Second Language Acquisition

SeBEN09z12

Thomas Wagner

week 5 – chapter 6

repetition

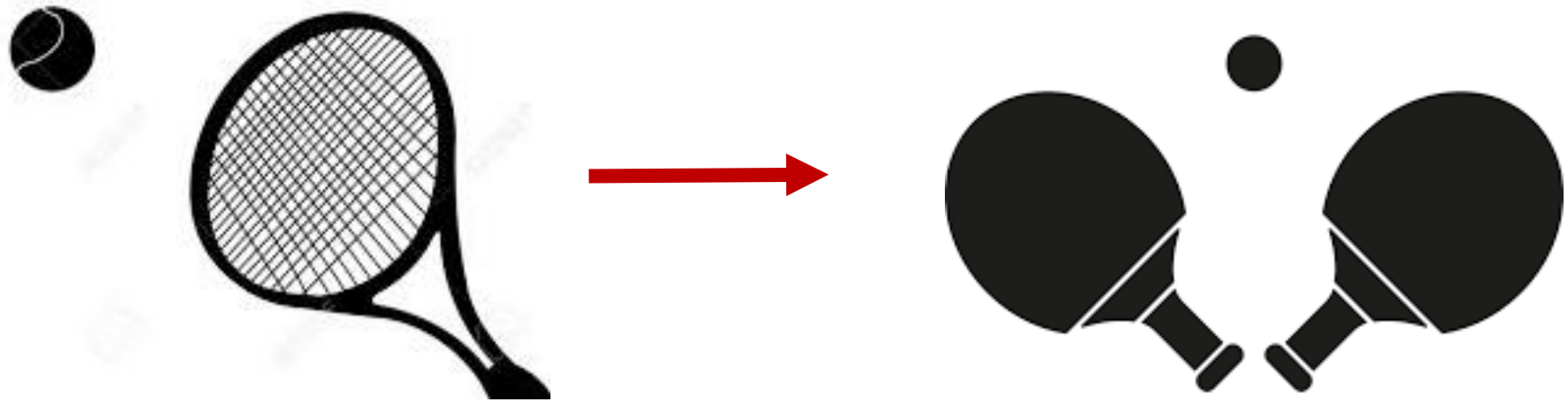
repetition

- How does Behaviorism conceptualise second language acquisition

- stimulus – response – reinforcement

repetition

explain the following graph and transfer it to behaviorist learning



repetition

- what two approaches to contrastive analysis did exist in the 1950s?
  - contrastive analysis (pedagogical)
  - contrastive analysis (scientific)
- what were main targets of CA
  - CA: language learning is habit formation
  - CA: we must define what needs to be learned
  - CA: we want predict difficulties
  - CA: we want to determine the source for errors (L1 habits)
  - CA: we must learn the difference and can ignore the similarities

repetition

- recent approaches
  - reaction time experiments, lexical decision
  - eye-tracking experiments
  - priming experiments
  - brain imaging (fMRI)
  - EEG (electroencephalogram)
  - computer modelling

repetition

- explain the following table

Table 4.1 Hierarchy of difficulty

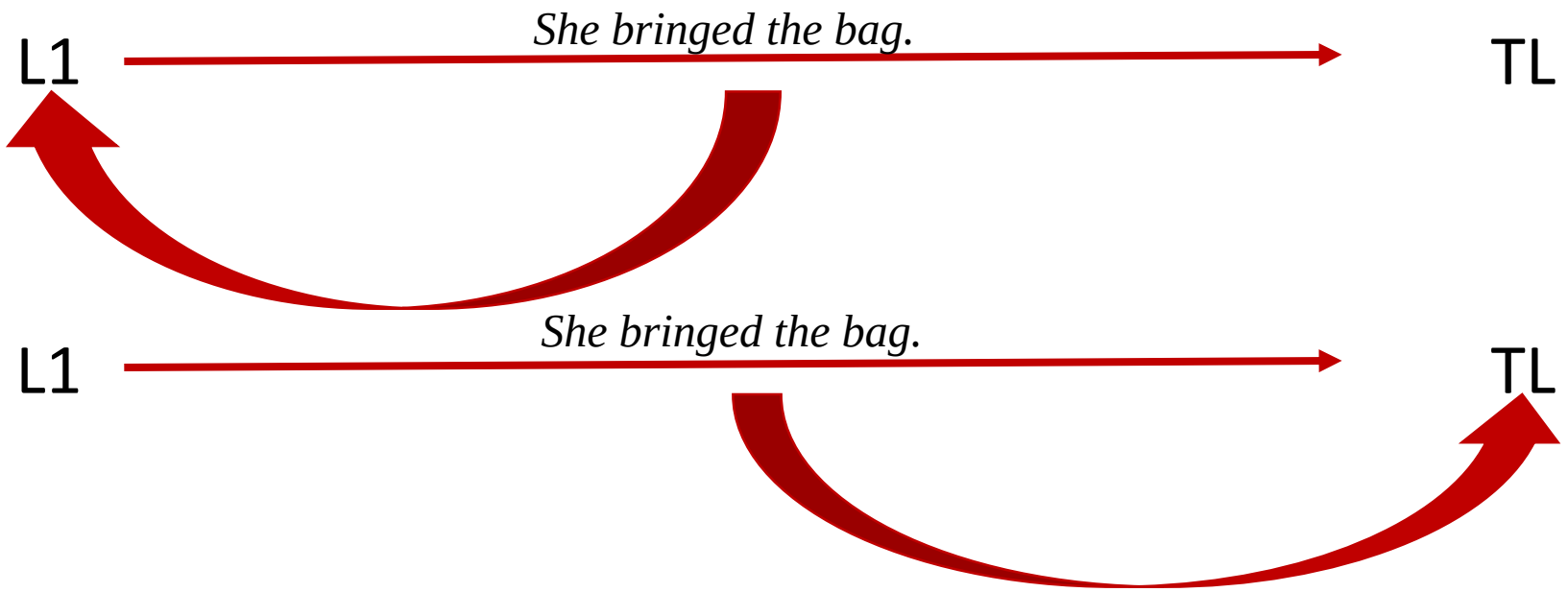
Category	*Example*
Differentiation	English L1, Italian L2: *to know* versus *sapere/conoscere*
New category	Japanese L1, English L2: article system
Absent category	English L1, Japanese L2: article system
Coalescing	Italian L1, English L2: the verb *to know*
Correspondence	English L1, Italian L2: plurality

repetition

- what is the differences between Ca and EA?

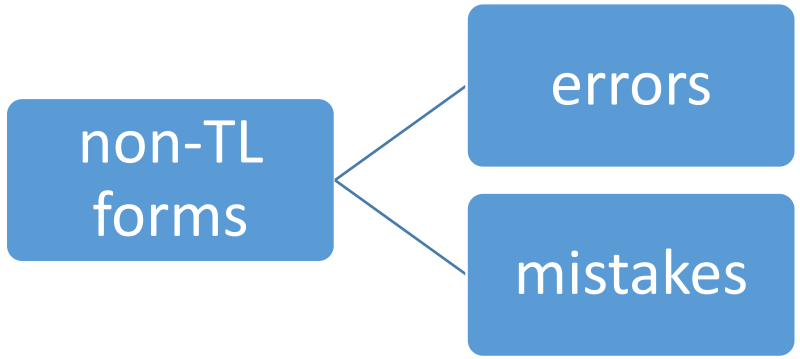
- CA L1 *She bringed the bag.* TL

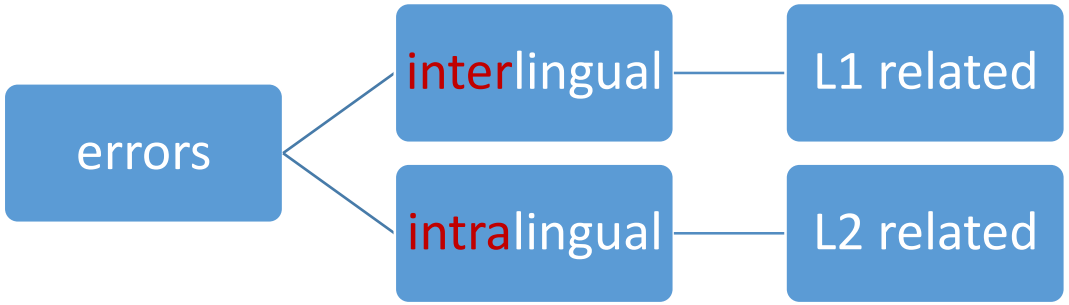
- EA L1 *She bringed the bag.* TL



repetition

- what types of ‚error' were discussed in EA ?





repetition

- In how far does the Creative Construction Hypothesis reject Behaviorist positions?

