

## Linguistics - 1

Mid 1

5 Typology — classification of language on diff basis — word order, Phonology, Morphology

Universal — Areal linguistics (Emenau)  
10 Similarities — genealogy  
Language Families

- Mentalism and Realism  
(Chomsky) <sup>less data</sup> vs (Greenberg) <sup>more data</sup>
- level of abstraction — deep vs surface structure

Writing System — features  
- alphabetic vs syllabic  
(English) (Hindi/ Devanagri)

20

25

30

## Language Typology and Universals

Language is a means of expression of thoughts and ideas - using words, sentences, sounds etc creatively, ~~and gestures~~ such that they still follow ~~syntax~~ and have a meaning following a grammar.

Know

Read

Write

Listen

Speak

listen (stimulus) + speaking (response)

when they → understanding go together.

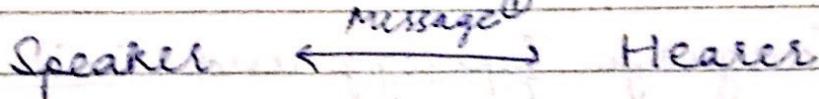
→ know a language - still don't understand

(lack of domain language, shared knowledge, shared code, noisy channel)

-Code

-channel

⇒ delayed communication  
- letters, e-mail



- "communicat" may/may not have a goal.
- purpose<sup>②</sup>
- setting<sup>③</sup> — diff in canteen/class/wedding/funeral

Goal Oriented — Task-oriented  
 (something changes in physical world.)

chit-chat — social goal (to have company)

purpose — is to buy a bag  
 goal — buy it for ₹100

according to goal, you ~~are~~ are conversat<sup>n</sup> elements.

→ what happened during the day  
 (no goal.)

→ you want money from parents  
 (goal)

→ Language is part of our behavior

"Don't use that word"

→ Behaviorist/Mentalist?

→ Chomsky — Innate (Mentalist)

Two schools of thought -

- born = language (innate) - Chomskyan

- b learned - Greenbergian  
(Behaviourist)

analyse what is  
written / spoken

take data in  
many languages  
- compare & study them.

Chomsky - go in depth of one language.

A killed B

B was killed by A

} Chomsky - equal

} Greenberg - diff

→ Chomsky calls it deep structures

L concept

surface structures

L words / sounds

L syntax

concept of - chair & ~~table~~ gift - same.

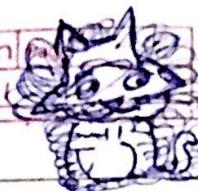
Creativity

Duality of pattern - sound < words < sentences.

- Human language can be broken down.

→ Displacement - talk about future/past.  
(Human L feature).

→ Recurriceness



- Competence - knowledge of vocab/fluency
- Performance - typos, errors, noise

5 Communicative competence - acc. to context / pragmatics / culture - modifying usage

of language.

- choice of words
- manners

10 Because of competence - one corrects himself.

15 Words - patterns | the | go to bed A

sentences - functions | A good night now A

20 grammar, pitch in other situations +  
typos |

written work

errors |

25 errors - from add & reads - from errors

30 errors in above. Shows - writing of phrasing

writing within the text of a story



## Life at IIT-H

Hunger. Sleep deprivation. Attendance. Three things you hear most at IIT-H. We wake up every morning thinking "we can do this" and sleep every night reminiscing "maybe tomorrow". Zomato and Swiggy are our best friends and the guards screaming for "biometrics" are the most annoying people ever.

We all came here thinking college is going to be all fun and parties, dancing, going out - but little did we know that its all a hoax. College is more deadlines in a day than hours, more stress in one day than you would expect in a year, and a LOT less sleep than you require to stay alive.

We look at our friends, our dear friends, who made wiser decisions and went to DU, and are now possess a life. It's heartbreaking.

Most of the times, its I feel like I was 100x more active during school days. Its not the college's fault. I can sleep 24 hours a day here. I have learnt to sleep in class, in the lab etc. Its a useful talent to have. Saves a lot of time and effort.

The other useful talent is to be able to convince juniors to give proxy. Because god knows how hard it is to attend 8:30 classes every week.

I thought courses here are like those at school, the instructor ~~n-th~~ tests your knowledge on basis of what they have taught. But more often than not, I end up staying awake the whole night studying the subject and still have no clue where the questions are from. But then again, I guess this is no one's surprised :). Welcome to IIT-H.

Translation:

aur  
 Bhukh, Neend ki komi, attendance mein get teen shabd, <sup>cheezey</sup> <sup>mein</sup> salse zyada sunne mein aayenge. Har subah utkai ham hum sochte hain "aj hum yeh jang jeetenge" and aur har roat haai maankar sochte hain "shayad kal". Zomato <sup>aur</sup> Swiggy humare <sup>tabde</sup> 11 प्रय मित्र हैं और <sup>जुस्ट</sup> कोटी • लाखों  
 & "गायोगेट्रिक" chillate suraksha karmiyon se zyada is duniya mein aapko kuch nahi sataayega.

Hum yaahaan aaye toh the badi ummeedin lekar ki college mein maij-masti aur party korenge par humein kya pata tha humare saath chhae ka khele racha gaya hai. College mein ghanton se zyada or grahkaarya hain, ek saal ka ki chinta aur vojh ek din mein hai aur neend toh jaise eid ka chaand hah hogi hai.

Apne khushkismat doston ko dekkhai lagta kaash humein bhi lektai nirnay lekar DU jaate aur humare paas bhi ~~ek~~ zindagi hoti bachi hoti. Soch kar hi lagta hai dil ka daura aagaya hai.

Mujhe lagta hai vidyalaya mein main un zyade sau guna chust thi. Par bechaare college ki bhi kya galti - kyonki waise to dekha jaaye toh main yahan 24

एंटे सो रस्कती हैं — कक्षा में, प्रयोगशाला में।  
अहीं तो मेरा ये दुनर काम आखाधी अंत में भी यही  
महुंमी के — <sup>जैख पकड़</sup> ज्यादा आश चर्चेंचिकत ना हो — ॥१८-५  
में स्वागत है।

## Comparision

### ① Word

- (i) IWS → 3WT
- (ii) like / love → पसंद <sup>contd</sup> (*I love football*)

### ② Auxiliary

### ③ Morphology — suffix/ prefix translation

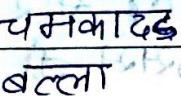
### ④ Omission of subject.

contd (iii) I — मुझे / मैं even in same PS tree.

Source Text Target Text

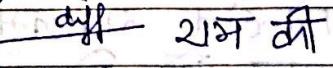
### Vocabulary

repeated words — translated diff.

