



Psycholinguistics

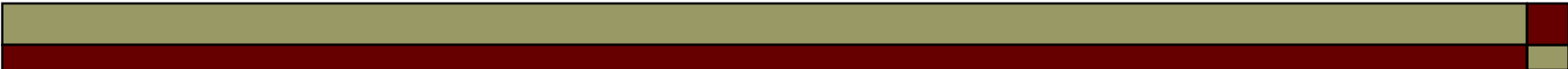
Lecture 3

By Dr. Chelli

Lecture Objectives

Students will review:

- ❑ Language properties
- ❑ Language components
- ❑ Language development
- ❑ Types and grammar
- ❑ Competence and performance




According to your knowledge of
linguistics, can you define language?



Definition of language

Language is a complex phenomenon which can be defined as a **communication of thoughts and feelings** through a system of **arbitrary signals** such as sounds, gestures or written symbols.

- ❑ **Bloch and Trager** (1942) consider it as a system of arbitrary vocal symbols by means of which a social group cooperates.

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- According to Chomsky (1957), it is a set of **finite number of sentences**, each finite in length and constructed out of a finite set of elements.
 - Later on Halliday (2003) defined it as a **system of meaning- a semiotics system**.

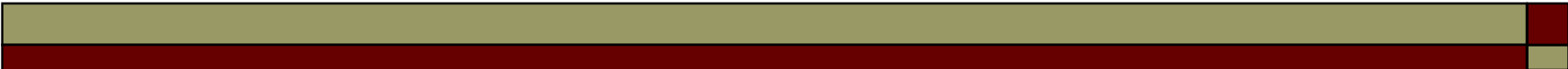


What are language properties?



2. Language properties

- According to the philosophy expressed in the myths and religions of many peoples, language is the source of human life and power (Fronkn, Rodman & Hyams, 2003)
- When we study human language, we are approaching what some call ‘human essence’, the distinctive qualities of mind that are, so far as we know, unique to man (Chomsky, 2006).

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- ❑ **Communication** is considered as the most important characteristics of human language; however, while we tend to think of communication as the primary function of human language, it is not a distinguishing feature (Yule, 2010).



Other language properties

- ❑ **Displacement,**
- ❑ **Arbitrariness,**
- ❑ **Productivity,**
- ❑ **Cultural transmission**
- ❑ **Duality**

Displacement

Displacement is the ability to **refer to things that are not physically present**. Different languages accomplish displacement in different ways.

For example, English has a system of **auxiliary verbs** (eg., will, was, were, had) and affixes like pre-ed to signal when an event occurred relative to the moment of speaking or relative to other events (Traxler, 2003).



Arbitrariness

The second feature of language, arbitrariness refers to **the relationship between speech sounds and meaning**. It is generally the case that there is no ‘natural connection between a linguistic form and its meaning (Yule, 2010, p.12.).

This relationship is arbitrary as different languages have different speech sounds to represent the same thing.

Productivity

- Productivity is a characteristic of all languages that **allow novel utterances to be created in response to new thoughts, experiences and situations.** Unlike the communicative system of other creatures, humans possess **a limitless ability to say new things** or the potential number of utterances in any language is finite. Productivity is also called open-endedness or creativity (Yule, 2010, p.13).
- Language is a system that allows **immense creativity** as we use it to communicate anything we can think of as well as to interact socially, to entertain and to inform.

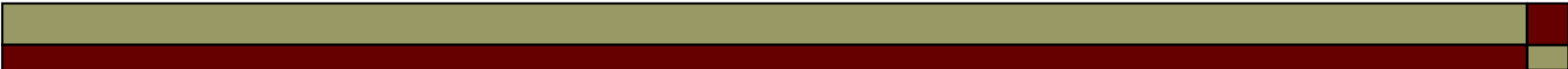


Cultural transmission

- Another important property of language, **cultural transmission**, is the process whereby a language is passed from one generation to the next one.
- It is clear that humans are born with some kind of predisposition to acquire language in a general sense; however, we are not born with the ability to produce utterances in a specific language such as English. We acquire our first language as children in a culture.