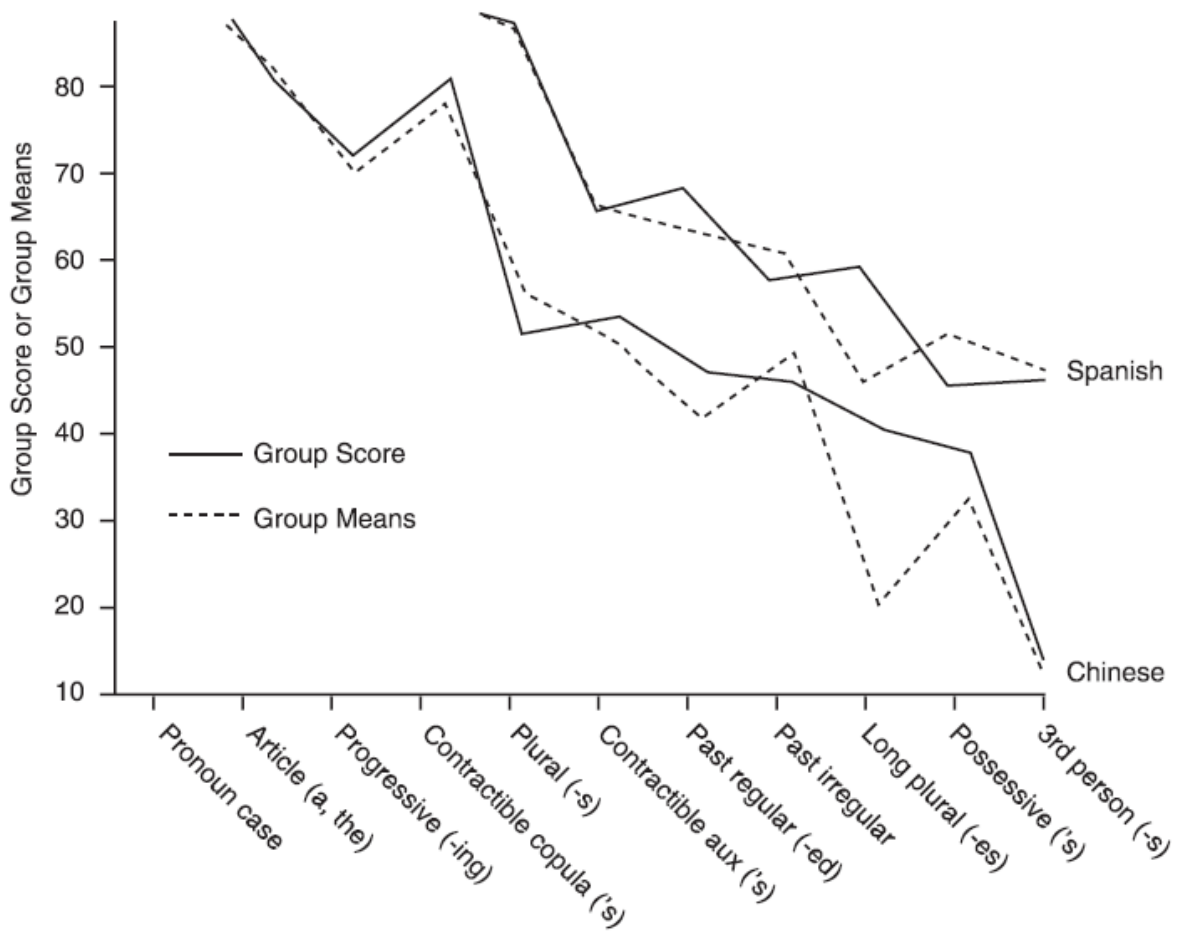
Creative Construction Hypothesis

LAD → strategies → hypotheses – (over)generalisations

Dulay & Burt 1974

repetition

- explain the following graph



repetition

- name some “Transfer 2.0” phenomena

- avoidance
- overproduction
- salience
- conceptual transfer
- interlanguage transfer

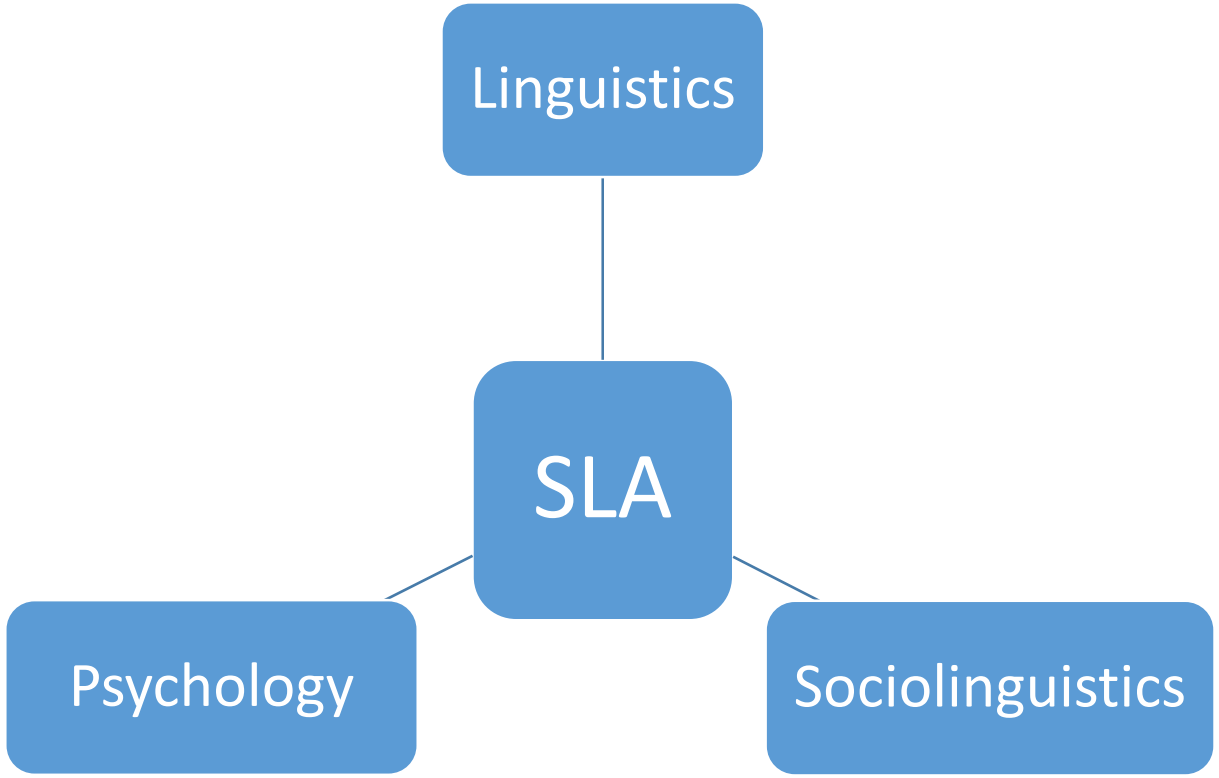
Chapter 6
Formal approaches to SLA

reading homework 4

- Universal Grammar
- Fundamental Difference Hypothesis
- Full Access Hypothesis
- Principles and parameters
- UG and transfer - Markedness Differential Hypothesis
- Optimality Theory

Section 6.2 – Universal Grammar

- SLA = independent discipline with strong ties to other disciplines



Section 6.2 – Universal Grammar

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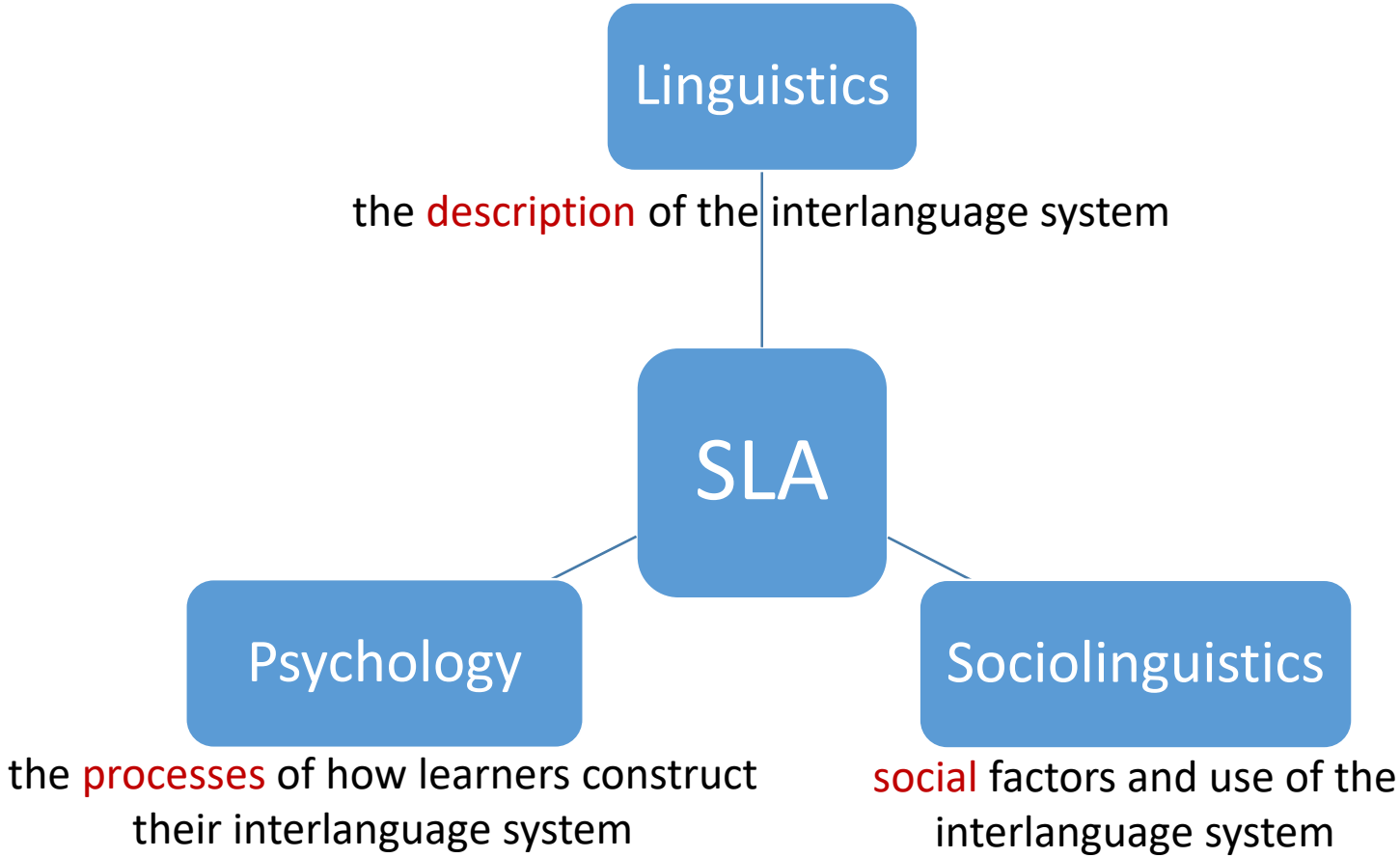