Bat  बत्ता

### conjunctions & other POS

e.g. A married B

A ने B से शादी की  नहीं की

करी

## Comparison

### Words

(i) One to many / Many to one

1. Sleep deprivation — नींद की कमी

2. most — सबसे ज्यादा

## Translation

भूख। नींद की कमी। अटेंडेन्स। तीन चौजे आप 11A-H  
 में सबसे ज्यादा सुनेंगे। हम हर सुबह उठते हैं, सोचते  
 हुए कि "हम कैर सकते हैं" और हर रात सो जाते हैं  
 सोचते हुए कि "शायद कल"। जोमाटो और स्विग्गी  
 हमारे सबसे प्रिय मित्र हैं। और "बायोमेट्रिक" के लिए  
 चिल्लाते सुरक्षाकर्मी सबसे अधिक सताने हैं। वाले लोग  
 हैं।

हम सब यहाँ आरे थे यह सोचकर कि कॉलेज होगा ~~लाज~~  
 मौज-मस्ती, नाच-गाना, बाहर घूमना — पर हमें क्या नहीं  
 पता था की ये सब एक छल हैं। कॉलेज ~~मेरे~~ के एक दिन में  
 पंटो से ज्यादा, ग्रहकार्यों की समयसीमाएँ हैं; जितनी  
~~उम्मीद~~ थकान <sup>की उम्मीद</sup>, आप एक साल से ~~करेंगे~~ <sup>जापको</sup> करेंगे उतनी  
 एक दिन में हैं। और (जितनी जीद जीवित रहने के लिए  
 ज़रूरी हैं) उससे कोई काफ़ी कम है नींद!\*

हम अपने दोस्तों को ढेखते हैं, उन प्रिय दोस्तों को  
 जिन्होंने अकलमंद निर्णय लिए और चले गए DU, और  
 उन्हें जिनके पास ज़िंदगी है। कितनी उदास बात है।

मुझे लगता है मैं स्कूल ~~मेरे~~ के दिनों में सौ गुना ज्यादा  
 चुक्त थी। यह कॉलेज का दोष नहीं है। मैं यह एक दिन में  
 २५ धृते सी सकती हूँ। मैंने क्लास, लेब इत्यादि में सोना  
 सीख लिया है। यह हुनर होना काफ़ी उपयोगी है।

बहुत समय और परिश्रम की बचता है।

मुझे लगा था यहाँ के पाद्यकाम स्कूल के जैसे हैं—  
 आचार्य आपके ज्ञान की परीका लेते हैं, उनकी पढ़ाई  
 उनके द्वारा सिख उन्हीं जो सिखाया उसके आधार पर  
 बहुत अक्सर ऐसा नहीं होता। मैं पूरी रात पढ़ती हूँ  
 और फिर भी समझ नहीं आता कि सवाल हैं क्या हैं।  
 पर फिर इस सब से चौंकता कौन है। कोई नहीं है।  
 यह मेरे स्वागत है।

most — सबसे ज़्यादा / अधिक

### Analysis:

#### Vocabulary:

① Exactly equivalent words.

① - Borrowing (if not found), Native (बोतल bottle)

② - Paraphrase

③ - Delete

④ - Root - suffix e.g. शुरू / बुक्सिंग  
 (source) (TL)

⑤ - help - help karna

help - help kya / try kya

मट्टे — after possessive nouns occur  
 (noun) check POS.

3 संघी ( )  
 NOUN

① - replace Multi-Word expression,  
 Frozen expression (HIT or idioms).

11T — TL  
 (source) — IIT (borrowing script)  
 आई आई...

— इंटरनेशनल —

BJP — बीजपी

— माजपा

Air conditioner — AC

you retain fun  
 don't even translate  
 "air".

SL idiom — meaning — TL

apple of my eye — आँखों का तारा

मुझे आरी है

gender  
req.



headmaster —

प्रधानाचार्य / अध्यापक

प्रधानाचार्य / अध्यापिका

very good  
teacher

अच्छा टीचर  
अच्छी टीचर

my friend — थोड़ी दोस्त

मेरा दोस्त

Personification

the paper  
says

the paper  
talked about

अखबारों में बच्चा हो  
 रही है

रुग्मान - dark or blue

Write all colour terms:

लाल

गुलाबी

संतरी ~~कुम्हा~~

केसरी

गोरुआ

नीला

गोहुआ

हरा

सफेद

काला

रानी

पीला

अरु

बैंधानी

जामूनी

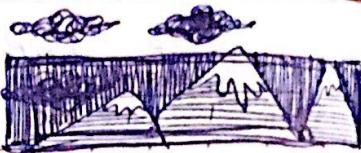
नारंगी

सुन्दरा

चाँदी

रवाकी

{ Pidgin will have vocab  
Code-mixed doesn't



Aug 19

## → Internal reconstruction

V/S

→ Comparative steady - (show similarity b/w words & sounds)

→ do -

d̪ɪrət̪ɪ  
↓  
hand

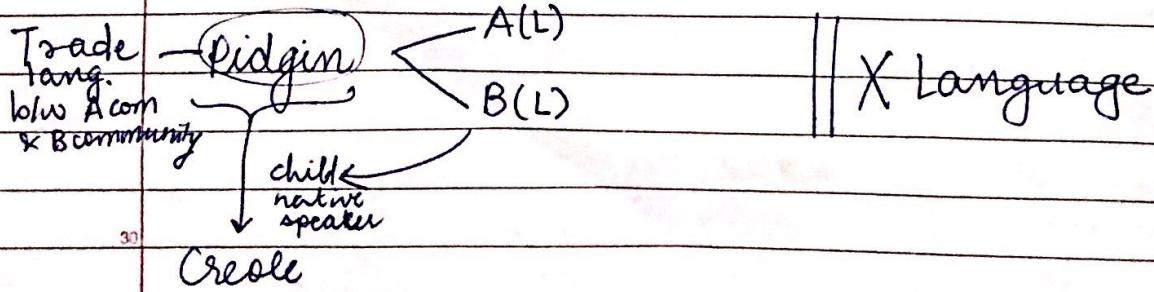
→ Borrowing

① nt form      changed form      native word  
                        ↑  
mixing of languages      borrowed word

Mixing

— Pidgin Pidgin  
  ② Languages come together      native speakers  
— Pidgin & Creole  
has a structure — has vocabulary

→ Standardisation of language the creole leads to it being raised to the level of language.



Pidgin — spoken by 2 monolingual.

Camli  
Date

Gurmukhi — in India

Sharmukhi — Punjabi in Pakistan

## Convergence & Divergence

↓  
Pidgin/Creole



How can we know if 2 lang belong to same language family:

look at sound, structure, morph (shared vocabulary)

Find out whether word is borrowed

Two equivalents ↗  
e.g. In Telugu (Formal) ఇంతకారు సిగ్ సంక్రమ  
(Informal) local సంక్రమ

kalyān — Kalyānam  
(कल्यान) (कल्यानम्)

class  
अस्त्र/orbit

शिक्षा  
Educate  
punishment

శిష్టాణ (Telugu)

Standard Variety — has least influence from other L



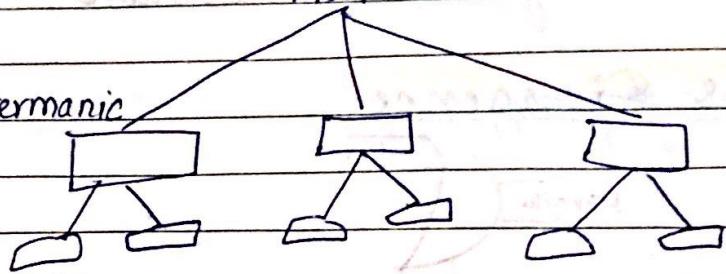
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Bangalore 5 Aug 2019

Date

Proto IE

Germanic



## GRIMM'S LAW

$$b^b - b - p^b = f \quad \} \text{Rask figured out first}$$

kurf~~si~~

kurtfulu

pilli

pillulu

Graduation

found in agglut. which vowel near each other

Vowel harmony

wowels of a word have to be members of same class

Areal Linguistics — looking at languages belonging to diff language families

Geneology — similarity of gene (belonging to same family)



## Word Order

## popularity

SOV	TPP	SOV
SVO	TPP	SVO
VOS	TPP	<del>SV</del> VSO
VSO	TPP	OVS
OSV	TPP	VOS
OVS	TPP	<del>SO</del> OSV

Aug 22 :: Lec 06

→ Srilanka :: Indo Aryan + Dravidian

Pakistan: Indo Aryan + Nuristan + Dravidian + Tibeto-Burman + Iranian

→ Dravidian

└ South - Malay, Tamil, Kannada

└ Central -

└ SC - Telugu (South Central)

└ North

conjugation - darsanam

verb - icitimatillam

→ B H Krishnamurthy

Anvita Abbi

## Linguistic features shared by all languages

- Shifting language loyalty
- Tribe - relatively isolated

Typology → {  
    Synthetic - use of "inflect"/agglutinat" to express ◎  
    Agglutinative - Sandhi (-spelling -phonetic change)  
    Inflecting - inflections are high  
    Fusional - fuse everything in one (all features in one)  
        e.g. एति → tells you Gender, Tense, Number

◎ Syntactic relationship within a sentence.

