COGNITIVE PROCESSES IN LANGUAGE LEARNING

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Cognition ≡ mental process

Psycholinguistics ≠ Cognitive Linguistics

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COGNITIVISM emphasises the role of the teacher:

- helping students to connect previous learning before moving to new ideas
- helping students understand the material
- understanding differences in students' learning styles
- etc.

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Cognitive revolution (middle 20th c.)

Behaviorism: unable to explain language learning and as well as a number of everyday events.

Cognitive learning theory:

- learners are active in their attempts to understand the world
- new understanding depends on prior learning
- learners construct understanding
- learning is a change in people's mental structures instead of changes in observable behavior.

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'Learning results from inferences, expectations and making connections. Instead of acquiring habits, learners acquire plans and strategies, and prior knowledge is important'

(Hartley, 1998: 18)

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Key Principles of Learning (Hartley, 1998)

- Instruction should be well-organized
- Instruction should be clearly structured
- The perceptual features of the task are important
- Prior knowledge is important
- Differences between individuals are important as they will affect learning
- Cognitive feedback gives information to learners about their success or failure concerning the task at hand

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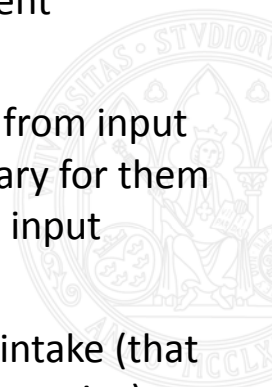**MURCIA**

Cognitive processes have to do with:

- Learning strategies
- Learning styles
- Multiple intelligences
- Etc.

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conscious learning seems to contribute to successful L2 development

for learners to acquire new forms from input (language they hear), it is necessary for them to notice such forms in the input

input (what learners hear) vs. and intake (that part of the input that learners notice)

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Features contributing to learners will noticing features of input:

- *"Other things being equal, the more frequent a form, the more likely it is to be noticed and then become integrated in the interlanguage system."*
- *"It concerns how salient a form is in input."*
- *"Instruction is crucial."*
- *"Individual differences in processing ability concern the learner's capacity to deal with the range of forms in input."*
- *"Task demands influences on noticing."*

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output promotes learners' attention to form

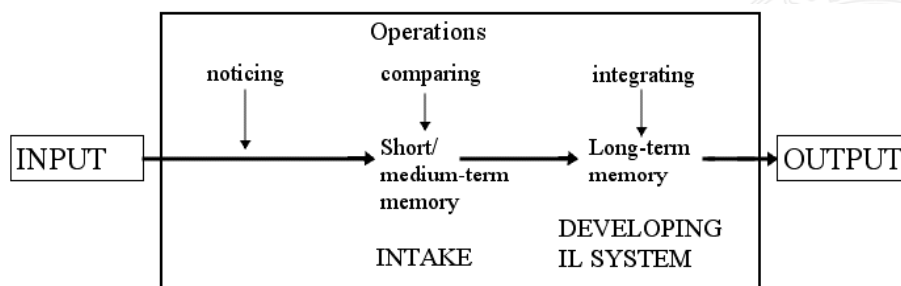OUTPUT HYPOTHESIS (Swain, 1995, 1998):

a) enhancement of fluency

b) the noticing function

c) the hypothesis formulation and testing function, and

d) the metalinguistic function

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Noticing Hypothesis (Schmidt, 1990)

focuses on the need to enhance learners' awareness of target language items

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Ellis' model (1997)

Operations

noticing   comparing   integrating

INPUT →   Short/ medium-term memory → Long-term memory → OUTPUT

INTAKE   DEVELOPING IL SYSTEM

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Kihlstrom (1984):

1) consciousness and short-term memory are essentially the same.
2) that for language items to be stored in long-term memory they must be processed in short-term memory.
3) that items not processed into short-term memory or not further encoded into long-term memory from short-term memory will be lost.

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"if consciousness is indeed equivalent to the short term store, this amounts to a claim that storage without conscious awareness is impossible" (Schmidt, 1990, p. 136).

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ATTENTION AND LEARNING
Suggestions for focusing and maintaining student attention.

