



*Did they acquire?  
Or were they taught?*

**A Framework for Investigating the  
Effects and Effect(ives)s of  
Instruction in Second Language  
Acquisition**

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# Outline

1. Some key terms and concepts
2. Framework (a) : The roles of instruction in and the effects of instruction on L2 learning
3. Framework (b) : Factors mediating the roles and effects of L2 instruction

# **L2 *teaching* vs. L2 *learning***

- Teaching = what teachers do;  
Learning = what learners do.
- No one-to-one match between teaching and learning!
- L2 teaching should accommodate (as much as possible) to the mechanisms of L2 learning (rather than the other way around)

# *L2 instruction* vs. *L2 teaching*

- *L2 instruction*: any deliberate attempt to promote L2 acquisition by manipulating the mechanisms of learning and/or the conditions under which these operate.
- L2 instruction is a more narrow concept than *L2 teaching* = any teacher-related activity within a pedagogic context.

# *Effects vs. Effectiveness of instruction*

- **Effect:** any observable change in learner outcome (knowledge, disposition or behavior) that can be attributed to a given instructional intervention (possibly in interaction with other, contextual variables).
- **Effectiveness** (*efficiency, efficacy, usefulness*): extent to which the *actual* effects (outcomes) of instruction match the *intended* or *desired* effects, within the practical constraints imposed by the larger instructional context.  
=> Effective instruction is *context-appropriate* instruction (i.e. goal-appropriate, learner-appropriate, and resources-appropriate).

## Non-interventionist view:

- Instruction has no (substantial) effect on how learners acquire a L2 (Krashen 1985, 1993; Prabhu 1987; Schwarz 1993)
- "Languages can't be taught. They can only be learned. People learn language in spite of what goes on in the classroom" (Krashen 1985 ).
- "Abandon all instruction!" (Krashen & Terrell 1983)

## Interventionist view:

- L2 instruction *can* have an effect on how learners acquire a L2 (Ellis 1991, 2008; Long 1983, 1988; Rutherford & Sharwood-Smith 1985)
- "L2 instruction is effective in its own right" (Norris & Ortega 2000:480)
- "while instruction may not always be necessary to achieve competence in the L2, it undoubtedly helps" (Ellis 2005: 725).
- In some contexts, for some learners, for some L2 features, or for some aspects of L2 proficiency, instruction may even be necessary (DeKeyser 2000; Doughty 2003; White 2003)

# Pertinent questions about L2 instruction

Not: "Does second language instruction make a difference?" (Long 1983)

But:

- A. Exactly *what* differences does L2 instruction make?
- B. *When* does L2 instruction make a difference?

# General research questions

- A. What is the role of instruction and what is the nature of its effects on the SLA process and on its outcomes? (descriptive question)
  
- B. Which factors mediate the effect(ivenes)s of instruction on SLA? (explanatory question)

De Graaff, R. & Housen, A. (2009). Investigating the effects and effectiveness of L2 instruction. In M. Long & C. Doughty (eds), *The Handbook of Language Teaching*. Oxford: Blackwell (pp. 726-755).

