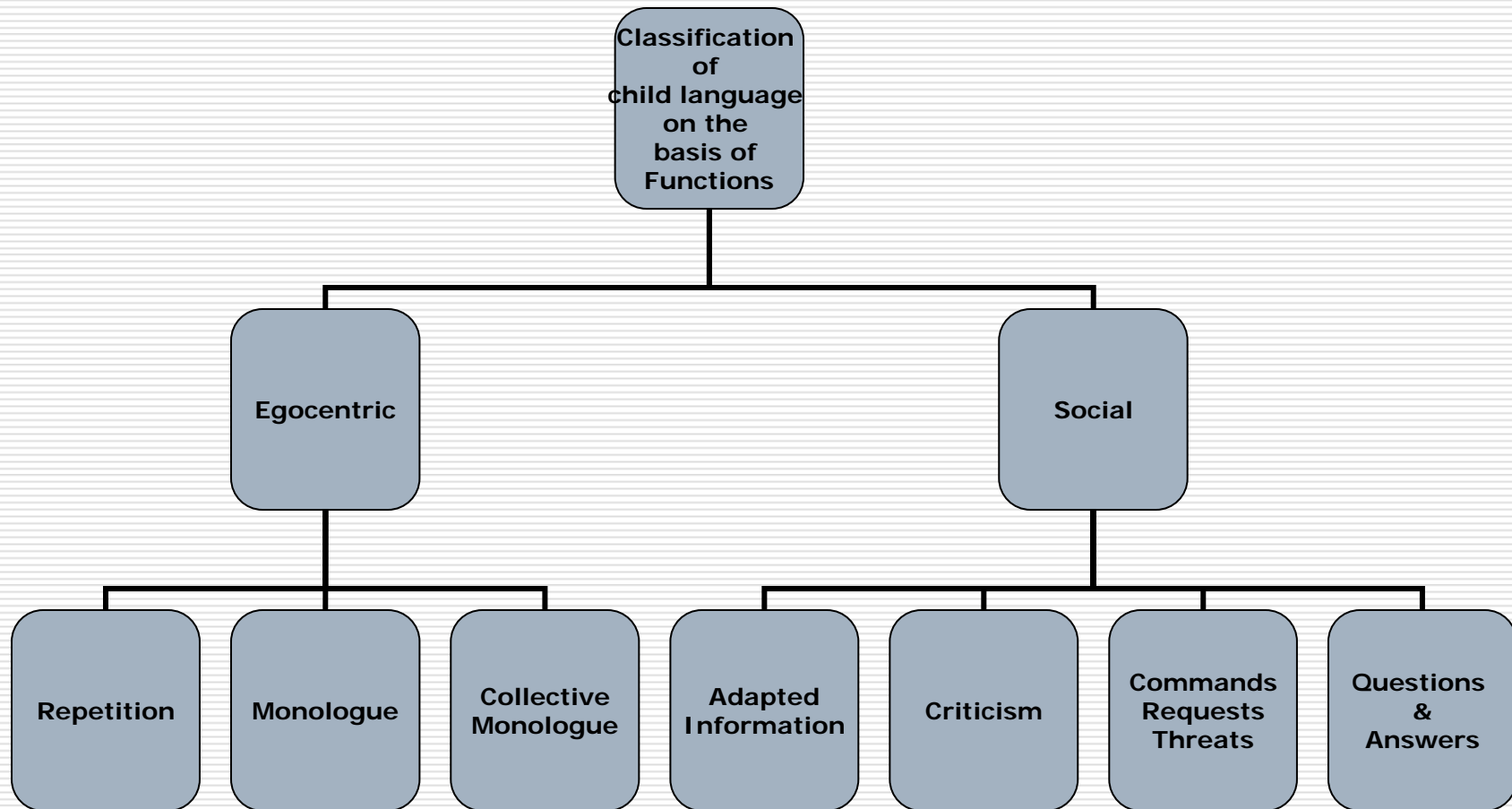


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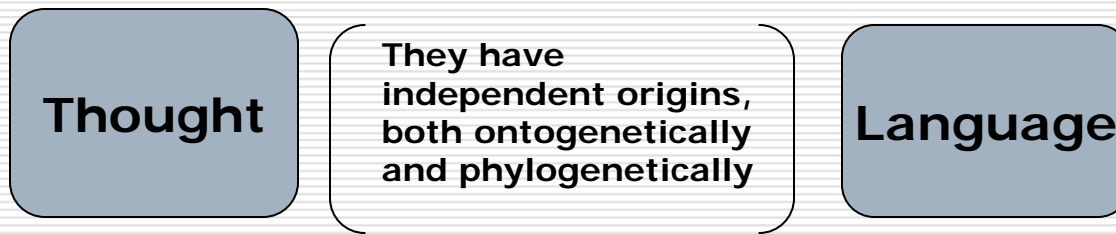
[Back to Theories](#)