Device	Implementation
Signals	Signal to students at the start of lessons or when they are to change activities
Movement	Move while presenting material to the whole class. Move around the room while students are engaged in seat work.
Variety	Use different materials and teaching aids. Use gestures. Do not speak in a monotone.
Interest	Introduce lessons with stimulating material. Appeal to students' interests at other times during the lesson.
Questions	Ask students to explain a point in their own words. Stress that they are responsible for their own learning.

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Explicit knowledge results from learning that involves attention to form as contrasted with implicit learning, where the focus is on meaning
(Ellis, 2004)

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Attention and awareness in particular have been identified as two cognitive processes that mediate input and L2 development through interaction

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Selective attention mediates the L2 acquisition process. Negotiated interaction is claimed to be useful in this regard, as the interactional **feedback** can help direct the learner's attention towards a mismatch between the target input and the learner's own interlanguage form, while at the same time providing learners with opportunities to produce modified output.

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Attention allows learners to notice a gap between what they produce/know and what is produced by the speakers of the L2.

Learners must consciously notice input in order for it to become intake

Noticing and interactional feedback were related.

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Corrective feedback

1) Explicit correction
2) Recast
3) Clarification Requests
4) Metalinguistic Feedback
5) Elicitation
6) Repetition

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Example 1

S1: And then I would say if I was last year I wouldn't

S2: If I were

S1: If I were

S3: But it was last year then ...

S1: OK. If I have been last year in the committee I would suggest

S3: Shouldn't we say If I had been last year in the committee?

S2: Yes, because it's the third type of conditional

S1: Oh. If I had been last year

S3: I would have consider alternative four

S2: Consider or considered?

S1: Considered, third type of conditional. OK. If I had been last year on the committee I would have considered

S2: Alternative four because the teacher is not enough

S3: Because the opinion of a teacher, you mean?

S1: Yes, because the opinion of a teacher is not enough

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Example 2

S1: Then, you have to say if I was there I ...

T: If I were

S1: If I were there I wouldn't have accept

T: I wouldn't accept. Remember that we have a second conditional, past in the if clause plus

simple conditional

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Example 3

Learner: Last weekend, a man painting, painting 'Beware of the dog'

Teacher: Sorry?

Learner: A man painted, painted, painted on the wall 'Beware of the dog'

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Example 4

S: Can I to the cinema?

T: Can you go to the cinema? Yes, that's an option

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Form-focused instruction:

- Focus on Form (FonF)

- Focus on Forms (FonFs)

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feedback provided during focus on form occurs
in response to specific learner errors or concerns
in meaning-focused communication

any planned or incidental instructional activity
that is intended to induce language learners to
pay attention to linguistic form'

(Ellis, 2001)
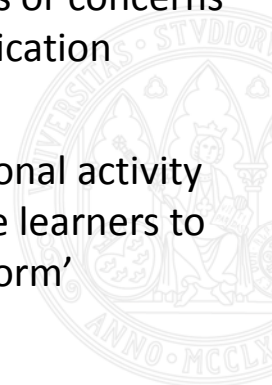
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T: What are they doing?
S: He ate the cake.
T: Yes, but ate, is that correct?, ate?
S: Uhmm… eat… are eating.
T: They are eating the cake, right.
S: and they are happy
T: umm
S: because they are on holidays

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Focus on form characteristics:

- It occurs in meaning-centered discourse.
- It is observable, i.e. it occurs interactionally.
- It is incidental, i.e. it is not preplanned.
- It is transitory.
- It is extensive, i.e. it attends to several different forms in the context of a single lesson.

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kinds of focus on form :
- Reactive focus on form. It occurs when a learner has said something erroneous and the teacher or another learner reacts to this error by correcting him.
- Preemptive focus on form. It is an attempt by the teacher or a learner to initiate explicit attention to a linguistic form to prevent the occurrence of an erroneous form.

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T: What's the opposite of landing?
S: Take off
T: Take off
SS: Take off

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- reactive focus on form addresses errors

- Preemptive focus on form addresses problems which are predicted to occur and thus block communication

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