Duality

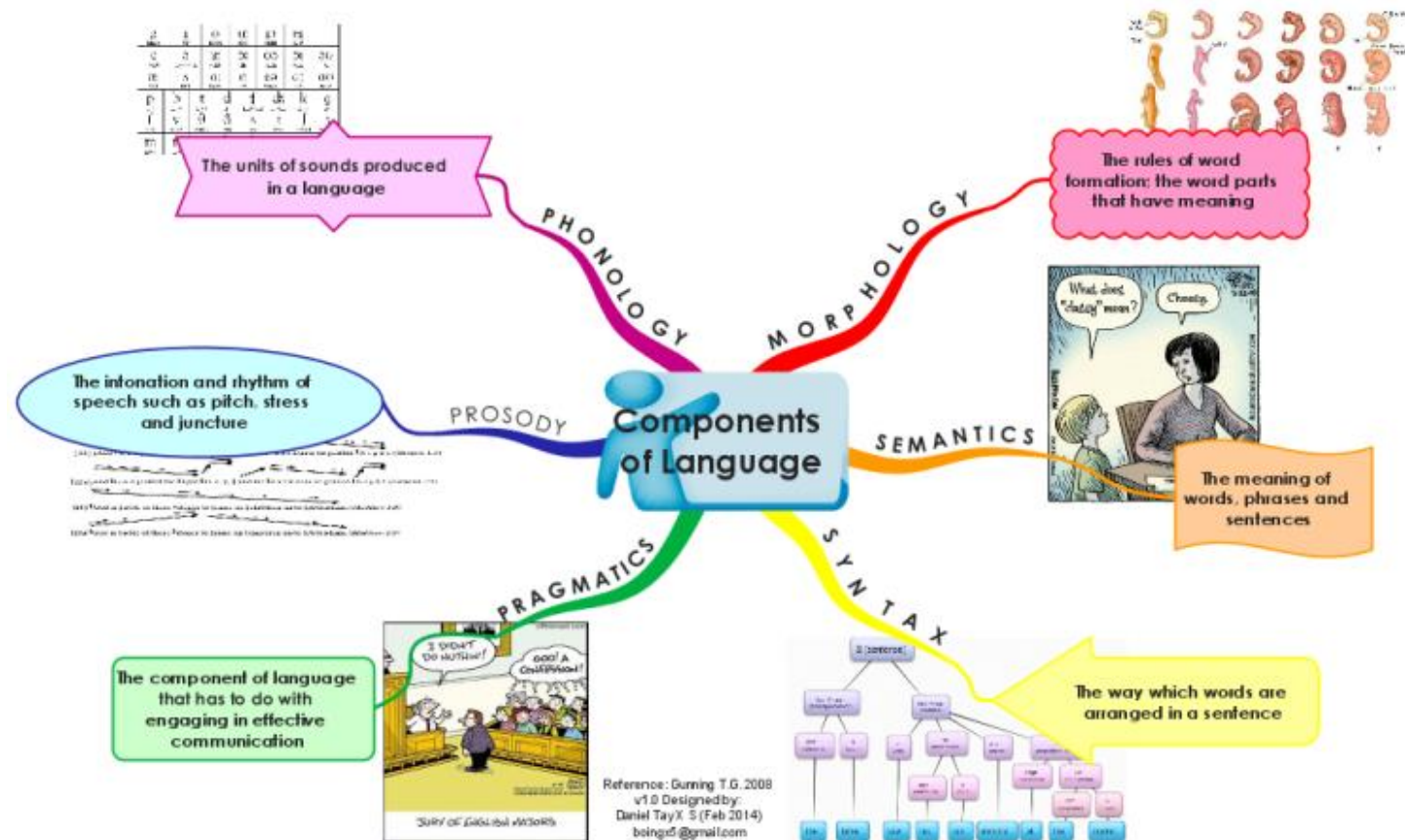
- **Duality or double articulation** means that language is organized at two levels or layers simultaneously. In speech production, we **have a physical level** at which we can produce sounds like, n, b and which have no intrinsic **meaning**. But in a particular combination such as bin, we have another level producing meaning different from the combination nib

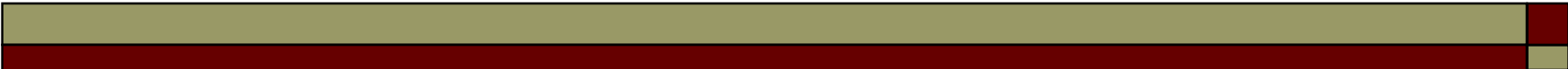
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- We can conclude by saying that the features of human language by Hockett (1960), known as a design features of human language help to understand the essential characteristics of human language.
 - They include in addition the **mode of communication, semanticity, pragmatic function, interchangeability** referring to the ability of users to transmit and receive messages or in other words communication and **discreteness**, another term with the same meaning as duality



what are the components of
language?