उत्ति रही थी  
ROOT aspect GNTense  
↑ continuous

Multilingual - Belgium

Multifamilial - India

Emmeneau (pronounced मॅमेनो)

SOV

Absence of preposition → postpositions

माला-माला चाई Morphological reduplication → Hindi (v), Punjabi (sh)

Echo format → (second changes) Telugu (g)

Reduplicated verbal adverbs - जल्दी - उत्तर्दी

Compounding : एति-गौतम, गुरु-विद्या, घोड़ा-पौत्र

expressives

Echo → चाई - vai

onomato compound

11 garam-garam chai } difference  
 thanda-thanda pani }  
 garamchai  
 thanda pani  
 on pragmatic level.

redup → अभी-अभी } emphasis/intensification  
 नहीं-नहीं }  
 होते-होते }

### Onomatopoeia

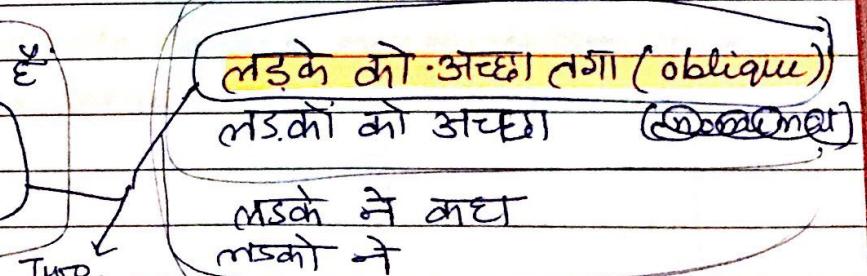
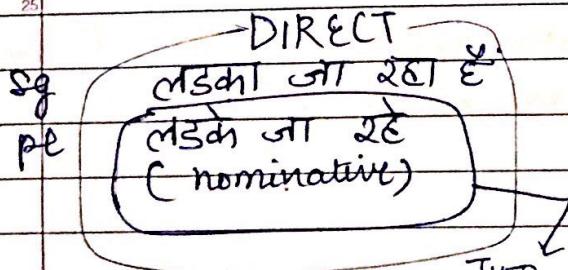
3ch - 3ch	drizzle
धून - धून	sizzle
चपर - चपर	shimmer
गप - गप	
बका - बका	
टिप - टिप	
रिमझिल	

### Converbs

Morphological causatives

explicator compound verbs — जाना, स्तम्भ, स्तल

INDIRECT



### Converbs

e.g. जाना सुअरा — go x sleep

Causatives — shown at morph. level in JL

कराया → कराया  
 (intransitive verb) (transitive verb)  
 कराया → कराया — made him eat  
 (causative verb)

from-fish → fish  
 fat → fat

water → water

from-verb → verb

glossed → gloss

missed → miss

discovered → discover

hit → hit

hop → hop

rest → rest

rest → rest

adverb → adverb

adjective → adjective

→ Chomskyian or Greenbergian

→ Surface structure is diff depending on language but main idea remains same.

A killed B } same active passive,  
B was killed by A } interrogative

A killed B } diff diff verbs  
A murdered B } (postposition)

Chomsky vs. Greenberg:  
(mentalist) (behaviourist)

Data      1 lang (e.g.)      300+ lang  
deep analysis      surface analysis

Universals by Greenberg

⇒ Typology means classifying languages on basis of:  
 → Word order (syntactic level)  
 → Phonetic / Morphological level

mostly SOV languages have postpositions

→ Languages are similar based on some universals and differences are studied under typology.

- rules + vocab → sentence (generative)

Chomsky - universal grammar

- creative - language is innate

- lang acquisition device (born with)

Greenberg - language is acquired

- repetitive - learned by stimulus-response

- sentences learned from environment

Competence & performance

[thoughts]

[forming proper

understanding)

sentences etc]

poverty of stimulus : even if the data is mixed & disfluent, a baby picks up the language. They don't confuse between 2 languages (even if data they receive is code-mixed)

### Types of universals

categories

informal subcat

1. formal (N.V) no

Substantive

2. Absolute vs

Statistical

[all lang have  
vowels and conso  
nants]

[SOV langs have  
postpositions : most,

statistics will catch  
the exceptions]

3.

Implicational vs non implicational  
case markers → free word order  
post positional → SOV

### Colour hierarchy

white

green

black

red

yellow

blue

brown

←

if lang has colour term for blue, it  
has all previous ones

if lang has only 3 vowels  $\exists$  u i

implicational  $\Rightarrow$  L has 3  $\Rightarrow$  L has 1

### Project

Term paper

- 8-10 pages / 10 minutes

- Linguistic study — Intro (Family, origin etc.)  
Phono.

Morph

Syntax Causative  
Semantic.

Special/Unique feature

→ Vowel/Consonant chart of language

→ features (morph) e.g. inflect<sup>n</sup>  
depending on other tokens in sentence

Infusion of features — morph level

Lexical level  
Syntactic level

The baby eats

The mother feeds the baby

The mother made the baby eat

Syntactic  
(Helping verb)

— plurality is observed with nasalised - - -

— How questions are formed

— Quest<sup>n</sup> words coming @ end or @ beginning

खाना रखा ? — दूरा मने खाना रखा ?  
without asking quest

## Part A : Analysis from English to Hindi text

- Assimilation
  - Borrowing
  - gender, number
  - simple / complex morphology
  - Classifiers / Numerals
    - countable for humans.

ੴ ਗੁਰ ਪ੍ਰਾਨ

*gradi*

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Bonus = actual interaction

Afterwards we had a short walk to the beach.

1. *Leucosia* *leucostoma* *leucostoma* *leucostoma*

Aspect II: Many transversal issues

19. *Leucosia* *leucostoma* *leucostoma* *leucostoma*

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~~negative~~ ~~negative~~

~~THE END~~

of *Agave* — *Agave* —

*Left side considered*

1923-1924  
1924-1925

新竹市立圖書館  
新竹市立圖書館

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2098-2099  
2099-20100

- added on ~~10/25/02~~ added 2/17/03 (EJL)

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*2000-2004*

—  
—

Chlorophylls

(d) *geological*

*Brachyura* *Decapoda* *Malacostraca*

Page 2 of 20 Date 10/10/2018

## I Formal rules of grammar - categories

Substantive - constraints on subcategories.

given less importance

### Implication

accusative

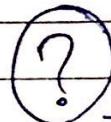
ablatice

### Reflexive pronoun

कुदको / कुद

अपने आप

स्वयंम् को / स्वयं



बेरा आई राम लो दे जाएगा

→ My brother Ram will go home tomorrow

→ Ram who is my brother will go home tomorrow

राम जो बेरा आई है, वह दे जाएगा।

Loc 1D

## Writing System

and conventional

- consistent, - Rules
- productivity
- conveying information
- expressing only the ideas expressed by the language.
- persistence

Speech is transient

## Speech vs Writing System

- conversational vs descriptive

### ORAL TRADITION

poetry (hymns) L dialogue.