Section 6.2 – Universal Grammar

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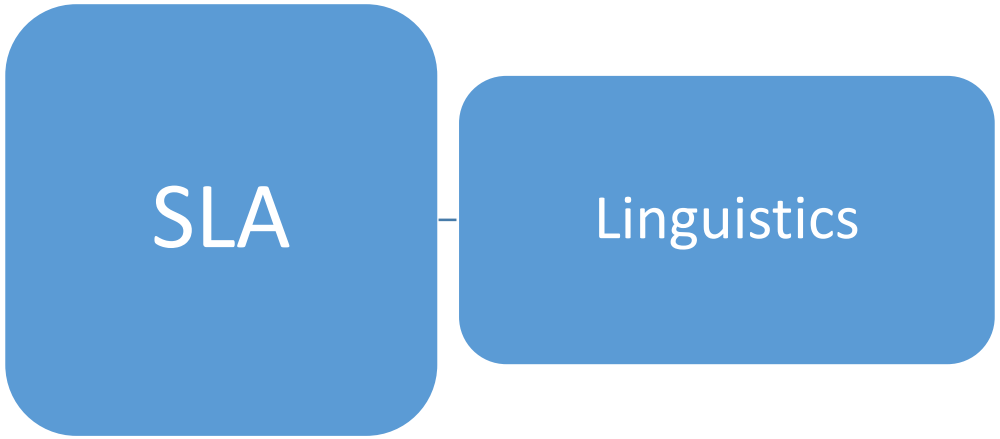


the description of the interlanguage system

Section 6.2 – Universal Grammar

- nativist approach – we are not born a blank slate !
  - general nativism
    there is no specific mechanism designed for language learning
  - special nativism
    unique principals designed for language learning → UG

Section 6.2 – Universal Grammar

- UG and the miracle of L1 acquisition
- what makes L1 learnability possible
  - all children acquire an L1
  - all children acquire an L1 to the same degree
  - all children acquire an L1 in the same time

  - no child is exposed to sufficient input - the poverty of the stimulus argument
  - no child is taught systematically
  - no child receives systematic feedback; feedback normally does not say what is to be done to modify the apparently wrong hypothesis in the child's mind → not a necessary condition for acquisition

Section 6.2 – Universal Grammar

- children acquire properties of grammar not learnable from input

(6-1) I want to go.
(6-2) I wanna go.
(6-3) John wants to go but we don't want to.
(6-4) John wants to go but we don't wanna.
(6-5) Do you want to look at the chickens?
(6-6) Do you wanna look at the chickens?
(6-7) Who do you want to see?
(6-8) Who do you wanna see?

Section 6.2 – Universal Grammar

- children acquire properties of grammar not learnable from input

(6-9) Who do you want to feed the dog?
(6-10) *Who do you wanna feed the dog?
(6-11) Who do you want to win the race?
(6-12) *Who do you wanna win the race?

- The input does not provide sufficiently specific information about where to use *wanna* and where not to use it.

Section 6.2 – Universal Grammar

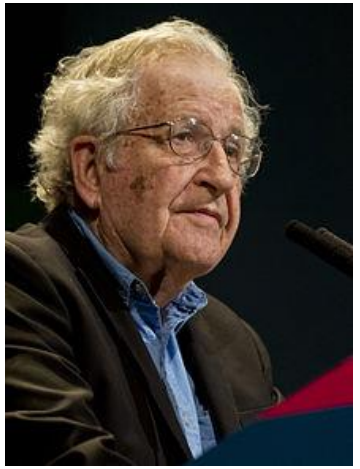
- universal principle: the syntax of question formation
- universal principle of English:

X wants Y to do Z

- if question is about X or Z, contraction is allowed
- if question is about Y, then contraction is blocked

Section 6.2 – Universal Grammar

- The theory of a particular language is its *grammar*
- The theory of languages is *Universal Grammar* (UG)



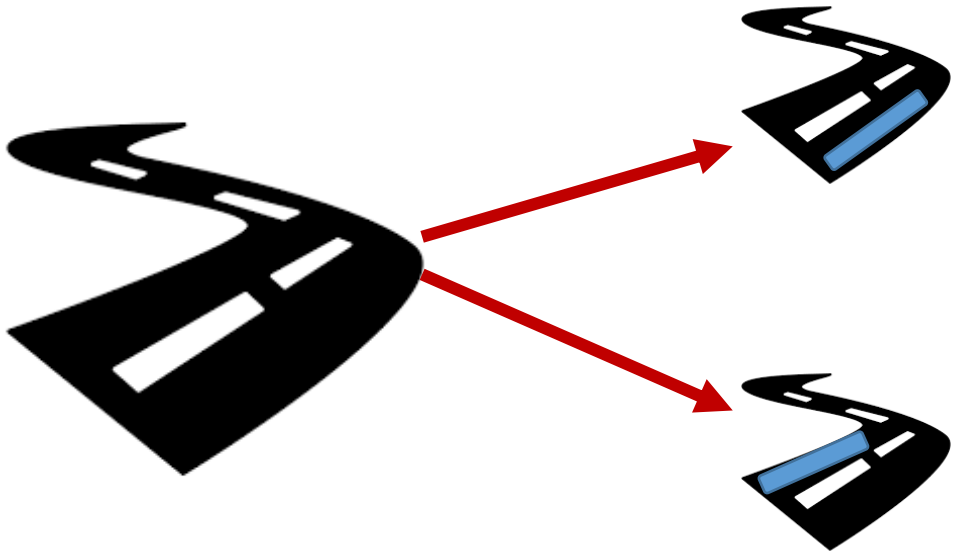
- UG is a theory of the initial state of the language faculty

Section 6.2 – Universal Grammar

- Universal Principles in languages
- Universal Parameters in languages

- Universal Principles the baby's mind
- Universal Parameters in the baby's mind

Section 6.2 – Universal Grammar



- The principle states the universal requirement on driving
- the parameter specifies the variation between countries.

Section 6.2 – Universal Grammar

- UG defines the extent to which languages can vary
- UG defines possible languages
- UG also contains lexical and functional categories

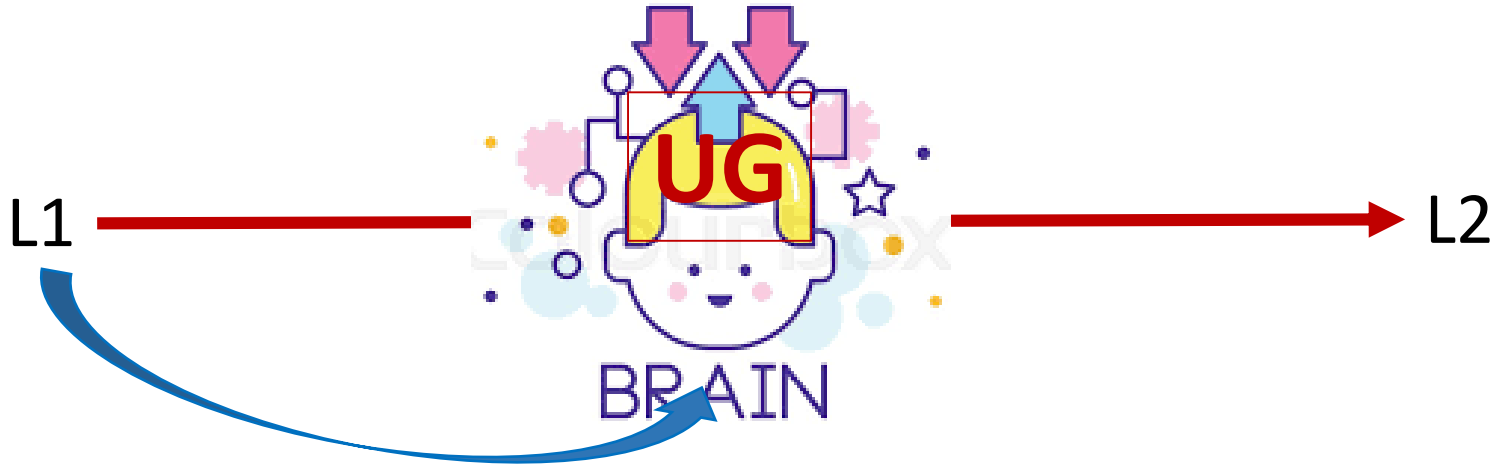
- lexical categories here = content words (N, V, adj, …)
- functional categories here = function words (articles, possessives, …)
- functional categories = grammatical morphemes