Vygotsky's Theory on Language and Thought

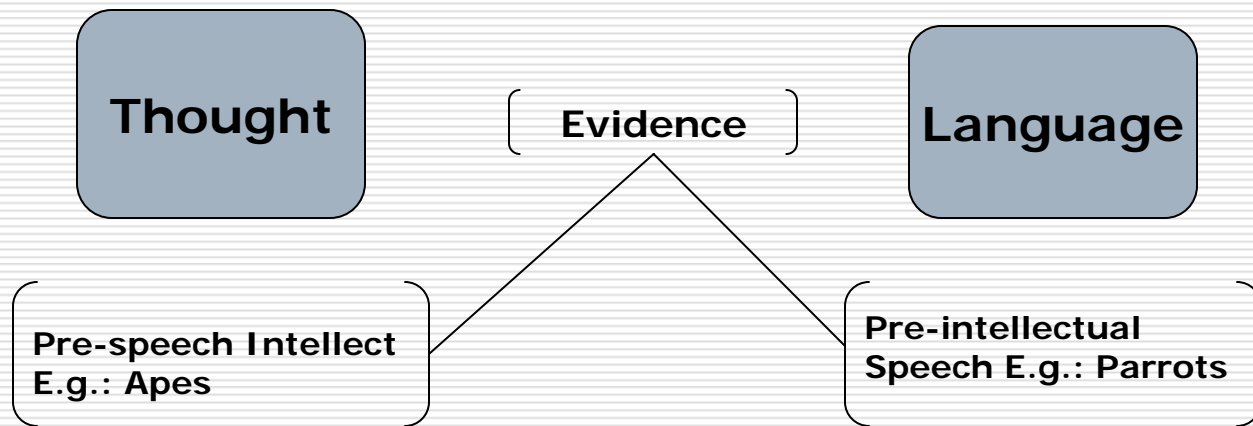
Thought

Language

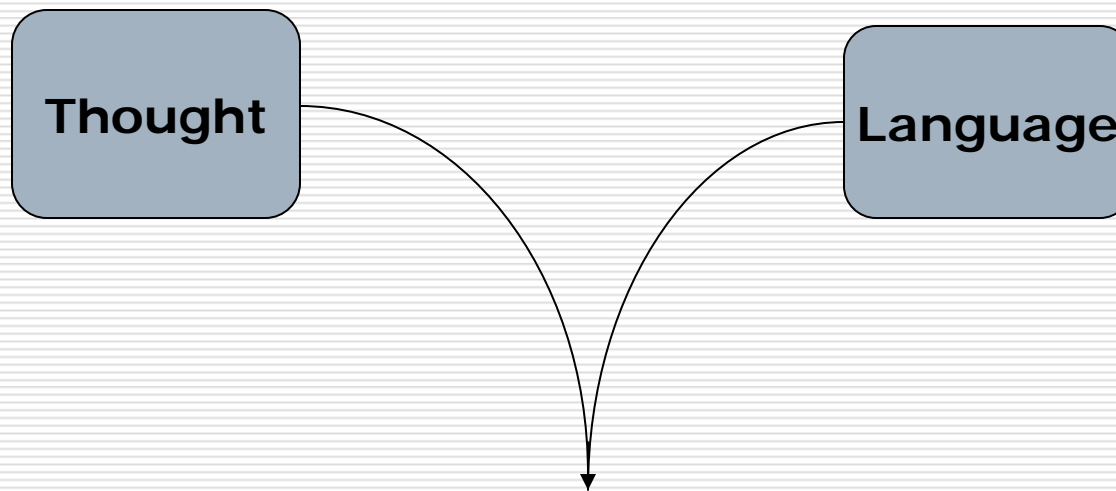
Vygotsky's Theory on Language and Thought