L spontaneous L more nuances (stress, pitch)

L transient

L higher degree of oscillation

### WRITTEN

L allow for more nuanced expressibility

L expressive

L permanent

- memorisation

L independent of discourse

L monologic

- high degree of oscillation

→ pauses - playwright device

e.g. Frozen

woods

- standardisation

Ideographic - each symbol represents an idea

Eg. math

Cannot become a language

→ Diacritic — first 3 of  
short /  
cong  
vowels

Lec 11 : Radhika Ma'am

Opposite	Approach
Acquisition vs Loss	Data
Broca's	Abstract
Wernicke's	Baseform (lost last) (learnt first)

Innate — mentalist

Reinforcement — behaviorist

— Spontaneity vs nuance

— Differences in vocab. level.

Subordinate clause

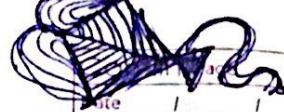
describing noun/NP

लोक ने यह किसके को  
जो दी

Co relative — showing case also

लोकने, उसने  
उसको, यहको

hence you can  
relativise an object and  
subject



Ravi hit Rahul who is very naughty  
" gave a book which is on the table

(Interrogative pronoun)

→ I saw a dog which was chasing a bird which  
was - - -

(Ques).

Hindi -

उस में कौन था? --- (not ---).

Question

What is your name? { wo changes

Your name in what }

आपका नाम क्या है?

आपका नाम क्या है।

} word Order  
doesn't change

→ wo - Relative noun

vs

wo of Relative pronoun

eg. Give this book to him who is - - -

Part

Here it is same but  
changes in some languages

→ Restrictive and Non-Restrictive

{ clause with  
additional  
info

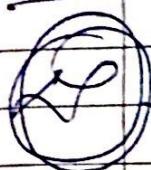
(written in  
brackets) — using ','

Ravi who is wearing red. — R

Ravi, who is " " — NR.



- All boys wearing black ~~s~~ such
  - if all boys are wearing black — ~~R~~ NR
  - If some (important info) — R
- In Hindi, — no diff while saying R and NR.
- In some lang.  
Relativising Ind obj — is difficult.



### Genitive Clause

↳ use of case marker (जिसकी)

15 Pg 98, 95 — Word Order Chapter

Tendencies:

VSO / Pr / ~~EN~~ NG / ~~NA~~

20 SVO / Pr / NG / NA (AN) — (Eng)

SOV / Po / GN / AN

SOV / Po / GN / ~~NA~~

Post  
positional

21 स वा लड़का

Genitive main  
subj

21 स वा लड़का

21 श्री

मातृ (मा sita is main subj)

→ son of Ram

T.  
main  
subj

→ Aux V - (English)

V Aux - (Hindi) रो<sup>॒</sup> शंकर <sup>॑</sup> &  
रवा शंकर <sup>॑</sup> &

### Case Number

→ Rel C. - N  
N Rel C.

→ Generic to Specific (Hindi)

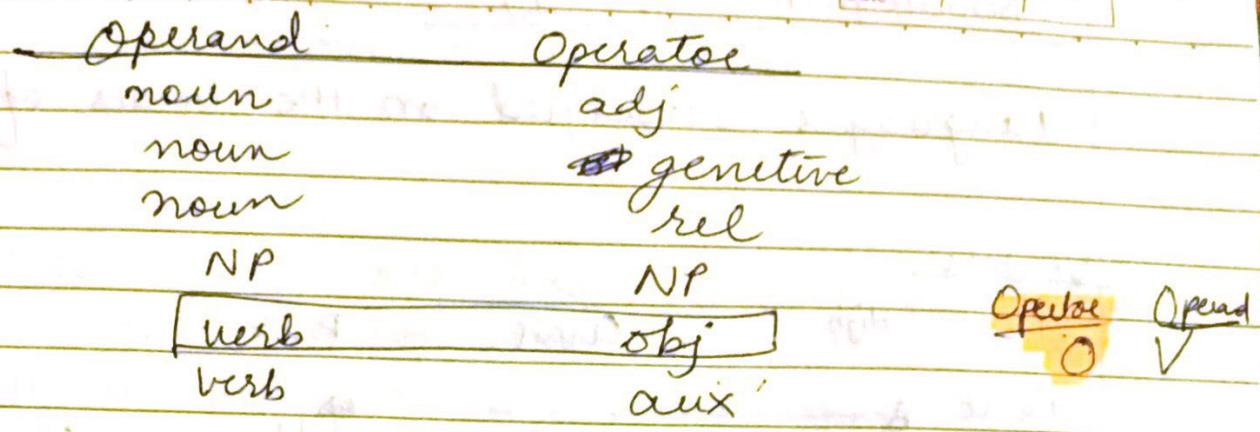
Specific to Generic (English)

Room 205 of Himalaya of IIT  
IIT at Rajouri <sup>at</sup> 205 dist

Thursday to ek boje  
One o'clock on Thursday

→ Operator / Operand (vo / ov)

→ Adj Noun



- standard of comparison vs comparative adj

A is taller than B  
 |                   |  
 Comparative      Standard

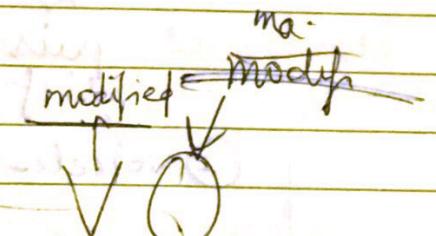
A      B      &gt;      more      &  
 |           |  
 stand.    comp

## Greenberg's universals (46)

6-7 Word Order

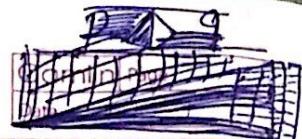
- Morph

- Syntactic



Lec 15

Class: 30 Sept



## Phonological Typology

Languages classified on the basis of sounds.

### Vowels

	High	Central	Back	
Front	ɪ	ə	ʊ	ʊ
bake	e	ə	ɔ	ɒ
red	ɛ	ə	ʌ	ɒ
cat	æ	ə	ɒ	ɒ
Low	ə	ə	ɒ	ɒ

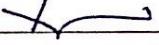
Backness - Backness  
Height - Height  
Roundness - Roundness

~~Roundness~~ Tabialisation compressed

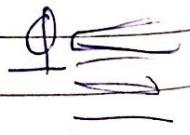
Nasal Vowels

### Consonants

① POA / MOA (voiced vs. voiceless)

p b      k g  
  
pair diff.

② voiceless | voiced



③ Aspiration (काना / रवाना)



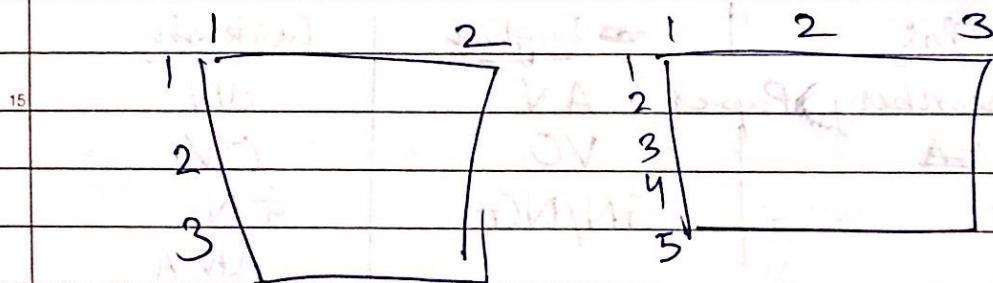
Phonology - study of sound system of languages and universal properties exhibited by these systems

Camlin Date: \_\_\_\_\_

→ egressive — ingressive

→

- ① Absolute      ① all languages distinguish b/w "V & C  
      VI      a language as at least 3 vowels
- ② Tendency      ② vowels < consonant in vast majority
- ③ No lg has more than 16 vowels.  
how developed articulatory organs are depending on that vowels are produced.