  = fixed set of words – *glue* of language

Section 6.2 – Universal Grammar

- 1950s: overcoming the L1
- 1970s: transfer and interlanguage

  creative construction



Section 6.2 – Universal Grammar

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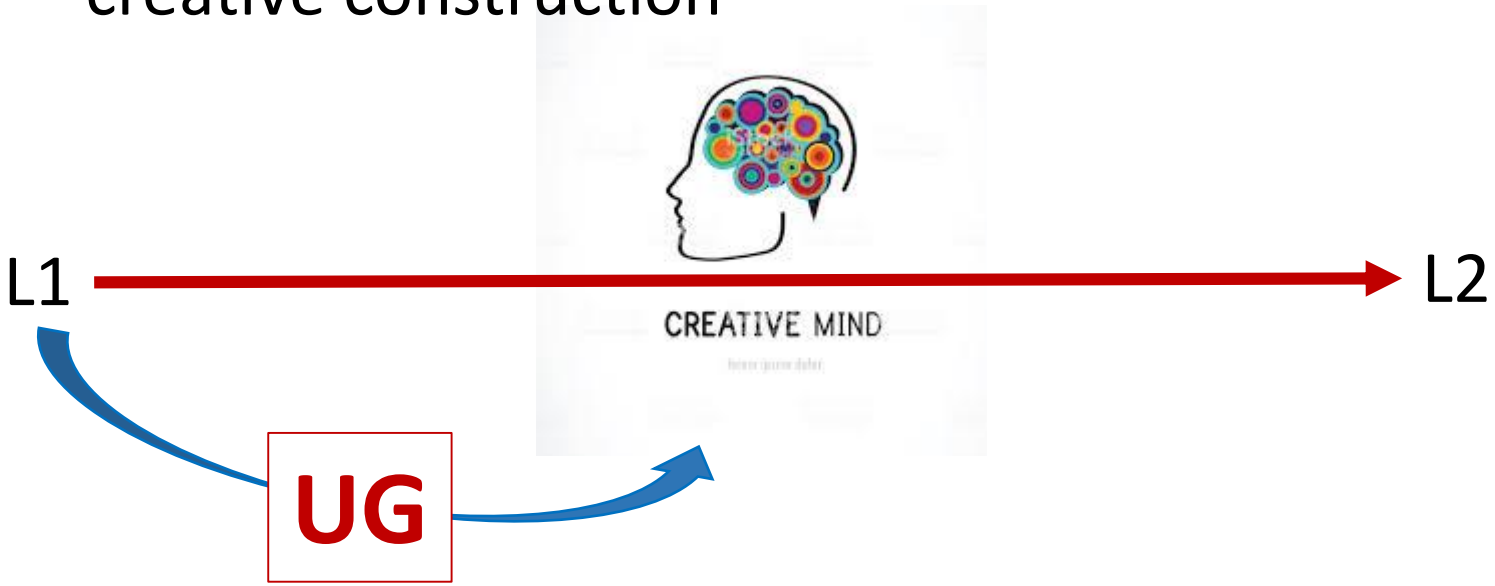


Section 6.2 – Universal Grammar

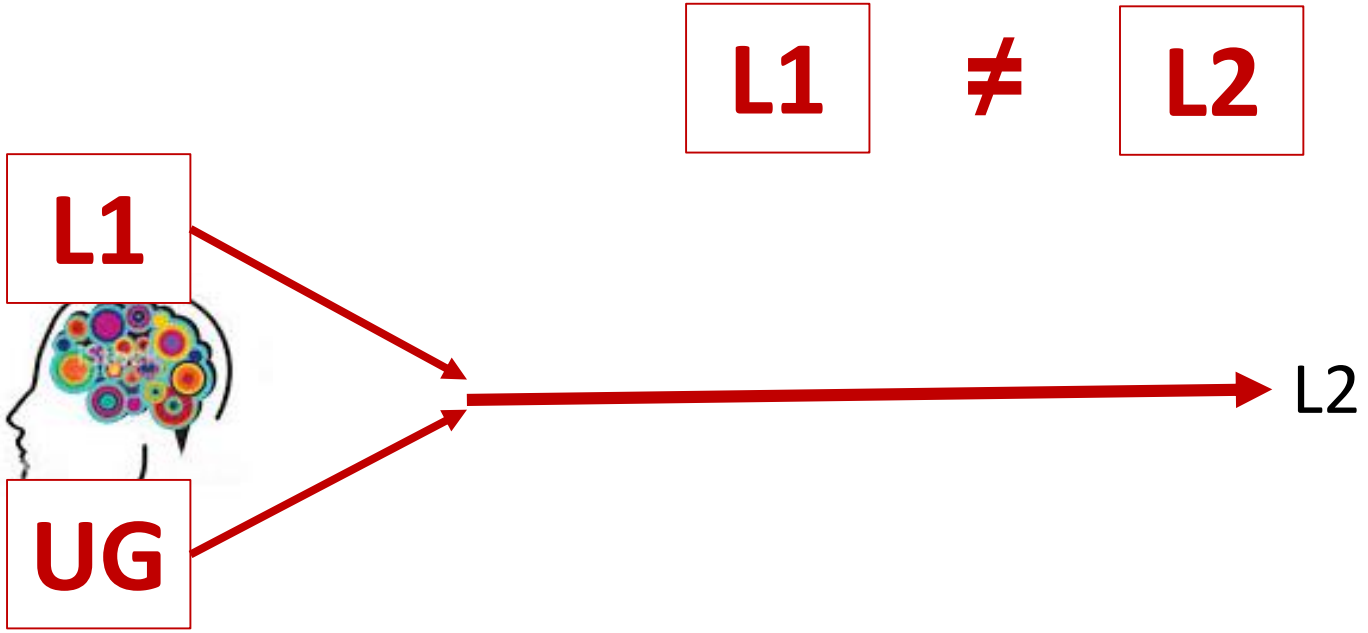
- Fundamental Difference Hypothesis — Bley-Vroman, 1989; Schachter, 1988
- Full Access to UG Hypothesis — White, 2003

- Fundamental Difference Hypothesis
  - different initial states
  - different ultimate attainments
  - different access to strategies and world-knowledge
  - motivation and attitude toward the target language
  - equipotentiality
  - adults construct pseudo-UG through their L1