# Taxonomic framework

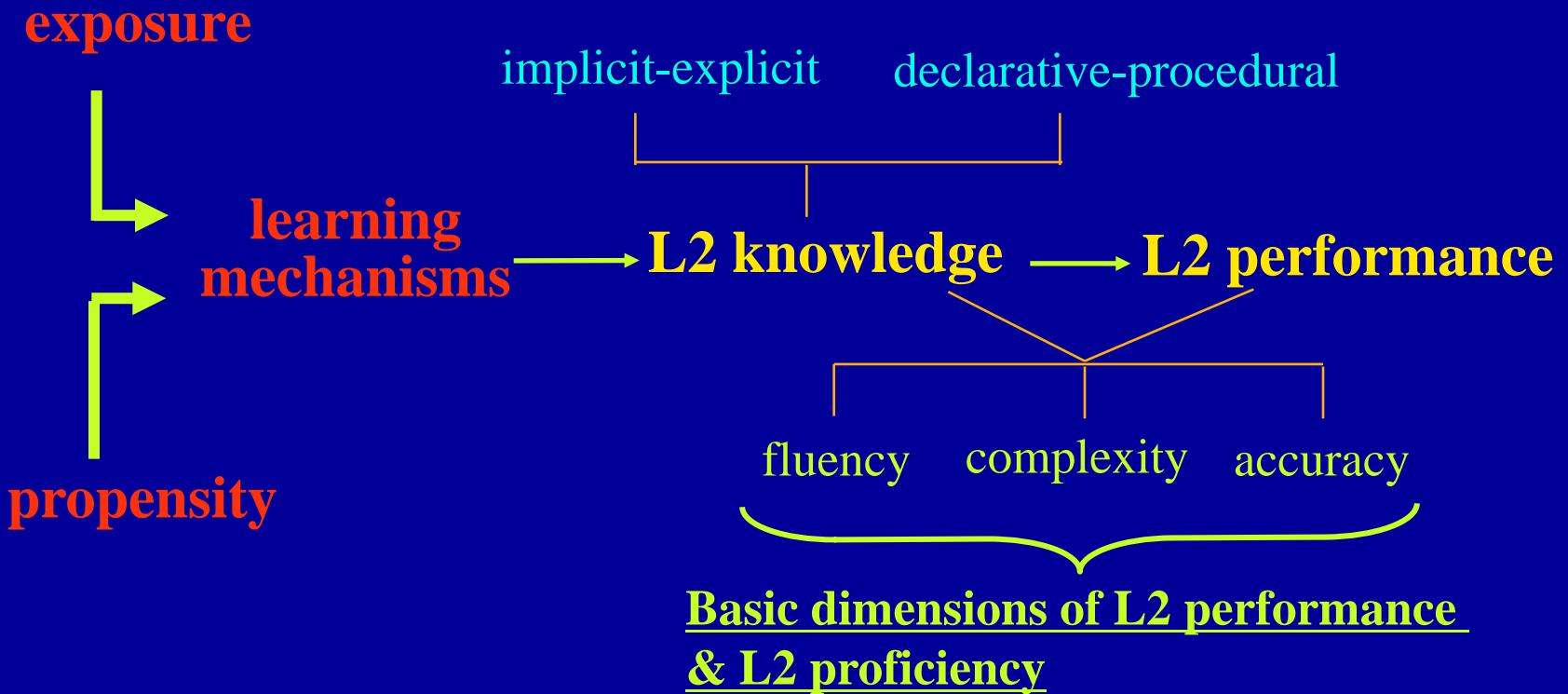
I. What are the roles and effects of L2 instruction for the :

1. different *dimensions* of the SLA process
2. different *components* of the SLA process
3. different *types of L2 knowledge*

II. What factors mediate the effect(iveness) of L2 instruction :

1. ...
2. ...
3. ...

# Second Language Acquisition



## Basic components of SLA

- exposure (input, output)
- learning mechanisms (eg. noticing)
- propensity (eg. motivation)

## Basic dimensions of SLA

- route of acquisition
- rate of acquisition
- ultimate achievement of acquisition

# 1. Roles of instruction for the basic dimensions of SLA

1. affect **route** of acquisition
2. affect **rate** of acquisition
3. affect **ultimate level** of attainment/end-state of acquisition

# 1. Roles of instruction for the basic dimensions of L2 proficiency/performance

1. to increase learners' accuracy
2. to increase learners' complexity (richness, sophistication)
3. to increase learners' fluency

# 1. Effects of instruction on the basic dimensions of SLA

- No substantial effect on the route of acquisition
- Can accelerate the rate of acquisition
- Leads to higher ultimate levels of attainment (esp. higher levels of complexity & accuracy, not fluency) and helps (or may even be necessary) to overcome premature *fossilization*.

## 2. Roles of instruction for the basic components of SLA

1. provide crucial exposure to L2
2. influence L2 learning propensity
3. activate language learning mechanisms & processes

## 2. Effects of instruction on the basic components of SLA

### 1. provide critical L2 exposure :

- Research on *Second Language and Study Abroad* contexts: when amount & type of instruction or amount & type of naturalistic exposure are held constant, instruction is more effective than mere naturalistic exposure - though a combination of instruction + naturalistic exposure is the best

(Doughty 2003; Freed 1998; Ellis 2008; Long 1988).