→ Height distinct<sup>m</sup> ≥ Backness distinct<sup>m</sup>

→ Vowels in front > Vowels at back

④ → no. of distinct<sup>m</sup> is more in high vowels than low.

⑤ → Front vowels tend to be unrounded and back vowels tend to be rounded

→ no. of nasal vowels ~~is~~ ≤ oral vowels.

⑥ → All languages make a distinction b/w labial and lingual articulat<sup>n</sup>

⑦ → Obstruents tend to be voiceless: Sonorants tend to be voiced.

10<sup>th</sup> October '19



## Implicational Universals

L most of universals are implicational

Greenberg

- Prepositional - Postpositional
- Some languages drop subject so, we talk only in terms of OV / VO
- Adj N & NAdj
- Tautology - implies itself — same thing twice in diff words  
contradicts itself

→ ↗ (maybe ≠ action verbs)

मुझे (maybe ≠ emotion/abstract verbs)

	Thai	English	Turkish
→	NA (Greenberg Paper)	AN	AN
→	VO	VO	OV
→	NG	GN/NG	GN
→			Adv A
→	Preposition	prepositions	Postpositions
→		Adv V.	

→ Mirror imaging

→ Dominant Order —

	VSO	SVO	SOV
Post-A	0	1	6
Post-N	0	2	5
Pr-A	0	4	0
Pr-N	6	6	0

→ 30 languages - classified

## Consonant clusters



Universal 2 = Prep - NG  
Post - GN

Hindi - OV  
GN  
Postposition

→ I and III are polar opposites  
(VSO) (SOV)

→ Yes/No Quest —

C तुम मेरे साथ आजोगे क्या?  
C क्या यह तुम्हारा है?

Wh-questions (Eng)

कौन्हौं, कैसे, क्यों, क्या, कौन  
C तुम्हारा नाम क्या है? — dominant  
क्या नाम है तुम्हारा? — foreshadow

Syntax: Wh-word follow the entity

A. Which boy did you come with?

B. What name did you write?

❖ Suffix - to make female

Filipino

- ~~Prep~~ V-initial, NG  
- ~~preposition~~ preposition

→ Intonation (Phonetic level) — to form a question

→ (Morph. level) ~~suffix~~ — addition of suffix to ask quest  
Morphological ~~suffix~~ — addition of a particle to ask quest — e.g. you are coming, no?

→ aux as main verbs — be, do, have

14<sup>th</sup> Oct '19 - Lec 1.7

- Sub-aux inversion
- Changing position to form questions (Syntactic)
- Language can have diff. ways of forming questions
- Implicat<sup>n</sup> — connecting universals & other  
↑ if quest<sup>n</sup> are formed this way — it is sov/svo etc.
- PROJECT — see how questions are formed.

Syntax  
11.

Is wh-word initial/ comes later (PROJECT)

10 क्या नाम है तुम्हारा?

तुम्हारा नाम क्या है? ✓

कहाँ जा रहे हो तुम?

तुम कहाँ जा रहे हो? ✓

In Hindi,

it is not  
initial

15 Exceptional =  
→ Talk in terms of focus

"नाम" क्या है तुम्हारा?

} correlating  
diff.  
universal

20 "मारा" राम ने राखने को।

12.

13. nominal obj = noun obj.

Relative / conditional clause.

- OV

- (Sub. Cl) (Main C.)

↓  
Sub. Verb

↓  
Main Verb.

30 eg.

उग्र तुम आओगे तो मैं चलूँगा।

Condition comes first  
 14. (absolute) order: Condition comes first  
 अगर तुम जाओगे, तो मैं आऊँगी

15.

g want to go.  
 Comes later

OV → मैं जाना पाएता हूँ  
 Sub. Main verb.  
 Verbal form

16. SOV →

मैं रखना रखा रहा हूँ

रही हूँ

inflecting auxiliary

17. VSO → NA (within VSO — absolute)

18.

AN — अच्छा लड़का — descriptive

वह लड़का — demonstrative

सोने का लड़का — numeral.

(?)

19.

20. demonstrative ~~or~~ numeral descriptive

21. In our lang. — always Adv Adj

(PROJECT) 22. (AMS) A is taller than B - prepo. ( tall - ex)  
 adj marker standard adj marker

(SMA). — A. B से लंबा है। — postpositional  
 adj stand. comp. adj

## adposition - preposition/postposition

Camlin Page

Date / /

23. apposition: gives additional information but not relative clause.

- Narendra Modi, The PM of India  
PROPER NOUN COMMON  
- भारत के PM, प्रधान मंत्री  
CN PN

भारत के PM — Main noun / governing (causing) noun.  
PM of India

Ex. राम का बेटा

राम का बेटा, रामुल

24.

लड़का जोसने खेल लेखा

बोने मे खेल लड़का लड़का

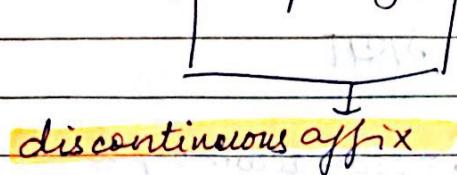
Post & AN — Relativising comes before noun part

25. pronominal obj: pronoun in accusative/ case.

John kicked the boy (nominal)  
him (pronominal)

## Morphology

26. She has been playing all day.



28. derive then inflect

government s  
root deriv" inflec"

30. (vice versa not true)

31. असृत मिथि - असृत मिथि

32. असृते लड़के (agreement) verb

33. (non-inflecting lgs.)

34. सावधान / धूमधान / वहुवधान

(?) 35.

zero-morpheme : girl

36. 37.

(a) He →  
she →  
It → (no gender)

(b) verb (gender)

(c) adj. (gender)

(d) Objects (gender)

phone — फोन रेट है।  
bag — बगर है।

38. sleep  
laugh

de सो गया

morpheme → zero-allomorph

Ergative case → 'ं' marker.  
verb: transitive

John ने — tr.  
Past tense.

John φ सो गया  
Intransitive  
zero allomorph

39.

लड़कियों को  
लड़कियों ने  
root ~~को~~ number marker  
case marker

40. (not in one (gs.))

41.

42. I II III — person (Implicat / Absolute)  
— sg./pl.

43. उसका / जूनी

not shown in nominative case — 'de'  
no. distinction in one (gs. — I, II. (no gender)

## Chomskyan Perspective

- Language acquisition
- takes less data
- abstract - deeper
- Mentalist approach

Innateness hypothesis — ~~not~~ born with innate ability to acquire a language.

Universal grammar — connects behaviorist and mentalist approach

Some grammatical constructions common to all lgs.

- language learning steps are same.

- Classifying lgs.

Diff b/w models

### Nature vs Nurture

part of human nature  
(babies respond to sounds)

Listen } comprehend  
Speak } what a person is saying/writing

Read

Write

### Nurture

environment  
child acquires from environment  
language is like behavior

listening/understanding  
includes:

Stimulus → expect → Response



L,R - passive skills  
S,W - active skills

### Chomsky

- Nature
- Innateness
- hypothesis
- S - LAD - R

### Greenberg

- Nurture
- Imitation
- S - R

→ Poverty of stimulus ← corrupted input  
    erros in lg in  
    behavise  
but child doesn't learn  
the disfluencies (∴ not immitating)

→ Generative model — given some rules  
    new sentences can  
    be formed. These  
    rules are learned by  
    the child — not sentences

Eg. if a child ~~learns~~ creates  
    words — "childs", "eated"  
shows they follow a pattern

→ Duality of pattern

Universal grammar  
↳ principles and parameters applicable to all lgs.