Section 6.2 – Universal Grammar

- Full Transfer / Full Access Hypothesis

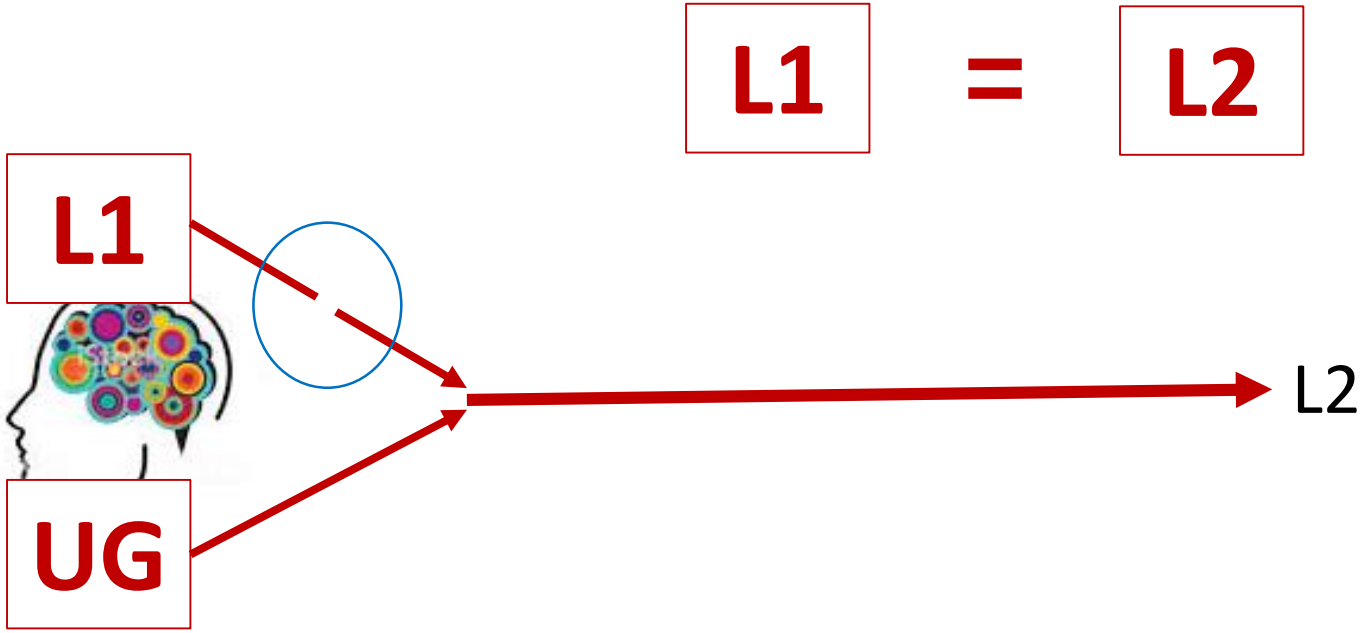
Schwartz, 1998



Section 6.2 – Universal Grammar

- Full Access / No Transfer

Flynn, 1996



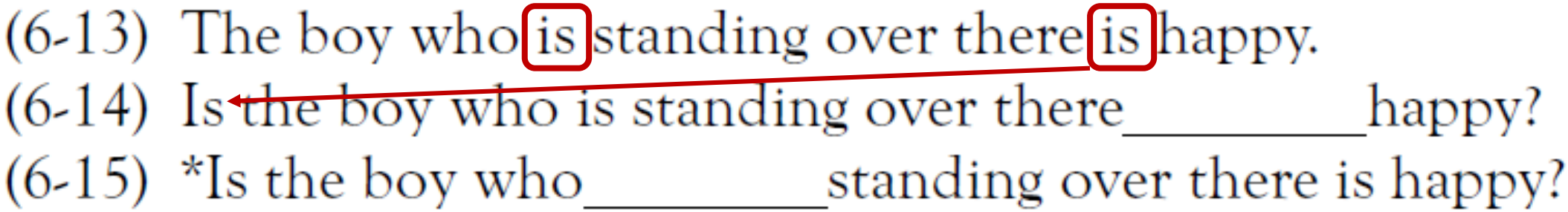
we don't need the Minimal Tree or Valueless Features approach ☺

Section 6.2 – Universal Grammar

- Can we detect access to Universal Principles in SLA data?

Section 6.2 – Universal Grammar

- structure dependence = UG principle 1
  structure dependence = language operates on linguistic units



Transformation rule does not say move 1st or 2nd verb !

Section 6.2 – Universal Grammar

- adjacency = UG principle 2
  movement of the question word is constrained by the distance and intervening syntactic structures between the two positions

Speaker 1: I agree with the idea that David loves Mary Jo.
Speaker 2: I didn't hear you. *Who do you agree with the idea that David loves?

Section 6.2 – Universal Grammar

- empty category = UG principle 3
  structure dependence = language operates on linguistic units

(6-16) John ga sono hon o yonda.
John NOM that book ACC read-PAST
"John read that book."

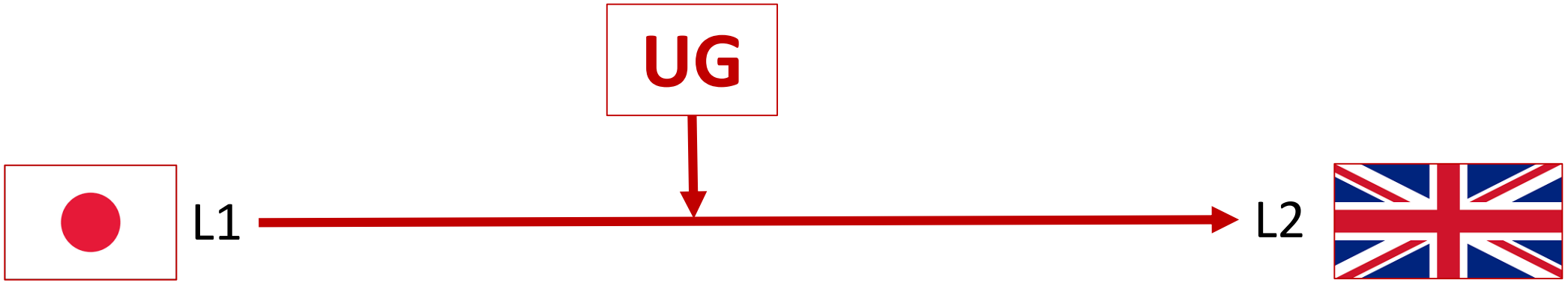
(6-17) John ga sono hon yonda.
John NOM that book read-PAST

(6-18) *John sono hon o yonda.
John that book ACC read-PAST

accusative case can be dropped, nominative cannot

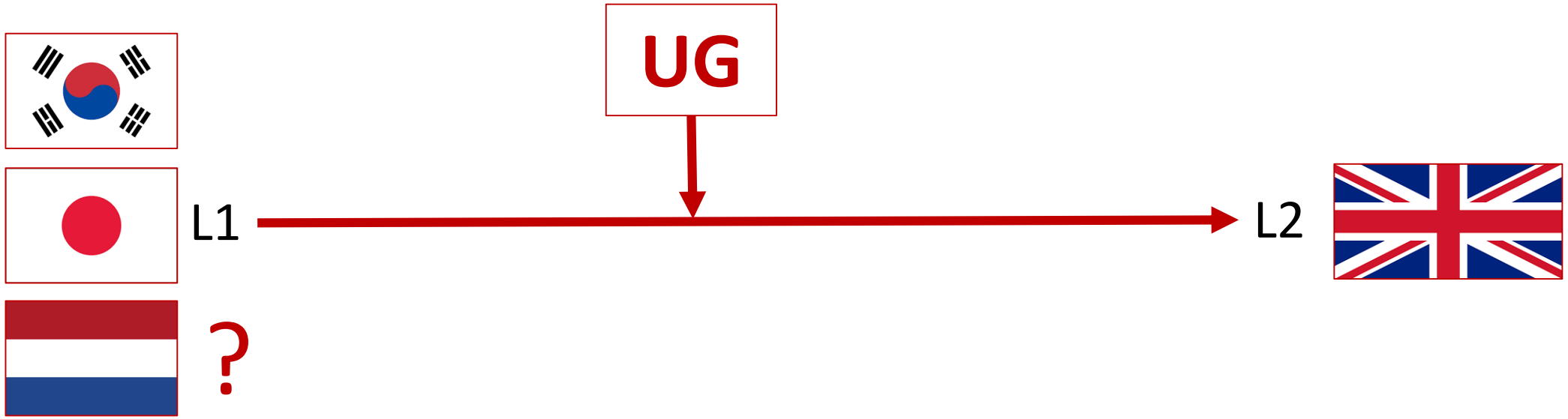
Section 6.2 – Universal Grammar

- Otsu & Naoi 1986: test for UG principle structure dependence
- if UG principle shows, it cannot have come through L2



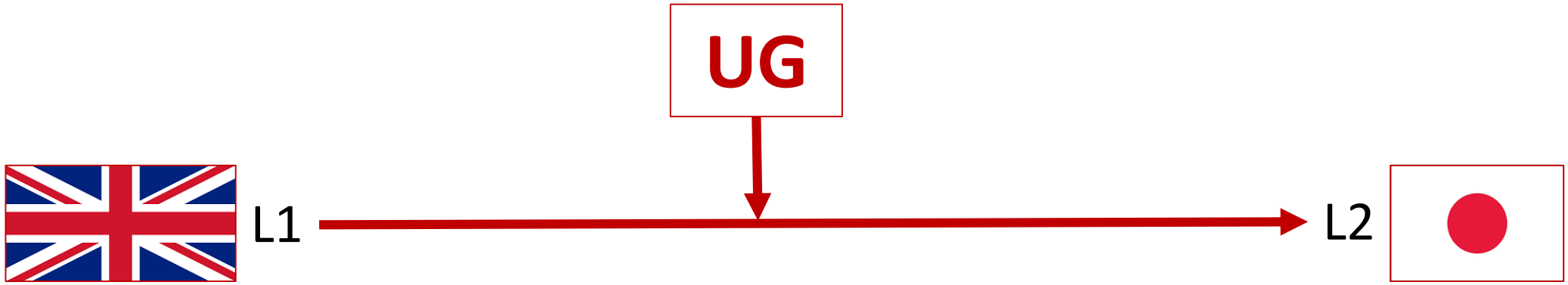
Section 6.2 – Universal Grammar

- Schachter, 1989: test for UG principle adjacency
- if UG principle shows, it cannot have come through L2



Section 6.2 – Universal Grammar

- Kanno, 1996: test for UG principle ECP
- if UG principle shows, it cannot have come through L2