## 2. Effects of instruction on the basic components of SLA

### 2. influence L2 learning propensity (socio-affective dispositions, esp. motivation)

- "... motivating students should be seen as central in L2 teaching effectiveness" (Dörnyei 1998:130).
- generate *intrinsic motivation* through learner-authentic and goal-oriented instructional activities (Dörnyei 2003).
- task-based L2 instruction & learning : instruction must be 'challenging' and 'engaging' (Ellis 2003; Platt & Brooks 2002).

## 2. Effects of instruction on the basic components of SLA

3. activate cognitive learning mechanisms & processes (eg. transfer, simplification, analogy, (over)generalization, restructuring, parameter (re)setting, attention, form-meaning mapping, noticing, storage, inductive inferencing, deductive inferencing, automatization, proceduralisation, ...)

- Internalisation of new L2 knowledge
- Modification of internalised L2 knowledge
- Consolidation of internalised L2 knowledge

=>

(cf. Skehan 1998; Housen & Pierrard 2005)

# Roles & effects of instruction on L2 acquisition processes & processing mechanisms:

## 1. enable **internalisation** of new L2 knowledge

- to produce more **complex** L2 use(rs) (elaborate, rich, sophisticated L2 systems and output)
- involves *noticing* features in input (attention, awareness), taking in features in WM, processing them and eventually representing and storing them in LTM (Schmidt 2000; Robinson 2003)
- Research on effects of instruction on noticing (eg. focus on form): mixed and inconsistent results (see Doughty 2003; Ellis, 2001, 2002, 2005; Williams, 2005)

# Roles & effects of instruction on L2 acquisition processes & processing mechanisms:

## 2. enable modification of L2 knowledge

- to produce more accurate and efficient L2 use(rs)
- involves *restructuring, extending* and *fine-tuning* existing L2 knowledge (MacLaughlin & Heredia 1996, Skehan 1992, DeKeyser & Juffs 2005)
- Research on effects of gap-noticing and corrective feedback suggests that instruction can have a 'knowledge modifying' effect (see Swain 2005, Russel & Spada 2006, Williams, 2005)

# Roles & effects of instruction on L2 acquisition processes & processing mechanisms:

## 3. enable consolidation of L2 knowledge

- to produce more efficient, stable and fluent L2 use(rs)
- determines (a) how robustly stored an internalised L2 feature is in memory and (b) its accessibility for L2 use.
- involves *deeper processing, restructuring, proceduralising* and *automatising* existing L2 knowledge (Anderson 1993, Clairk & Lockhart 1972, DeKeyser & Juffs 2005, MacLaughlin & Heredia 1996, Segalowitz 2003)
- depends on practice (repeated exposure & use) (DeKeyser 2005)
- some studies suggest that instruction may have a consolidating effect (Gass et al 1999; Gatbonton & Segalowitz 1998, Robinson 2001, Swain 2005).

### 3. Effect of instruction on the development of different types of L2 knowledge

- declarative *vs* procedural knowledge
- implicit *vs* explicit knowledge
  - analyzed *vs* metalinguistic knowledge
- Can instruction also lead to implicit L2 knowledge, or only to explicit knowledge?
  - > no-interface vs. interface hypothesis
- Importance of using multiple measurements (that tap different types of knowledge (Ellis 2002, 2004)