↳ Optimality Theory

↳ setomorphs.

↳ used for computational methods.

↳ underlying principles available in all lgs.  
parameters are set by language

e.g. S, V, O - principle

SVO/OSV/SOV - parameter.

### Language Acquisition

One theory: ↳ child produces all sounds available in all languages. (a stage in child's life - cooing stages)

Two stages ↳ after being exposed to their lgs they retain only required ones.

Other theory = a - Cooing

b - babbling

c - syllables. → ურა, მამა, გაგა

↳ bilabial / i.e. why these sounds are fast then heard first because they are vowel etc / capable of producing

→ referencing words to people / things

begin to use lg.

## Vowels first

then consonants      bilabial  
stops  
fricatives      → affricates come later

- d) two syllables — reduplicat<sup>n</sup> first
- e) words (noun first) ←
- f) N and Verb ( here comes behaviorist. — order of N and V)
- g) sentences — one word / 2 word
- h) declarative      } sentences.  
                          interrogative      }

→ Acquisition & loss are opposite

- { pronouns lost first then nouns
- { sibilants, affricates lost first

31st Oct

← Camlin Page  
Date / /

## Language (only if it has these features)

- L used figuratively and creatively (2)
- L produce ∞ sentences (3)
- L Duality of Pattern (4)
- L Displacement → Bees dancing  
can't talk about future/past (5)
- L Recursiveness (6)
- L Transition of Culture — language is passed from 1 generation to other (7)

→ Comparing languages ← cross linguistics

→ geneological { closer that's why  
geographical Show similarity



→ G

— John killed Bill  
— Bill was killed by  
John  
different

C  
— Bill was killed  
by John  
— John killed Bill  
same

- large dataset
- Surface
- Behaviorist

- small database
- Depth
- Mentalist

(Vg)

— Principles and Parameters (PnP)

- LAD (Language Acquisition Device)

Chomsky

L first language acquisition  
second language learning —

Aq. v/s LearningBA (SLA)

Acquisition  
acquiring  
from  
environment.

SLLLearning

→ being taught

→ 2/3rd lgs are taught in school.

→ systematic way

↳ it is taught first  
child might have spoken IT first

↳ depend on development of articulatory organs.

→ innate ability

↳ initial stages of acquisition

→ first lg. and mother tongue can be different.

so we say

FLASLLLearning→ Motherese → lg used with babies→ Poverty of Stimulus

↳ Babies should speak motherese but they end up speaking correctly.



→ Children learn quickly (new lg).

because exposed to more data.

→ Then mother <sup>NEED (Maid)</sup> learns; last father - <sup>Driver</sup> NEED→ Critical age — Brain Development→ Motivation to Adult infant Bonus.

① because if there are 2/3 lgs. there are options hence motivat<sup>n</sup> lessens.

### FLA

### SLA

→ simultaneously acquisition & cognitive development

→ Progressive (labelling) → concepts already there.

→ learn dixis <sup>things w/ concept</sup>

→ stages may not be same as FLA

15

→ data is sparse

↳ Why ①

↳ oldie families ↳ lot of people

↳ unlimited data

Now, in nuclear families :

↳ limited data (less people talk)

↓  
hence books, TV, videos

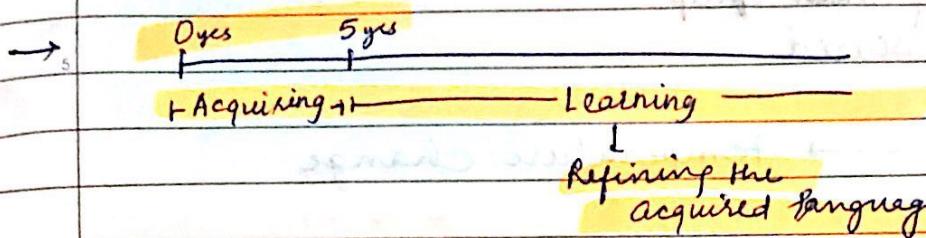
additional supplements to data

not natural  
not natural  
interfering  
with natural  
process

30

→ speaking (Performance) does not show competence

## → Generative grammar — Rules + Lexicons



→ Book:  
The articulate Mammal by Jean Aitchinson

15 9: mummy push  
agent action

20 play garden  
action locat<sup>n</sup>  
cookie plate  
entity locat<sup>n</sup>

mummy scarf  
possessor possession

25 drink milk  
action entity object

## Language Stages: (Universal)

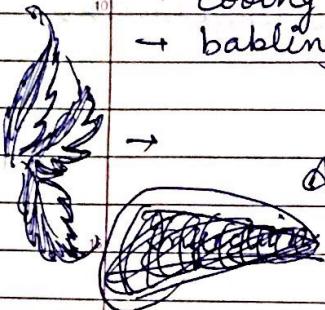
- |  |                                      |
|--|--------------------------------------|
| 30 ① crying → birth  | 7 inflect <sup>n</sup> - 2           |
| ② cooing → 6 weeks   | 8 ? / -ve - 2.25                     |
| ③ babbling → 6 months                                      | 9 complex construct <sup>n</sup> - 5 |
| ④ intonat <sup>n</sup> patterns - 8 months,<br>1 word utt. | 10 matured speech - 10 yrs           |
| 2 word utt.  | 18 months                            |

10 min  
Chaitanya  
Date / /

→ crying  
need milk  
wet  
woken up  
need sleep  
scared

→ smile → temperature change  
when sleeping

→ cooing - sounds  
→ babbling - end up pronouncing all kinds of sounds



Among consonants:

Stop  
fricatives  
affricates  
l laterals

retroflexes

lose language  
in reverse order

### Syntax

→ Declarative N

NV

V Adv

→ Wh -

→ Complex

Broca  
Wernicke

Lang  
Lang  
Modality

Com  
Prod

Broca  
in

Broca  
help  
prod  
com  
spe

Broca's  
Wernicke's

~~Language - loss~~

~~language - development~~ — child

Modalities — LSR & W

Aphasia (wiki) + aphasia.org

Comprehension

Production

(W) talk frequently  
don't make  
sense

(B) can produce  
large but  
comprehend alright

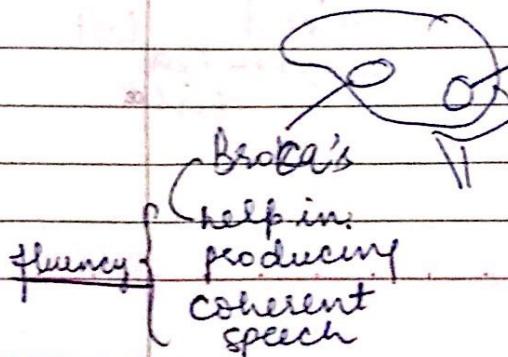
- understand  
not pronounce
- fluent but  
not comprehend

(B) — physical  
states affect  
comprehension

noisy bg

+  
sleepy

— Broca's and Wernicke's area  
in brain



Wernicke

Helps in  
speech  
processing &

understanding language.

## Anomic Aphasia

words missing

## Global aphasia

cannot speak many words

cannot read/write

temporary/chronic; can happen after surgeries

## Primary Progressive aphasia

form of dementia

at every level

INVERSE order of language loss and language acquiring

acquired

nouns first

verbs

pronouns

lost  
pronouns last (because generic)  
this, that, then nouns

adj

adv

adv. first

— syllables first

syllables last

then words

first words

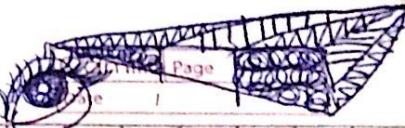
— stops - p t k

voiced lost  
aspirated first

bilabials  
first

— vowels

first a — i — u last



baby says

top ← soap  
tanam ← snanam

— Discourse — basis

| Book : Roman Jakobson

| Coherence → sarcasm ~~not~~  
acquired later  
(lost first)

Refinement  
of humour  
comes later

Syntax

Relativisation { come later  
Complex structure }

Imperatives first

Distinct" b/w sounds

t d {  
s z } come later  
l k }



## Q Differences b/w Broca's & Wernicke's

- what they do
- when damaged what happens
- give examples.