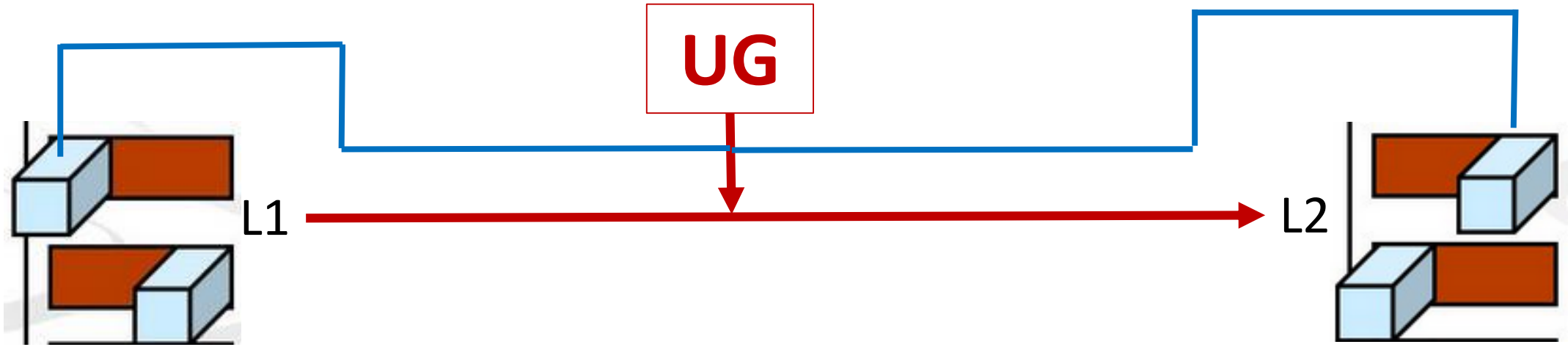
Section 6.2 – Universal Grammar

- https://www.youtube.com/watch?v=GbK0ls7YVN4

- The Ling Space on Principles and Parameters

Section 6.2 – Universal Grammar

- can we detect access to Universal Parameters in SLA data?
- if parameters exist, the child's task is eased, because there is a limited range of options to choose from



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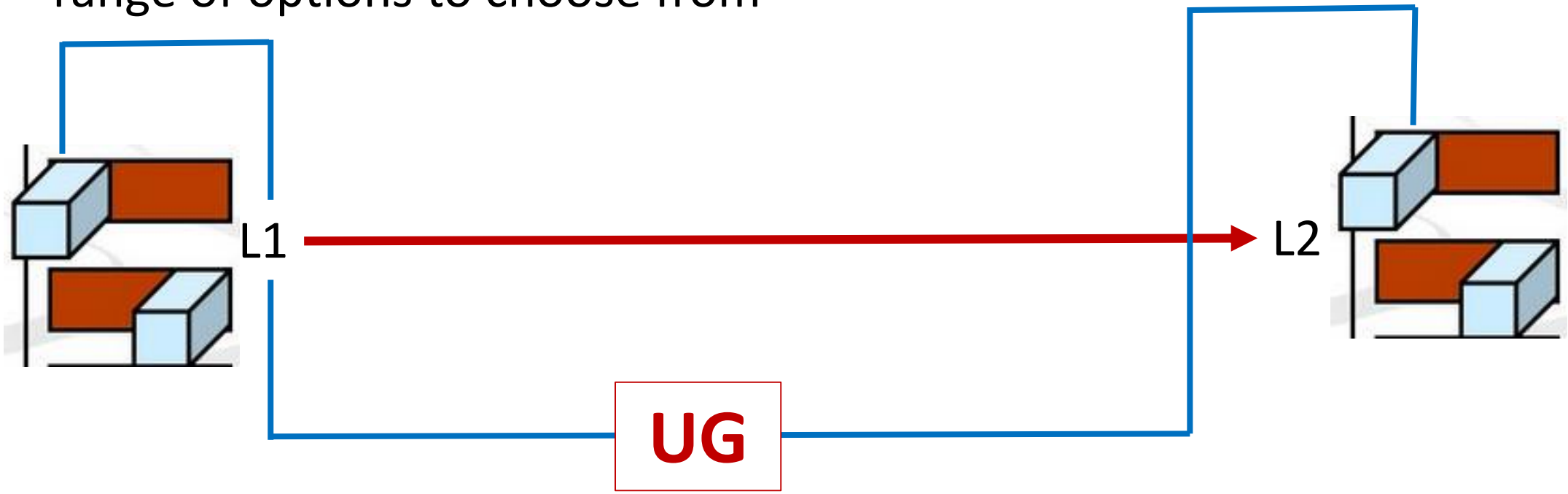

Section 6.2 – Universal Grammar

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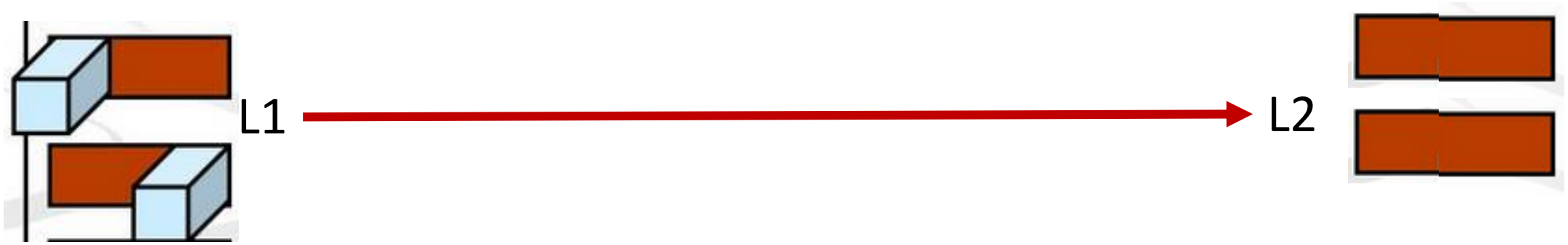
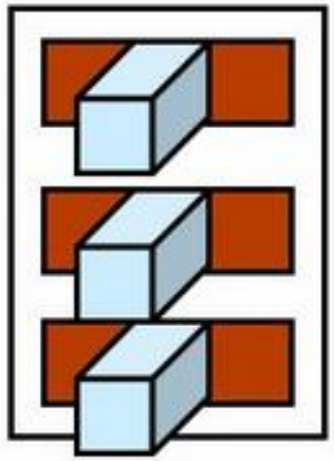


Section 6.2 – Universal Grammar

- parameter setting of one principle affects many parts of grammar
- pro-drop – either [+pro-drop] or [-pro-drop]

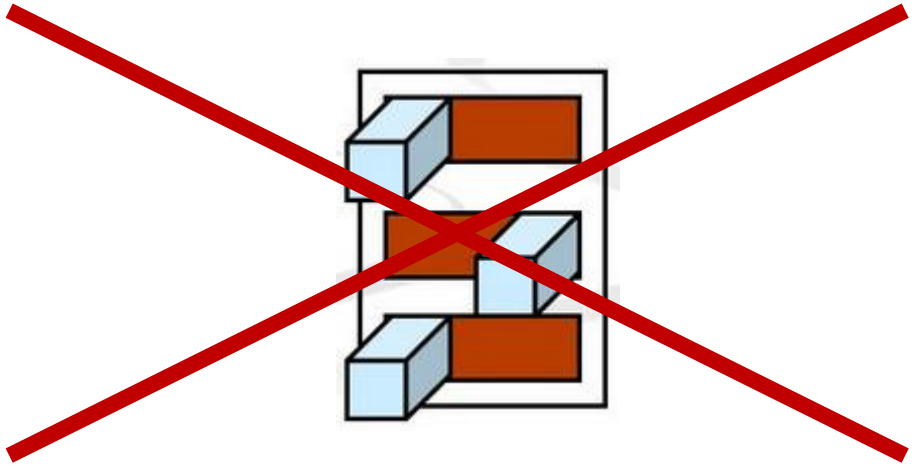


(a) the omission of subject pronouns

(b) the inversion of subjects and verbs in decl. sentences

(c) *that*-trace effects

Section 6.2 – Universal Grammar



Section 6.2 – Universal Grammar

Italian	*English*
Omit subject pronouns	*Obligatory use of subject pronouns*
Va al cinema stasera.	She is going to the movies this evening.
goes to the movies this evening	*is going to the movies this evening
Subject–verb inversion	
È arrivata Laura.	Laura has arrived.
is arrived Laura	*has arrived Laura
That-trace	
Chi hai detto che è venuto?	Whom did you say came?
who you said that is come?	*Whom did you say that came?

Section 6.2 – Universal Grammar

- White, 1985 Lakshmanan, 1986
- Spanish, Japanese, Arabic, and French learners of English did not recognize these three structures as related and thus did not see these three properties as representing a unified parameter
- Hilles, 1986
- one Spanish learner of English had apparently truly understood this unified parameter

- overall, results are mixed
- L1 acquisition ≠ L2 acquisition
- L1 acquisition = L2 acquisition either ! forget about Minimalist Program