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Verbal Thought
*'speech begins to serve intellect
and thoughts begin to be spoken'*

Behaviorist Theories

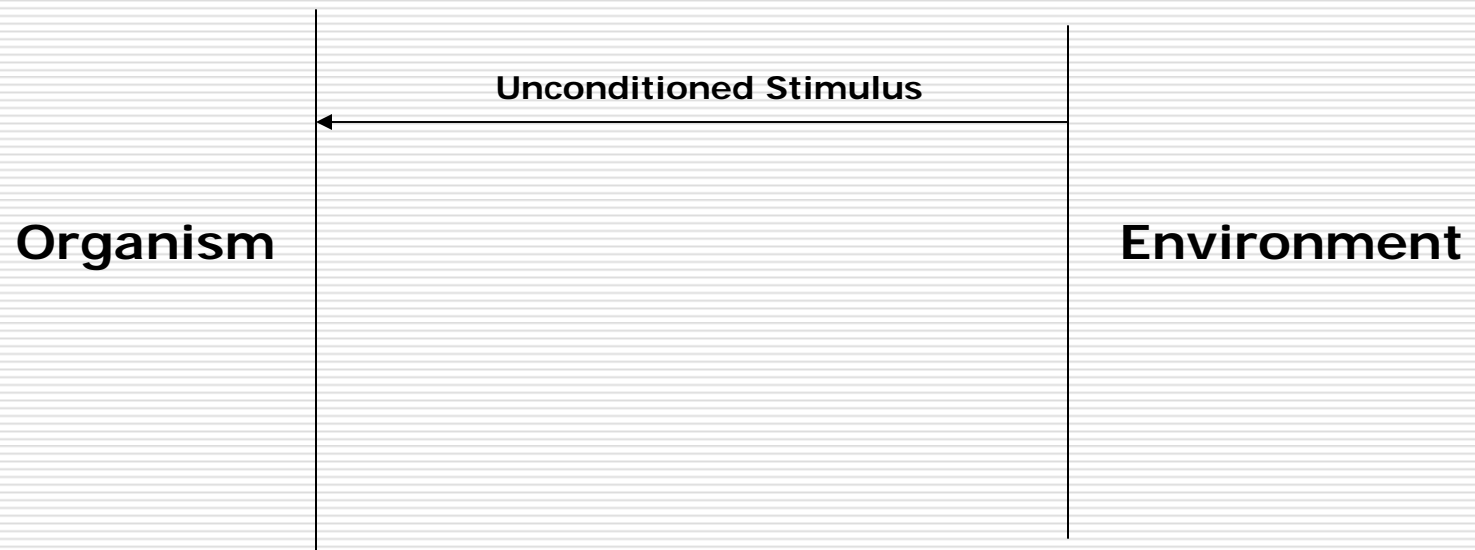
- *“Language development is the result of a set of habits, conditioned by interaction with the environment”*