## WORD ASSOCIATION

7th Nov '19

- VO | OV
- V Adv | Adv V
- Pr N | N Po
- Aux V | V Aux
- (GN | NG)
- (AN | NA)
- Question formation
- Generic to Spec.

→ Universal given — how it works for your lg  
→ look at universals.

- Numeral | Demonstrative | Adj.
- within descriptive adj also there is an unsaid rule

→ The two tall beautiful girls  
dimension closer  
first then:

so ex.

The two tall intelligent (and)  
beautiful girls

eg2 the tall blue beautiful building

the tall construct  
as we structure the image  
give it height  
then colour  
then a closer attribute

### - Prepositional phrases adverbial in func'

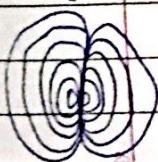
in on at of order.

### - Ch4 (Both books) :

Operator and Operand (OR) Modifier Head

aux	Verb
verb	adv
noun	

- When we talk of universals its mainly implicational universals



- Most of them have statistical universals

SOV + Post positional (general order is seen)

- ergative case — if transitive verb

noun becomes subject (marked by ?)  
in Hindi

- accusative & nominal

→ oblique → indirect

Imp things in Indian languages:  
— Impersonal constructions

→ Prodrop — Pronoun drop

L did ~~आई~~ आई } Possible because  
आई रहे थे } verb has  
most of informat<sup>n</sup>  
& features.

② Causative → different lexicon see show

⑨ Lexical Morph → word Atm ↓

Lexical → eat-feed  
Morph → eat-<sup>ə</sup> /ɪd/ -feed ↓

-Morph →  
- Sentence level → bring in a helping verb

- Sentence level → bring in a helping verb

eg. make her sleep

helped — help kasi

20 as she swam — swim karte hue gji

also mailed picture — tangaya

~~as Rel. Clauses (Bernard Comair)~~

जो/वो

- exglik: Wh-pronoun — you can  
Relativise everything:

## Subject, Object

## Ind. object

## Adverb / Conjunction

in prepositional  
Phrase)

→ Other languages are  
hierarchical

Sub - Obj - Ind. Obj - C(pp)

## animacy

### — Pronouns

Human      Animal      Object

+ Hindi doesn't have

+ English has this distinction (It)  
also has

M/F in Human  
in III person  
level only.

+ Hindi doesn't have gender distinct<sup>n</sup> — He/She  
in pronouns      DE/FE

+ Telugu ~~at~~ has + Politeness  
+ Proximity

also.

### — Adjective

L Hindi has gender.

ending in े - एकी कुसी, ending in ा - एकी सोनी

But when { देल — अदेल  
                  } चावल — अचावल

'ST'  
no. े/ा

→ Hindi has sexism in size of objects

↳ Strong + Male

[ Fragile - Male ]

→ Some things become difficult to relativise because the same semantics can be conveyed using another structure (not Rel Cl.)  
but e.g. coordin at " (using 'and' 'or' 'but')



मुझे → [g] love icecream } मुझे  
मुझे - कृत [g] love my mother } मेरे  
मेरे - कृत [g] hit the ball } मेरे

Using  
diff case  
markers  
for diff semantic  
roles

\* - Conjugate verbs (converbs)

कानूनी करना (compound)

help करना

(\*) - Compound verbs - meaning change.

→ Explanations

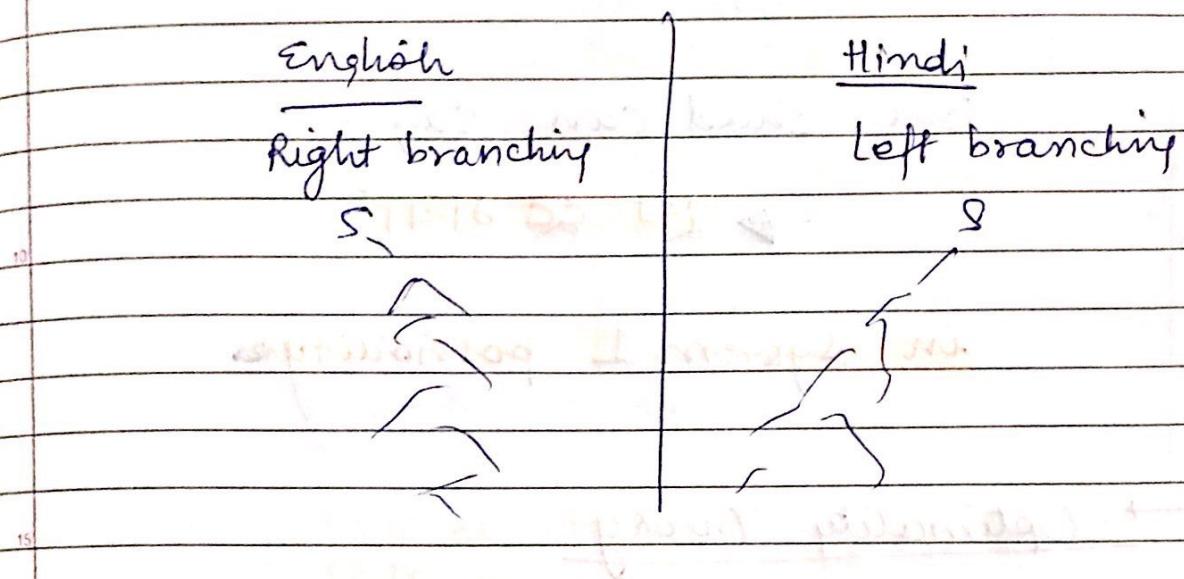
कालना - to put

पर कालना - diff from 'put'

e.g. देना - give

पर देना - diff from 'give'

- Echo words
- Numerals / Classifiers
- Structure of phrase structure



- Language Acquisition is a universal process.

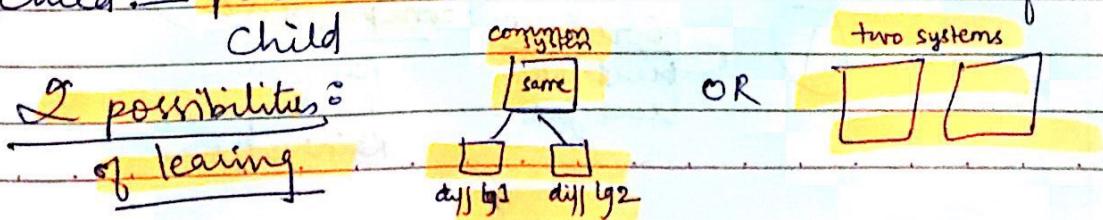
## HOME ASSIGNMENT

↳ Parameters → the child is setting the parameters

### Bilingualism

Father  
lg1  
Mother  
lg2

child: parametric variation is there for



Telugu + Hindi

e.g. ( Child )  
 Broke for some milk  
 tear for some milk

But child can say —

→ दूध का गाया

in System 1 possibility

→ Optimality Theory

→ Word Association

- most ppl have similar answers
- other different answer may be influenced by what that moment/day's experience

Books

- WORDS IN THE MIND
- Articulate Mammal

- frequently used words

①

Coordinator

bread-butter  
bread-jam

compounds ②

Rainbow  
raindrop  
Rainwater

Sem

(3)

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## Semantic field

(3) Relations — Synonymy

Hyperny

Hyponymy

Co-hyponymy → blue / red

(4) Collocat<sup>n</sup> → blue - sky

e.g. blue - turquoise

Colour - blue

e.g. Salt - pepper } Collocat<sup>n</sup>

Salt - water }

Hungry - Starve → synonym.