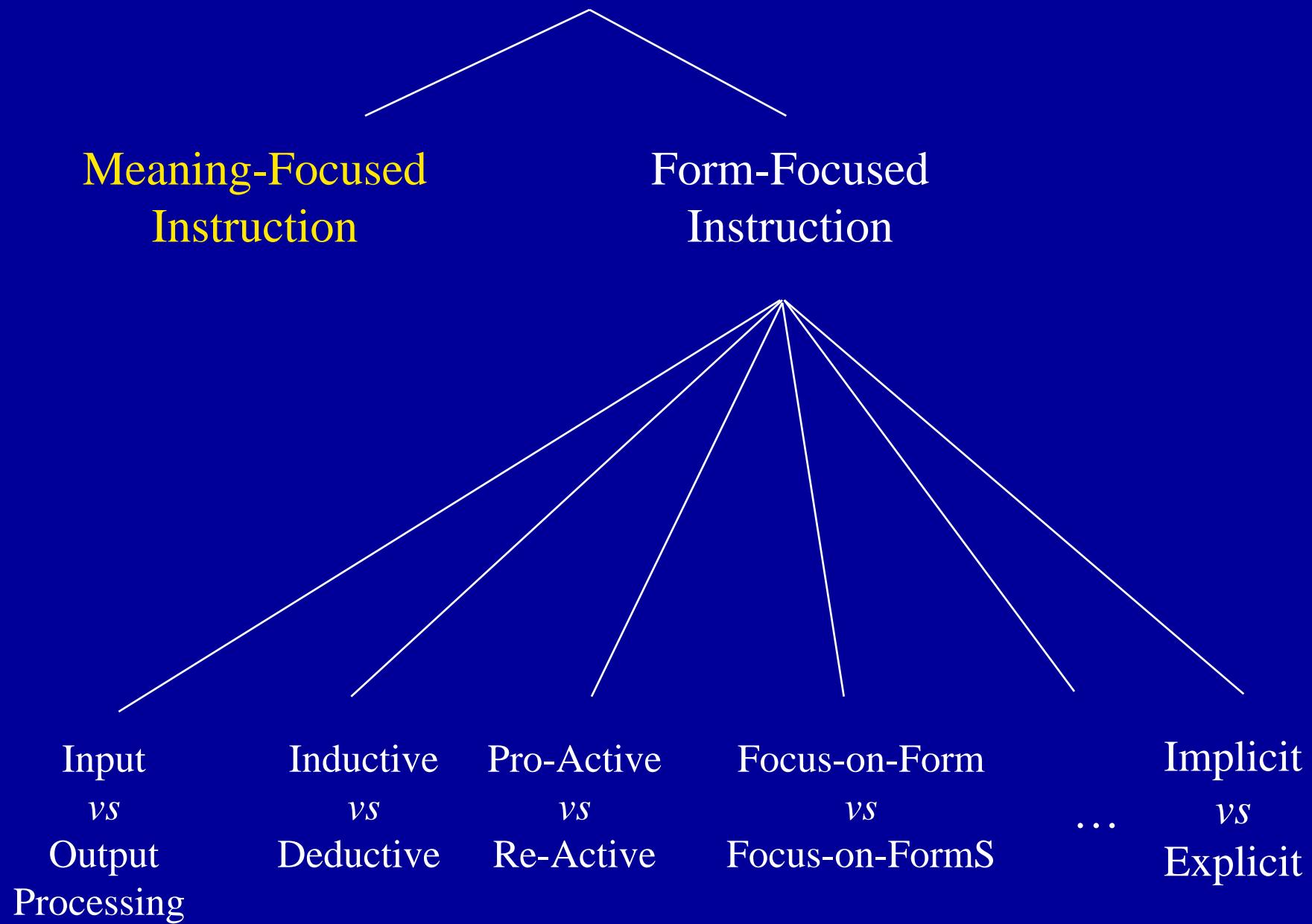
# Taxonomic framework

- A. Possible effects and roles of L2 instruction for :
  - 1. different dimensions of SLA and of L2 proficiency
  - 2. different components of SLA
  - 3. different dimensions of L2 proficiency/performance
  - 4. different processes and mechanisms of SLA
  - 5. different types of L2 knowledge
  - 6. ...
  
- B. Factors mediating the effect(iveness) of instruction :
  - 1. type of instruction (*How*)
  - 2. type of L2 feature (*What*)
  - 3. type of learner (*Who*)

## 2. Types of L2 Instruction

- Many different types of L2 instruction...
  - What are the relevant types?
  - What kind of effects does each type of instruction have on SLA?
  - Which types of instruction are more/most effective?