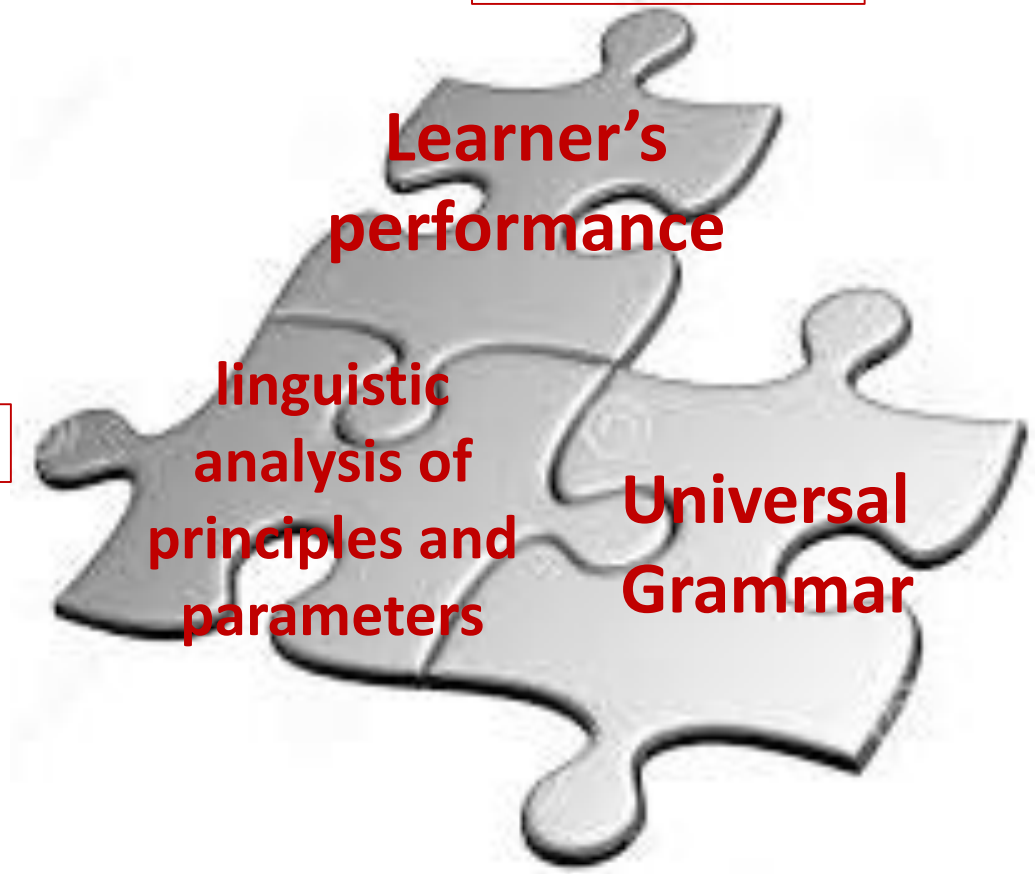
Section 6.2 – Universal Grammar

- if X = Y and X ≠ Y then ??
- deterministic predictions if x → always y, if not X → never y

- how to treat counter examples
  a) UG not accessed
  b) methodological problems
  c) performance quirks
  d) […]
  e) theory is false → underlying linguistic analysis is faulty

Section 6.2 – Universal Grammar

bad performance



inaccurate analysis

violation of universals

Section 6.2 – Universal Grammar

- UG as a corrective mechanism
- problem with cross-sectional studies
- when do grammars stabilise ?

- if UG is followed → SLA grammars are governed by UG no-na ☺
- if UG is not followed → ??

Section 6.2 – Universal Grammar

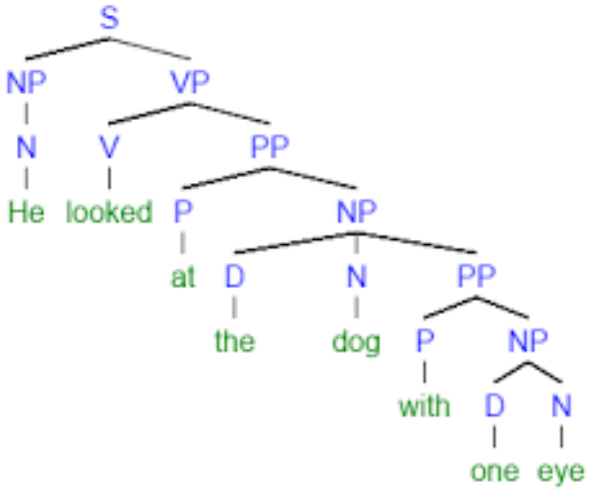
- falsification – the way out ?
- verification: a scientific hypothesis is confirmable through empirical investigation
- falsification: an idea is put into a theoretical postulate which is assumed to be a candidate for truth; it must be capable of being falsified.

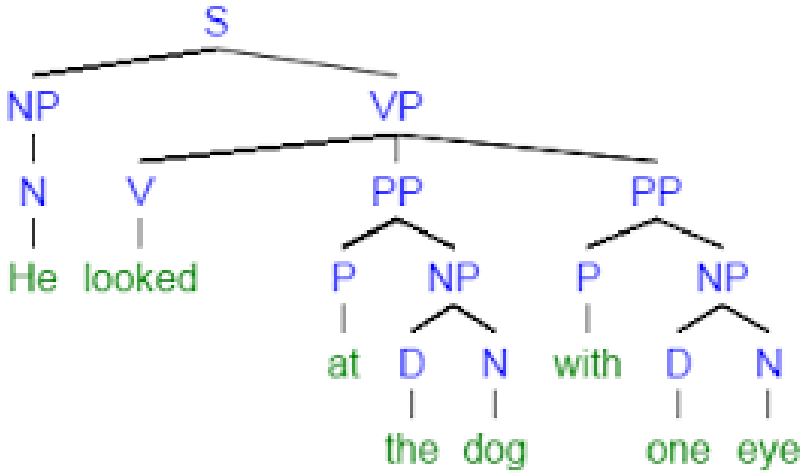
Section 6.2 – Universal Grammar

- UG and transfer 3.0

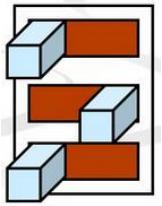
(6-25) Visiting relatives can be boring.

- 2 interpretations, 2 syntactic structures
- can underlying representations be transferred ?





Section 6.2 – Universal Grammar

- can clusters of parameters be transferred 

- learnability theories – subset – superset principle

- * *The man is drinking slowly his coffee*. ☹
- *L'homme boit lentement son café*. ☺

- F → E restrict L1 use, new constraints – negative evidence – transfer
- E → F new broad use – positive evidence – no transfer

Section 6.2 – Universal Grammar

- https://www.youtube.com/watch?v=9OB72GZOS4c
- **Trevor Noah - Some Languages Are Scary**

- https://www.youtube.com/watch?v=gjpApOYziCw
- **Elon Gold: Chosen and Taken - Accents**

- https://www.youtube.com/watch?v=M0lZ4i37RrM
- **Michael McIntyre on accents**

Section 6.2 – Universal Grammar

- markedness differential hypothesis (Eckmann 1977)
- marked form = more frequent and common in world languages
- male profession word are unmarked

Table 6.2 Markedness Differential Hierarchy

Description	*Languages*	
Languages that maintain a superficial voice contrast in initial, medial, and final positions	English, Arabic, Swedish	More frequent
Languages that maintain a superficial voice contrast in initial and medial positions, but fail to maintain this contrast in final position	German, Polish, Greek, Japanese, Catalan	
Languages that maintain a superficial voice contrast in initial position, but fail to maintain this contrast in medial and final positions	Corsican, Sardinian	
Languages that maintain no voice contrast in initial, medial, or final positions	Korean	Less frequent

Source: Slightly modified from "Markedness and the Contrastive Analysis Hypothesis" by F. Eckman, 1977, *Language Learning*, *27*, 322. Reprinted with permission.

Section 6.2 – Universal Grammar

New conceptualisations of grammar in human languages

- how could you describe the nature of school grammars (prescriptive grammars)?
- how could you describe the nature of linguistic grammars (descriptive grammars)?
- take plural formation in English as an example

Section 6.2 – Universal Grammar

- Optimality Theory (OT) – *the* linguistic theory of the 1990s
- **Universal Grammar = a set of violable constraints**
- different languages = different constraint rankings
- **OT ranks universal, innate, and violable constraints**

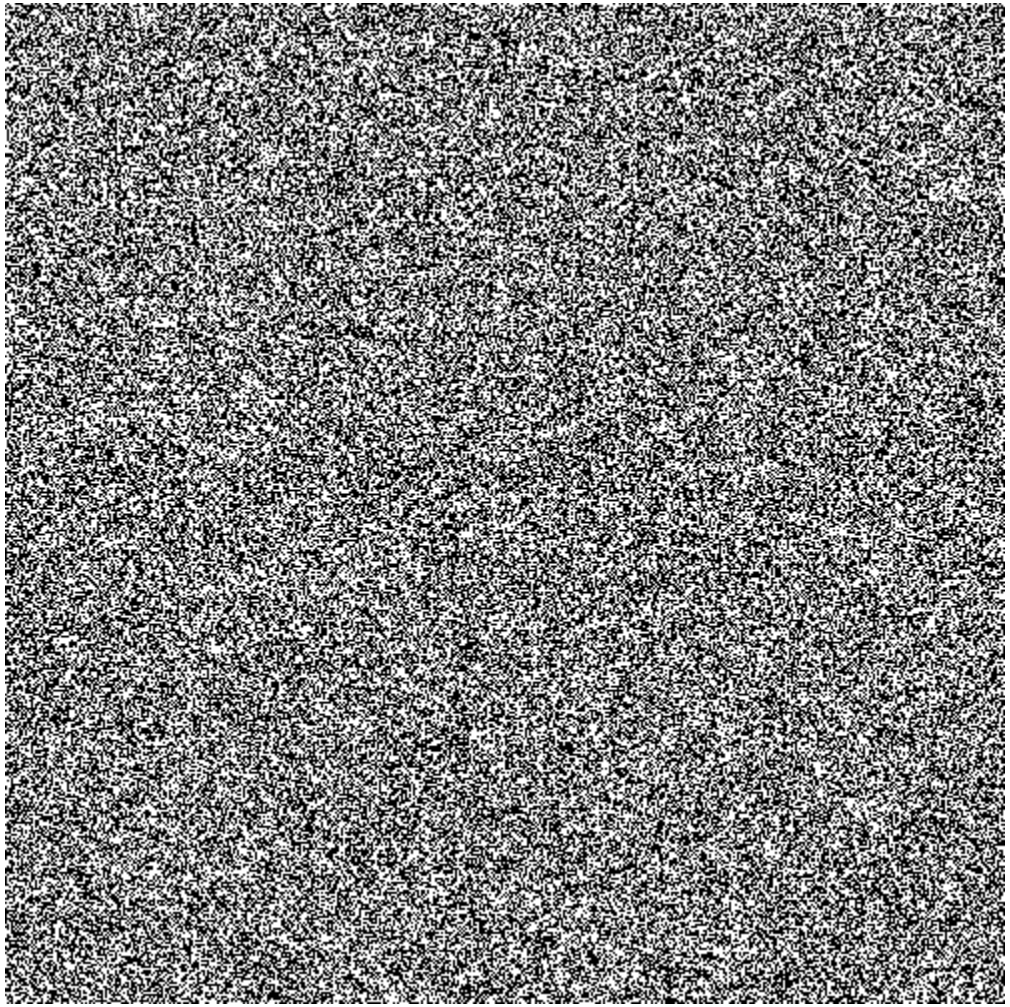
- SLA = re-ranking of constraints

- why so new?