(5) Rhyming Phonetic Similarity

(6) culture  
background

e.g. twinkle - Sprinkle

twinkle - Star (think of alliteration)

Some are not possible in reverse

black — book ✓

book — black ✗

① Read book (NITM)

→ Orange

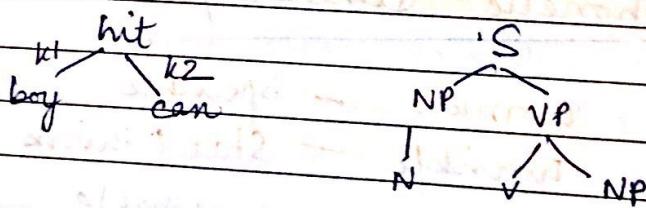
## Aphasic patients

- Semantic fields & coordinates are closely related.
- Clusters of coordinates
  - [ Sun ] [ Mon ] [ Tue ]
  - [ Months ]
  - [ Christmas ] [ December ]

these patients who retain semantic fields — come up with words associated w each other.

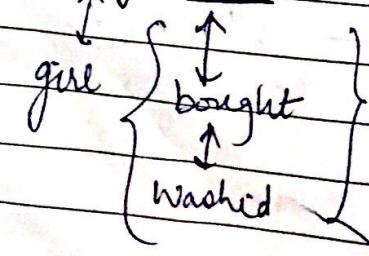
## Syntagmatic & Paradigmatic relation

Syntagmatic } The boy hit the can (Horiz. relation)



## Pragmatic

The boy hit the can (vertical relationship)



all transitive  
all past

## Chomsky

- innate
  - generative  
(grammar +  
vocab)
  - looks at a  
small database
  - Mentalist  
theory
  - focuses on  
Competence
  - deep level of  
analysis (concept)
  - level of abstraction  
is high
  - Stimulus
- ↓  
LAD  
↓  
Response

## Greenberg

- learned
- Repetitive  
or imitation
- large database
- behaviorist  
theory
- Competence and  
Performance
- surface  
analysis (sounds/words)
- level of abstraction  
is low
- Stimulus  
↑  
Response
- Nature (part of  
human)
- Nurture (env.)
- Poverty of stimulus and generative model and  
steps of language learning are same
- A was killed by B } same      → different  
B killed A

## Features of language :

(1) Displacement of time and place  
 ↳ things → not in real world

(2) Creative

(3) Duality of pattern or Double articulation

↳ sentences > words > sounds

↳ human language can be broken down  
 discrete parts of lg can be recognized

↳ in a systematic way to create new form  
 two-level structure =

- meaningful & discrete

- meaningless

ability to form discrete meaningful units from meaningless segments.

(4) Competence and Performance

↳ "correct"  
 knowledge  
 concepts  
 (Perfection)

↳ typos,  
 errors

(mistakes)

(5) Arbitrary - no connection between forms of signal and what they refer to

(6) Discrete - basic units can be categorised to be belonging to distinct categories.  
 ↳ no gradual continuous shading.

(7) Recursiveness

(8) Transition of culture

## Broca's

### FUENCY

- ① Broca's area in left hemisphere

- ② non-fluent aphasia

- ③ know what they want to say but cannot get it out

- ④ limited vocabulary  
trouble finding words

- ⑤ formation of sound is clumsy and laborious

- ⑥ tend to understand speech

- ⑦ able to read but limited in writing

## Wernicke's

### UNDERSTANDING

- ① posterior part of the brain

- ② fluent aphasia

- ③ words pour out with ease

- ④ forms incoherent words or incoherent sentences

- ⑤ speaking isn't difficult.

- ⑥ ability to grasp the meaning of spoken words is impaired

- ⑦ affects reading and writing

Aphasia: impairment of language, affecting the production or comprehension of speech and ability to read and write.

## Language acquisition

FOLA (Lang. Acq.)

- ① → triggered by birth
- ② → very rapid
- ③ → complete
- ④ → natural  
(no instruction)
- ⑤ → acq. from env.
- ⑥ → use LAD
- ⑦ → progressive (cog. dev.)
- ⑧ → not conscious

SLA (Lang. Learning)

- personal choice  
motivation
- not as quick as FLA
- never as good as native speaker.
- Natural or guided.  
(instruction),
- SLL → these are taught  
SLL → use a systematic way — it is taught first (child speaks at first)
- Concept already (int)  
→ Stages not same as FLA  
→ conscious

Lang. Acq. Child > Mother > Father

Exposed to more data + Critical age of Brain Dev.

less motivation

SLA (time of begin > time spent learning)

SLA can involve acquisition or may be learned

decline in acquisition ability after puberty

structures of L1 are carried over (2) ~~Ch~~ bilinguism

## Stages of language development

PF Stage  
Hibamin Page  
Date \_\_\_\_\_  
DF

- (1) crying — hunger, pain
- (2) Cooing (6 weeks) — 'GOO GOO'
- (3) Babbling (6 month) — lips & teeth articulation
  - name of food - mum
  - exotic sounds

- (4) Intonation patterns
  - produce incomprehensible sounds

- (5) One-word
  - names of people and things (no pronouns)

- (6) Two-word
  - I want milk

- (7) Inflections
  - progressive
  - plural
  - copula
  - articles

- (8) ? / -ve
  - WH-words before sentences

- (9) Complex

- (10) Matured

Critical age - toddler to adolescence

# UNIVERSAL GR.

## ① Optimality Theory

optimal satisfaction  
of conflicting

language arises from constraints  
not about outcome but process

→ Constraints are ranked and violable.

e.g. bag [z]

allomorphs:

Bag [s]

constraint  
match  
voicing  
keep  
same sounds

## ② UG:

set of principles common to all  
langs. — the initial stage of

lang. knowledge for all human

— considered to be innate —

joins M&B

doesn't contain the actual rules of  
each language

P&P: ~~This~~ idea is that a person's

linguistic knowledge can be modelled  
with 2 mechanisms:

Principles ← invariants of HL

finite set of principles  
common to all langs

Parameters ← cross-ling. variations

determine syntactic  
variability

## Chomsky vs Skinner

→ LAD	→ reinforcement
	→ child is blank slate filled up by knowledge gained through experience
→ innate	→ LA as cognitive behavior
	(+) (−)
→ optimal learning age	→ children cannot repeat everything
	→ error correction
→ doesn't need trigger to LA	
→ error correction	

## Types of universals =

### I Formal

- statements concerning form of rules

### Substantive

- elements we find in all lgs. or sets from which we derive elements

eg (all possible sounds → verbs)

### II Implicational

### Non-implication

Analytic → little inflection

rely on WO & aux. to convey meaning  
e.g. Chinese,

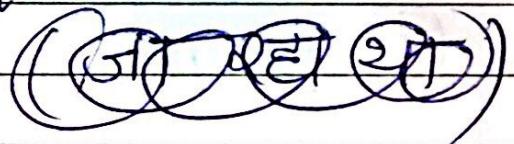
Synthetic → affutinative

fusional

1. fuse inflectional

categories together.

↳ discrete particles for inflectional



e.g. Telugu

Turkish  
Tagalog

(टरी)

(तरी री)

↳ one morpheme  
gives more  
than one  
feature

e.g. Hindi  
French  
Russian