Skinner's Verbal Behavior

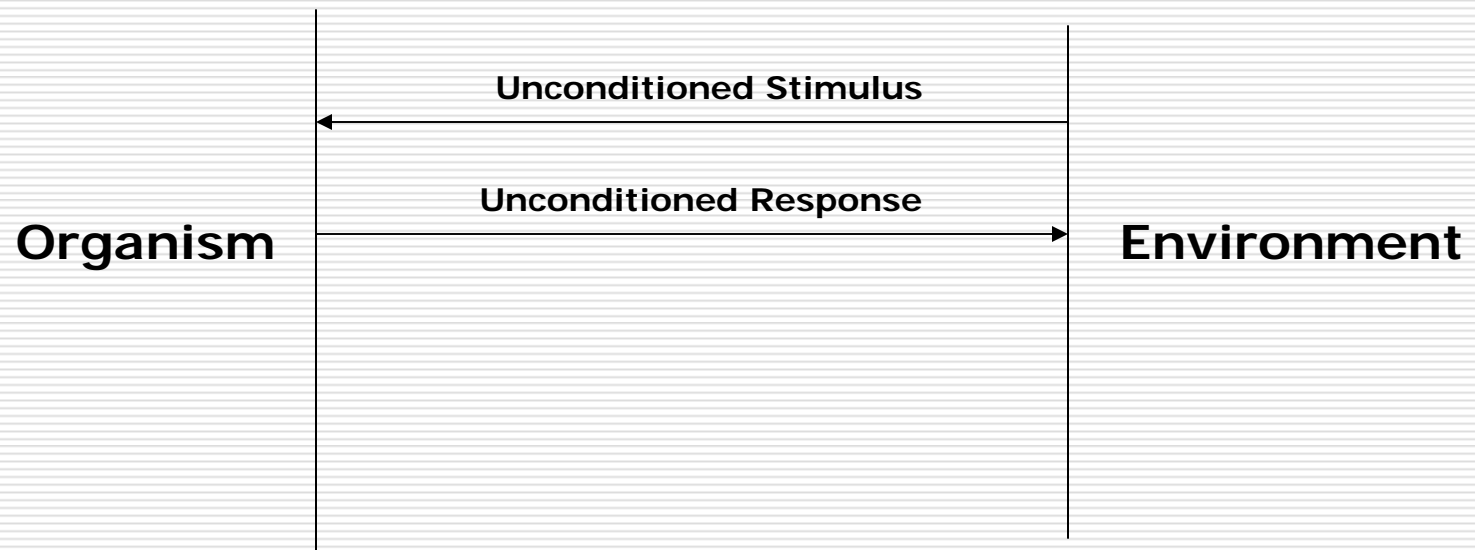
Organism

Environment

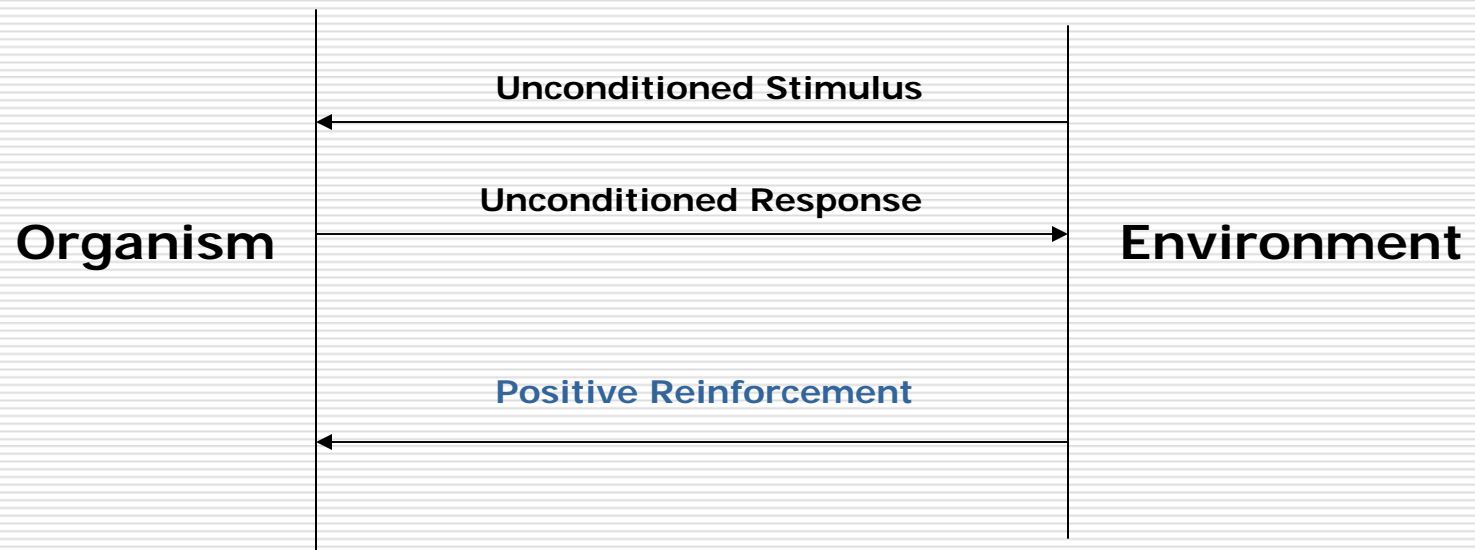
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