Section 6.2 – Universal Grammar

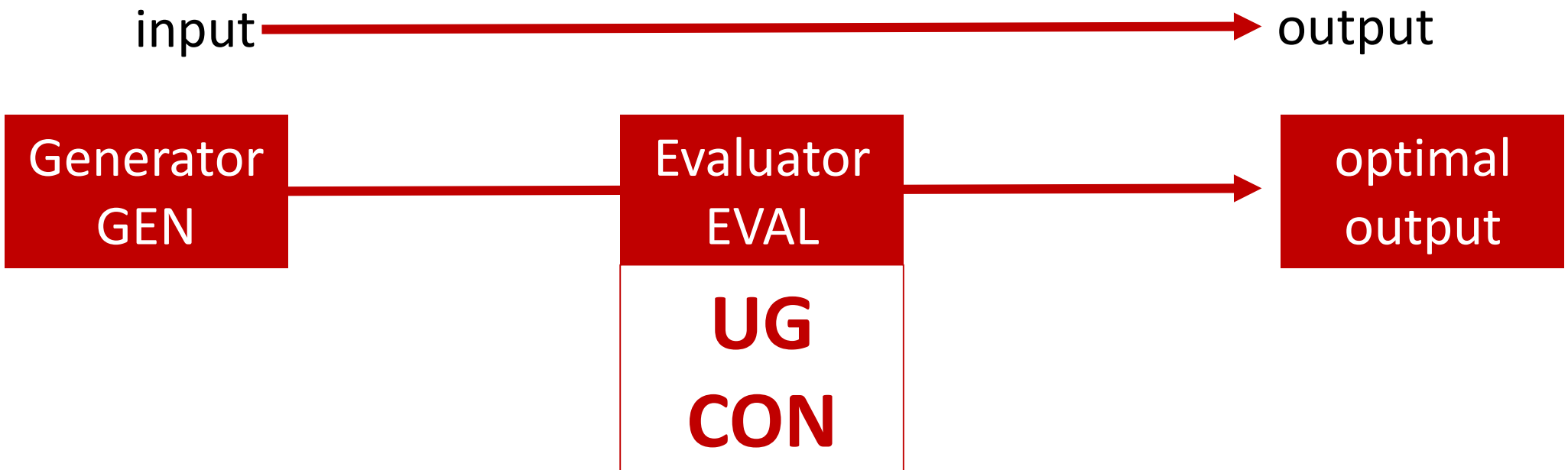
- post-war:
  - dichotomous, deterministic thinking of grammar
  - computer metaphor for grammar models
  - information processing paradigm
- 0 – 1
- no randomness
- always the same output from a given initial state
- rule-based

Section 6.2 – Universal Grammar



Section 6.2 – Universal Grammar

- OT is not rule-based – OT is a generative constraint based theory



Section 6.2 – Universal Grammar

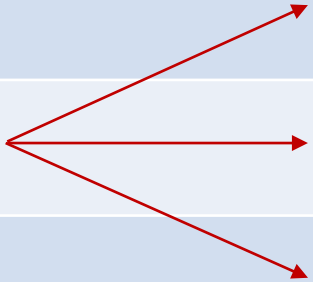
- Example – plurals in English
- standard linguistic analysis
- pluralisation rule: attach the morpheme `{plural}` to stem
- allomorphy:

voice+	+	voice+
voice-	+	voice-
sibilant	+	[ɪz]
irregular forms		

Section 6.2 – Universal Grammar

morphemes and allomorphs – example 2

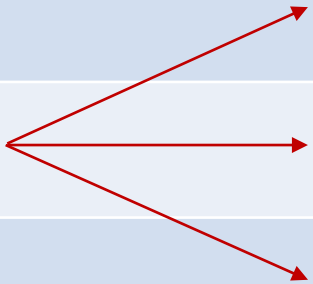
morpheme	allomorphs	condition / rule	example
{plural}			



Section 6.2 – Universal Grammar

morphemes and allomorphs – example 2

morpheme	allomorphs	condition / rule	example
{plural}	[s]		
	[z]		
	[ɪz]		



Section 6.2 – Universal Grammar

morphemes and allomorphs – example 2

morpheme	allomorphs	condition / rule	example	
{plural}	[s]	[#____ (-voice) _]	lips	[lɪps]
	[z]	[#____ (+voice) _]	bugs	[bʌgz]
	[ɪz]	[#____ (sibilant) _]	cases	[keɪsɪz]

Section 6.2 – Universal Grammar

morphemes and allomorphs – example 2

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	[ɪz]	[#____ (sibilant) _]	cases [keɪsɪz]
	irregulars	lexicalised	*tooth, oxen, children, sheep*

Section 6.2 – Universal Grammar

- OT and buying coffee
- GEN: how to get coffee
- EVAL: six options, like everybody has ;-)
  1) don't bother at all
  2) make terrible instant coffee
  3) brew your own really good coffee from scratch
  4) get a crappy cup at the nearby corner store
  5) get a pretty good coffee from further away Starbuck
  6) get a really good but expensive coffee from an Indie shop
- CON: you want easy, cheap, and good caffeine

Section 6.2 – Universal Grammar

- how to get coffee
  - * = violation *! = fatal violation

	EVAL coffee	constraint 1 has caffeine	constraint 1 cheap	constraint 3 easy	constraint 5 good
1	don't bother				
2	instant				
3	brew own				
4	Indie café				
5	Starbucks				
6	corner store				

Section 6.2 – Universal Grammar

- how to get coffee
  - * = violation *! = fatal violation

	coffee	constraint 1 has caffeine	constraint 2 cheap	constraint 3 easy	constraint 4 good
1	don't bother	*!			

Section 6.2 – Universal Grammar

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	coffee	constraint 1 has caffeine	constraint 2 cheap	constraint 3 easy	constraint 4 good
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5	Starbucks	*!	*!	*	*
6	☞ corner store				**

Section 6.2 – Universal Grammar

- 2 ranked universal constraints for English pluralisation
  - match voicing >> keep same sound
  - * = violation *! = fatal violation

	EVAL	constraint 1 match voicing	constraint 2 keep same sound
1			
2			
3			
4			

Section 6.2 – Universal Grammar

- 2 ranked universal constraints for English pluralisation
  - match voicing >> keep same sound

	EVAL	constraint 1 match voicing	constraint 2 keep same sound
1	bag + [s]	*!	*

Section 6.2 – Universal Grammar

- 2 ranked universal constraints for English pluralisation
  - match voicing >> keep same sound

	EVAL	constraint 1 match voicing	constraint 2 keep same sound
1	bag + [s]	*!	*
2	bag + [t]	*!	*

Section 6.2 – Universal Grammar

- 2 ranked universal constraints for English pluralisation
  - match voicing >> keep same sound

	EVAL	constraint 1 match voicing	constraint 2 keep same sound
1	bag + [s]	*!	*
2	bag + [t]	*!	*
3	bag + [t]	*!	*

Section 6.2 – Universal Grammar

- 2 ranked universal constraints for English pluralisation
  - match voicing >> keep same sound

	EVAL	constraint 1 match voicing	constraint 2 keep same sound
1	bag + [s]	*!	*
2	bag + [t]	*!	*
3	bag + [t]	*!	*
4	☞ bag + [z]		*

Section 6.2 – Universal Grammar

- https://www.youtube.com/watch?v=rxsbPDjL9ds
- The Ling Space on OT

- https://www.youtube.com/watch?v=xsMea6QhLoA
- Linguistics 101 – OT

Questions ?

practice tasks

- How can our knowledge of parameter clustering help language teachers?
- How do you personally get your dose of coffee?

final exam topics

Chapter 6

a) Universal Grammar
b) principles and parameters and their clustering
c) access hypotheses
d) Optimality Theory

homework 5

- read chapter 8 & 9, pp. 219-294

- try to understand ….
  - interlanguage variation
  - social contexts
  - social interactional approaches
  - interlanguage pragmatics
  - the role of input, interaction, and output
  - metalinguistic awareness