Components of language



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- In general, the major components of language include: form, content and use




In general, the major components of language include:
form, content and use

1. The form includes: phonology morphology and syntax as defined below

- ❑ **Phonetics and phonology:** Phonetics is concerned with how sounds are produced, transmitted and perceived while phonology is concerned with how sounds function in relation to each other in language.
- ❑ **Morphology** is a sub-division of grammar concerned with the study of the internal structure of words.
- ❑ **Syntax** is the study of the way in which sentences are constructed from smaller units called constituents.

2. The content refers to semantics which is part of grammar concerned with the study of linguistic meaning


- ❑ **3. Pragmatics** is concerned with the study of meaning as communicated by a speaker. This type necessarily involves the interpretation of what people mean in a particular context

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- Do you think that language has effect on thought?
 - How?

4. Effects of language on thought

Look at these quotation and discuss.

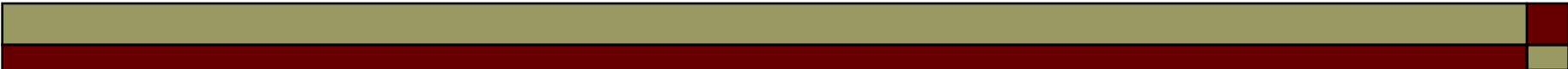
- Language is a mirror of mind in a deep and significant sense. It is a product of human intelligence ... By studying the properties of natural languages, their structure, organization, and use, we may hope to learn something about human nature; something significant, if it is true that human cognitive capacity is the truly distinctive and most remarkable characteristic of the species.” (Chomsky, 1975, p. 4)

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- ❑ Classical empiricist thought maintained that our concepts (sensory discriminations aside) derive from experience with properties, things, and events in the world and not, originally from language (cited in Gleiman & Papafradou, 2005).

Assignment 1:

- Write a summary of the article entitled language may indeed influence thought by Jordan Zlatev and Johan Bloomberg.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4628110/>



Let us now discuss the different
views of language development
(language theories).



5. Views of language development

There are various language development theories that have been propagated by different proponents. These include:

- ❑ The behavioural theory,
- ❑ The nativist linguistic theories,
- ❑ The social interactionist theory
- ❑ The cognitive theory.



The behavioural theory

- ❑ The behaviourists believe that language **can be observed and measured**. B.F Skinner is the best who positioned that **children are conditioned by their environment to respond to certain stimuli with language**.

The nativist theories

- The nativist theories hold that children learn through their **natural ability to organize the laws of language**.

Chomsky claims that children are born with a hard-wired Language Acquisition device (LAD) in the brain. According to him when the young child is exposed to language, the LAD makes it possible for them to deduce the grammatical principles because they are innate



The social interactionist theory

- ❑ Contrary to the previous theories, **the social interactionist theory** stresses the **importance of the environment and the context in which language is being learnt**. It focuses on the **pragmatics of language** rather than grammar.
- ❑ It is not an innate ability, but it develops in negotiation the environment as it is based on both the culture and the environment