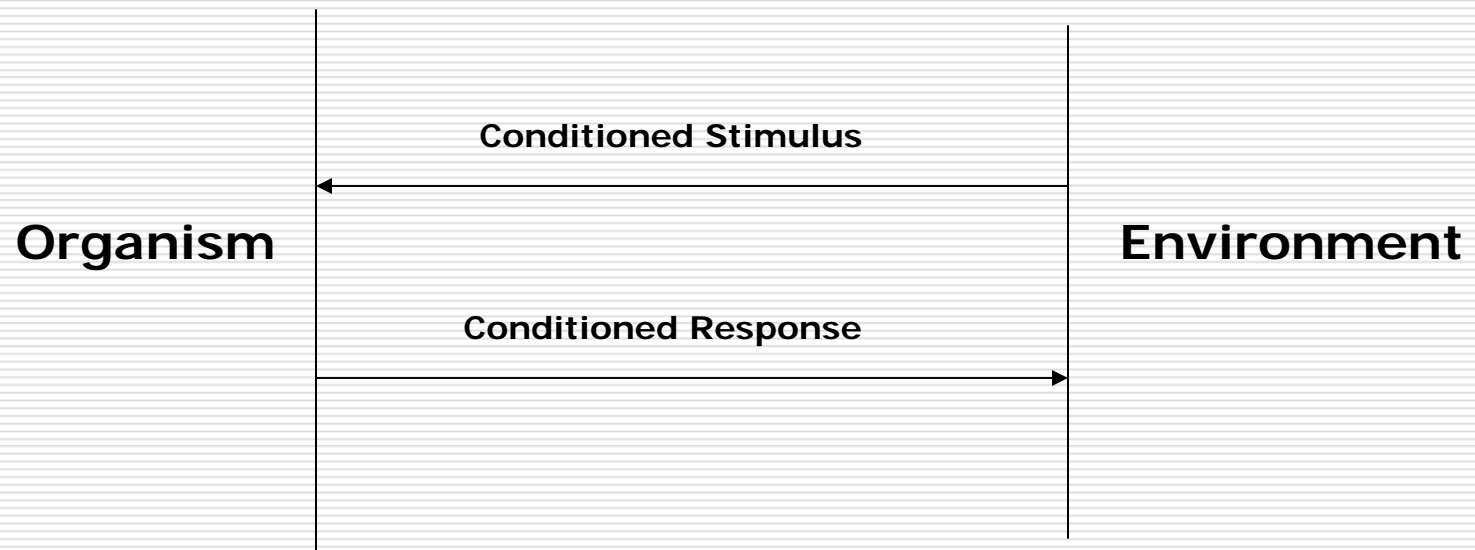
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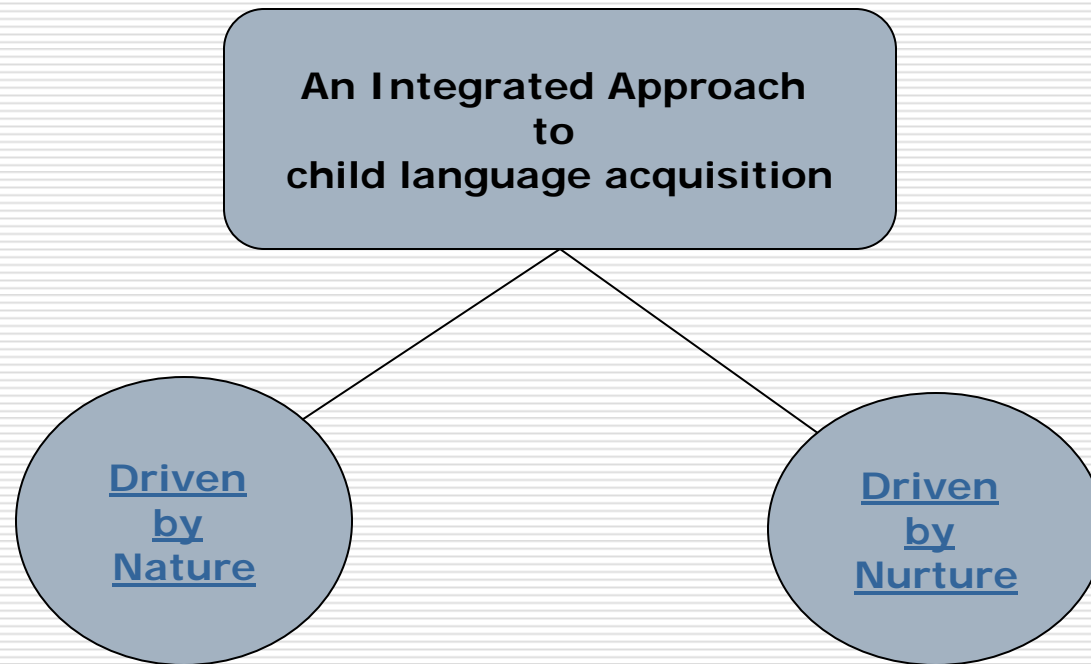
Skinner's Verbal Behavior



