Input Processing and Processing Instruction: The Story So Far

Alessandro Benati
Inaugural Professorial Lecture
7 March 2012
University of Greenwich
Introduction

- SLA research is about learning and learners
- SLA is the study of how learners create a new language system and how they use this system during comprehension and speech production
- But, SLA research has also clear implications for teaching and teachers
- Processing Instruction (pedagogical model) is derived from insights about Input Processing (theoretical model)
Topics of Discussion

☐ Input Processing
☐ Processing Instruction
☐ Research Findings

☐ Concluding Remarks
Input Processing

- What is Input Processing?
- Input Processing (VanPatten, 1996, 2004, 2007) is concerned with how learners initially perceive and process linguistic data in the language they hear or read.
- This is because ‘acquisition is a byproduct of comprehension’
- Input Processing is concerned with internal strategies (unconscious) by which L2 learners derive intake from input.
- \textit{Input} \rightarrow \textit{Intake} \rightarrow

- \textit{Input} is the language we hear or read.
- \textit{Intake} refers to the linguistic data which is actually processed.
Input Processing

- Input Processing is concerned with one fundamental question: What internal strategies do L2 learners use in comprehending sentences?

- Imagine a speaker of Italian learning English. In a conversation she hears someone say
  - “Yesterday, I played tennis with John in the park”
  - “The police officer was killed by the robber”

- The Input Processing model makes a number of claims:
  - L2 learners are driven to get meaning while comprehending
  - L2 learners assign the role of subject to the first noun they encounter in a sentence
  - L2 learners have a limited capacity for processing and storing information
Input Processing

Based on these claims the theory consists of two main principles (each of which is further explicated with sub-principles):

- Principle 1. The Primacy of Meaning Principle. Learners process input for meaning before they process it for form.
- L2 learners must make good form-meaning connections = L2 learners must be able to connect a form with its meaning in the input they receive (the morpheme –ed- on the end of the verb in English refers to an event in the past).

- Principle 2. The First Noun Principle. Learners tend to process the first noun or pronoun they encounter in a sentence as the subject or agent.
- L2 learners must be able to determine, for example, which is the subject and which is the object in a sentence they hear or read.
Input Processing

- L2 learners fail to make appropriate form-meaning connections
- L2 learners fail to assign syntactic structure to input sentences (misinterpretation)
- Delay in comprehension \(\rightarrow\) Delay in acquisition
- How can we help L2 learners?
- If we know what L2 learners are doing wrong at the level on Input Processing, can we create a pedagogical intervention that is comprehension based and push them away from non-optimal processing?
What is Processing Instruction?

Processing Instruction is an approach to grammar instruction that will guide and focus learners’ attention when they process input.

Processing Instruction attempts to influence, alter or improve the way learners process input.

This pedagogical approach works with input and with the processes learners use to get data from that input.

Processing instruction consists of two basic components:

- Learners are informed about a particular processing strategy/principle that may negatively affect their picking up of the form or structure during comprehension.
- Learners are pushed to process the form or structure during activities with structured input - input that is manipulated in particular ways to push learners to become dependent on forms and structures to get meaning.
Processing Instruction

Input ➔ Intake ➔ Developing System ➔ Output

Processing Strategies

Focused Practice
Guidelines:
- Present one thing at a time
- Keep meaning in focus
- Move from sentences to connected discourse
- Use both oral and written input
- Have the learner do something with the input
- Keep the learner’s processing strategies in mind

Referential activities are those for which there is a right or wrong answer and for which the learner must rely on the targeted grammatical form to get meaning.

Affective structured input activities are those in which learners express an opinion, belief, or some other affective response and are engaged in processing information about the real world.
Research Findings

- Processing Instruction is an effective pedagogical intervention to alter L2 learners internal strategies.
- Processing Instruction helps L2 learners of any L2:
  - to process a formal feature in order to determine an appropriate semantic distinction
  - to apply appropriate word order processing strategies
Research findings

- Processing Instruction is more effective than traditional and others output-based grammar instruction approaches (Lee and Benati, 2009)
- Processing Instruction is equally effective across a variety of romance and non romance languages and a variety of forms and structures (Lee and Benati, 2009)
- Processing Instruction is effective on sentence and discourse tasks (Benati and Lee, 2010)
- Processing Instruction has long-term durative effects (Lee and Benati, 2009)
Research Findings

- Processing Instruction is equally effective no matter the native language of the L2 learners (Benati and Lee, 2008).
- Processing Instruction is just as effective as an intervention with younger learners as it is with older learners (Lee and Benati, forthcoming).
- L2 Learners who receive training on one type of processing strategy for one specific form appropriately transfer the use of that strategy to other forms without further instruction (Benati and Lee, 2008).
Concluding Remarks

- Does Input Processing offer a complete account of second language acquisition?
- What is the future of Processing Instruction?
THANK YOU