The cognitive theory

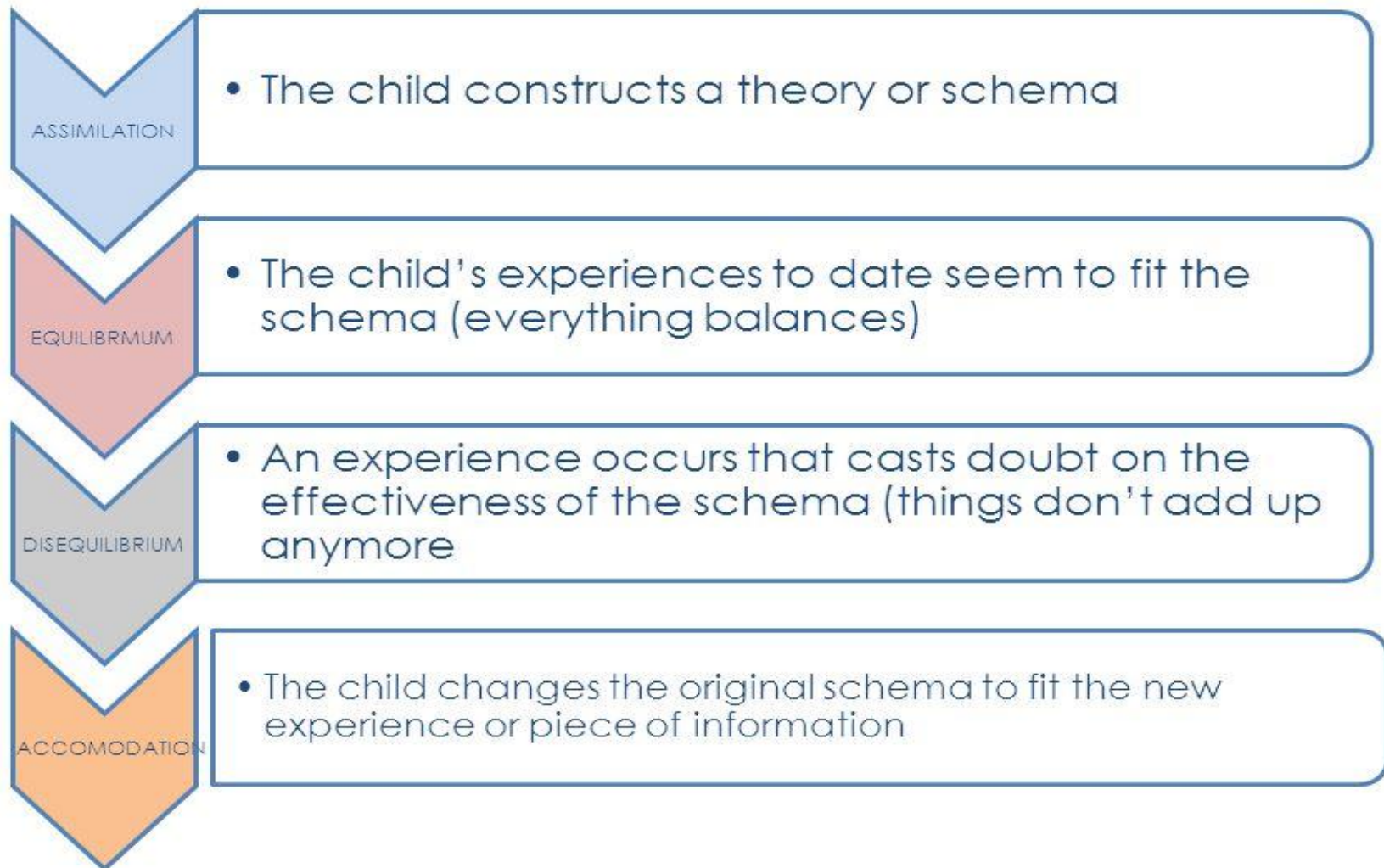
When we talk about the cognitive theory, we refer mainly to **Jean Piaget who views that language is made up of symbols and structures.**

He deals with the nature of language and how humans **gradually come to acquire, construct and use it.** The chart below shows the different stages involved in cognitive development

PIAGET THEORY OF COGNITIVE DEVELOPMENT CHART

Stages	Age Range	Description
Sensorimotor	From birth to 2 years	<ul style="list-style-type: none">- Identifies object performance, the object still exists when out of sight- Recognition of ability to control object and acts intentionally
Preoperational	2 to 7 years	<ul style="list-style-type: none">- Begins to use language- Egocentric thinking difficulty seeing things from other viewpoints- Classified objects by single feature i.e. color
Concrete Operational	7 to 11 years	<ul style="list-style-type: none">- Logical thinking- Recognizes conservation of numbers, mass and weight- Classifies objects by several features and can place them in order
Formal Operational	11 years and onward	<ul style="list-style-type: none">- Logical thinking about abstract propositions- Concerned with the hypothetical and the future- Create hypotheses and test

Piaget's Theory of Learning





Assignments 2& 3

2. Piaget's theory has been very influential in education

Write a paragraph in which you answer this question: What are the implications of Piaget's theory for education?

3. What is Vygotsky's theory based on?



Grammar

- What is grammar?
- What are the types of grammar?

Types of grammar


- ❑ The grammar of a language consists of the sounds and sound patterns, the basic units of meaning such as words, and the rules to combine them all of these to form sentences with the desired meaning.
- ❑ Very simply, it is what a speaker knows about language. It represents his/her linguistic competence.
- ❑ Grammar refers to the mental grammar speakers possess in their brains and also to a model or description of this grammar.

Different theories of language resulted in different types of grammatical descriptions based on different premises and with different purposes

- ❑ **Traditional grammar/** structural grammar that divides language on the basis of parts of speech or division of a sentence into its constituents: noun, verb, adjective...
- ❑ Another description of grammar, **called functional grammar**, concentrates on how words are combined to make meaning.