Drawbacks

THEORIES	DRAWBACKS
Innate Theories	1)They do not have empirical evidence. 2)They leave out details on how the specifics of a particular language are acquired. 3)They are not very clear on the exact innate nature of acquisition.
Cognitive Theories	The clinical method adopted by the cognitive experimentalist in language studies are severely criticized by later scholars.
Behaviorist Theories	why is it that animals do not and cannot learn to speak while humans do?

An Integrated Approach



Driven by Nature

- ❑ The first one year in a child's life is mainly driven by nature.
 - ❑ A set of observations made by Hippolyte Taine on her baby daughter are in order.
-

Driven by Nature

Age	Observations	Inference
First few weeks	<i>"Probably by reflex action, she cried incessantly and kicked about all her limbs."</i>	In my opinion it is out of this enormous number of movements that there will be evolved by gradual selection the intentional movement. The same is true for vocal actions.

Driven by Nature

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Three to five months	<i>"She began to feel with her hands and to stretch out her arms. Takes delight in its bird like twitter."</i>	I believe, a child does this for the mere pleasure of discovery.

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Three to five months	<i>"She began to feel with her hands and to stretch out her arms. Takes delight in its bird like twitter."</i>	I believe, a child does this for the mere pleasure of discovery.
Fifth or Sixth month onwards	<i>"She employed her whole time for two years and more in making physical experiments. "</i>	It is pure curiosity. And I propose that it is this same curiosity that drives a child to make vocal experiments with sounds and exclamations.

Driven by Nature

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Thirteen months onwards	<i>"Seeing two little wet places left by the watering pot on the gravel she said 'baby' with an evident meaning; she meant by it 'whatever wets' "</i>	As various concepts begin to take shape in a child's mind as part of its general cognitive functioning, it makes generalizations suited to its own mental state.

Driven by Nature

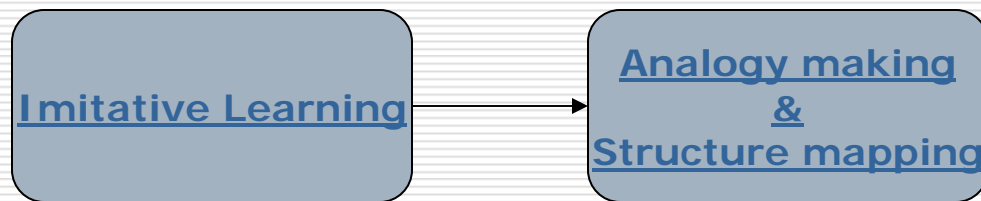
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Thirteen months onwards	<i>"Seeing two little wet places left by the watering pot on the gravel she said 'baby' with an evident meaning; she meant by it 'whatever wets' "</i>	As various concepts begin to take shape in a child's mind as part of its general cognitive functioning, it makes generalizations suited to its own mental state.
Eighteen months onwards	<i>"As she began to use consonants freely, she invented a few new words to which she attaches meanings. For e.g. ham and tem"</i>	The initial phase of producing sounds for the mere pleasure of discovery has subsided.

[Back to Proposal](#)

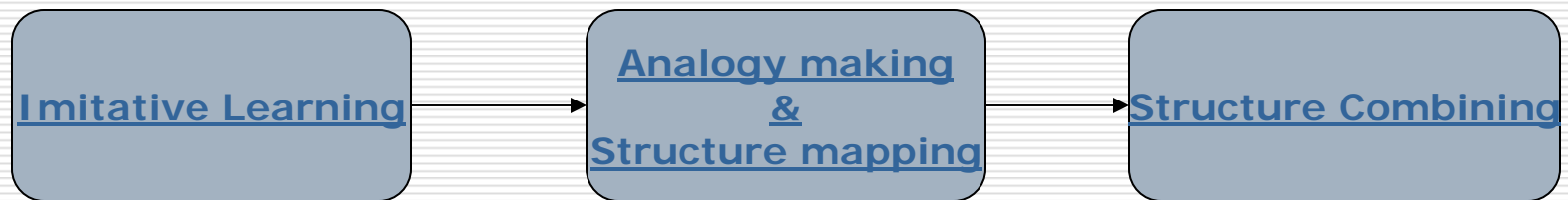
Driven by Nurture

Imitative Learning

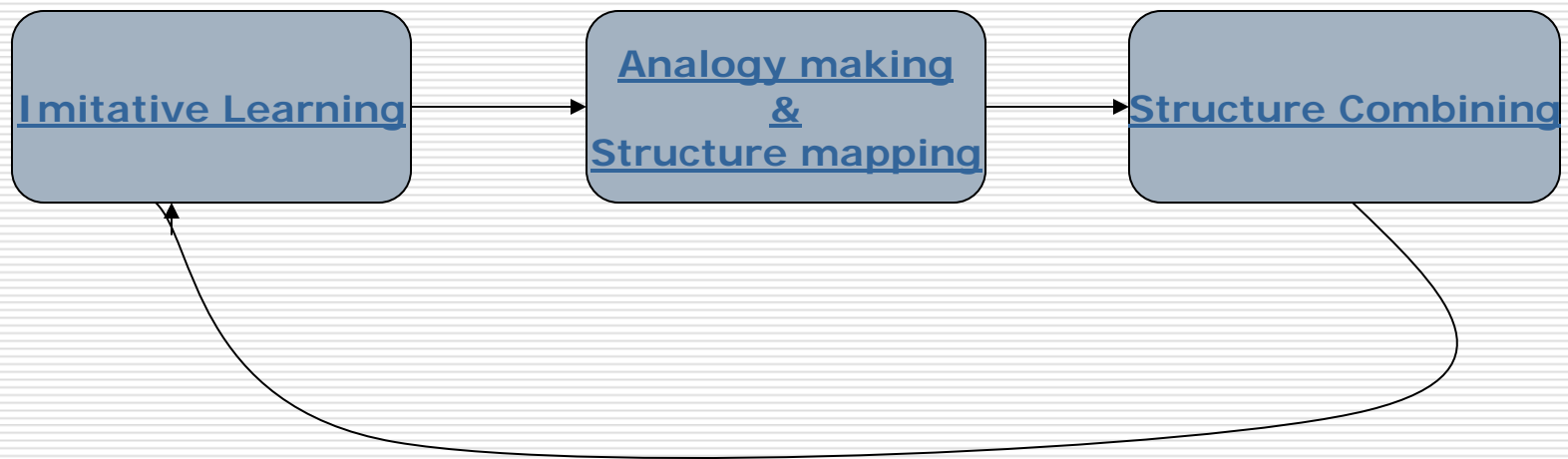
Driven by Nurture



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Driven by Nurture



To Conclusions

Imitative Learning

- ❑ From the age of 2-3, children attempt to understand and reproduce virtually all of the activities they see in the cultural environment around them
- ❑ Communicative Intentions
- ❑ However, imitative learning cannot be the whole story

Analogy making and Structure Mapping

- Children, very naturally, discerns similarities and dissimilarities among the various the constructs

Structure Combining

- Children are not just combining words or isolated linguistic categories, they are combining pre-compiled linguistic constructions
-

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See Maria
See Daddy
See this

See _____

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See Maria
See Daddy
See this

See _____

Daddy's _____

Daddy's Bread
Daddy's ball
Daddy's Salad

Structure Combining

- Children are not just combining words or isolated linguistic categories, they are combining pre-compiled linguistic constructions

See Maria
See Daddy
See this

See _____

"See Daddy's car"

Daddy's _____

Daddy's Bread
Daddy's ball
Daddy's Salad

Conclusions

- ❑ There are many facets to the problem of Child Language Acquisition and, hence, an integrated approach is required.
 - ❑ It is erroneous to reduce child communicative systems to adult models.
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Thank You