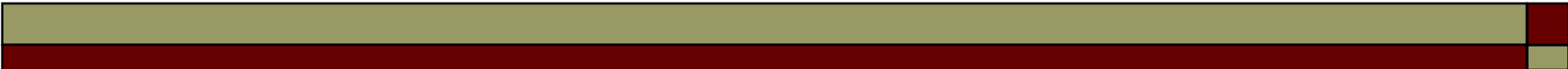
Both traditional and functional are largely **descriptive**.

- ❑ **Prescriptive grammar**
- ❑ **Transformational grammar**
- ❑ **Pedagogic grammar**



Descriptive grammar describes what we know about grammar; however, prescriptive grammar tells us how we should use language

- ❑ **Prescriptive grammar** is an account of a language that sets out rules for how it should used (prescription) and for what should not be used (proscription) based on norms derived from a particular grammar.
- ❑ It is interested in **correctness** as the Renaissance a middle class wanted their children to speak the dialect of the ‘upper class’. This led to the publication of many prescriptive grammars.

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- ❑ In recent times, linguists who were interested in studying the English language have been able to free themselves of the centuries of prescriptive grammars and develop **transformational grammar**.
 - ❑ Some of the most important contributors to develop transformational generative grammar were **Bloomfield, Harris and Chomsky**.
 - ❑ The latter was interested in a grammar that would generate the structures that constitute the individual's linguistic competence.
 - ❑ Chomsky Chomsky made a fundamental distinction between competence and performance.



What is the difference between
competence and performance?

Competence & performance

- By competence Chomsky means the shared knowledge of the ideal speaker-listener set in a completely homogeneous community. Such underlying knowledge enables a user of language to produce and understand an infinite set of sentences out of a finite set of rules.

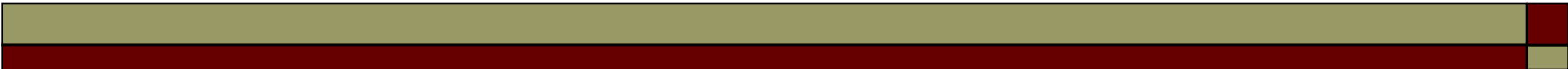
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- Performance, on the other hand, is concerned with **the process of applying the underlying knowledge to the actual language use.**

However, performance cannot reflect competence except under the ideal circumstances because it can be affected by such variables as memory limitations, distractions, shift of attention and interest, errors and some other variables

Pedagogic grammar

- ❑ Pedagogic grammar **links theory to practice**.
- ❑ It is based on the description of ‘standard English’ to help mainly foreign learners to learn English.
- ❑ It is an area of pedagogy referred to as **form focused** instruction.
- ❑ It consists of measures taken mainly by teachers to facilitate the development of grammatical competence and the skill of using grammar.
- ❑ It is conscious learning as opposed to natural acquisition.
- ❑ This type of grammar combines elements from more than one type of grammar.

We can conclude saying that teachers need to know about grammar as well as the psychological processes taking place in grammar acquisition and how this knowledge is translated into the classroom.

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We can conclude saying that teachers need to know about grammar as well as the psychological processes taking place in grammar acquisition and how this knowledge is translated into the classroom.



Assignment 4:

- **Reads the article entitled ‘ Main Schools of Grammar, Grammar in Schools and Pedagogic grammar’ *free-journal.umm.ac.id/files/file/2720-10545-2-PB.pdf* and sort out the main schools of grammar and their main purposes.**
- **What is the difference between Chomsky’s grammar and Halliday’s grammar?**

References

- ❑ Chomsky, N. (1975). Reflection on language. New York: Pantheon Books.
- ❑ Chomsky, N. (2006). Language and mind. Cambridge: Cambridge University Press.
- ❑ Formkn, V; Rodman,R, Hyams, N (2003). An introduction to language. Thomson Wardsworth.
- ❑ Gleitman, L ; Papafradou, A (2005). Language and thought. In K.H Holyoak & B. Morrison (eds.), Handbook of Thinking and Reasoning. Cambridge University Press.
- ❑ Traxler Matthew, J. (2012). Introduction to psycholinguistics: Understanding language science.

Further reading

*Incorporating Piaget's and Vygotsky's Theories in
classroom.mxtsch.people.wm.edu/Teaching/JCPE/.../JCPE_2008-01-09.pdf*

Next session

1. Correction of the assignments
2. Lecture 4: Language comprehension

Refer to:

- Psycholinguistics by John N. Williams
- Psycholinguistics: Language comprehension and production (better to be printed).