## 2. Types of L2 Instruction



# 1. Types of L2 Instruction

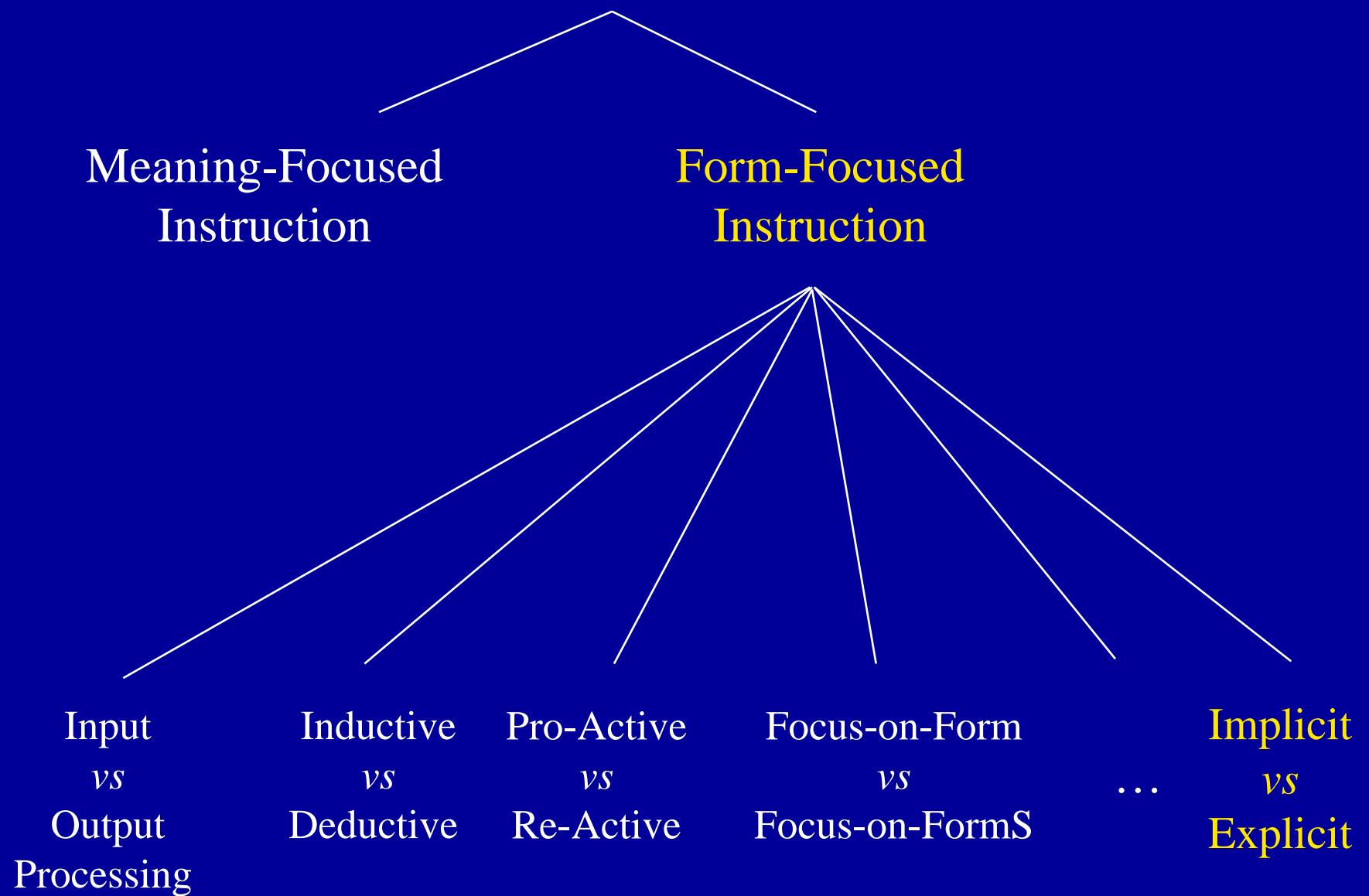
## 1. Meaning-Focused Instruction (*MFI*)

- any deliberate effort to engage the L2 learner in the communicative exchange of relevant meanings and authentic messages (Ellis 1999).
- L2 learning via **negotiation of meaning** in **interaction** (Long 1996) and processing **comprehensible input** (Krashen 1985) and **pushed output** (Swain 1985).
- cf. Communicative Language Teaching (Krashen & Terrell 1983), immersion education (Johnson & Swain 1998), Content-Based L2 Teaching (Wesche & Skehan 2002).
- Limitations of 'pure' MFI -> “*a focus on form* is probably a key feature of L2 instruction” (Long 1991).

## 2. Form-Focused Instruction (*FFI*)

- “Any pedagogical effort used to draw the learner’s attention to language form, either implicitly or explicitly, spontaneously or pre-determined” (Spada, 1997)
- ‘form’ =
  - grammatical, phonological, lexical, socio-pragmatic,...
  - items, structures, rules, patterns, features, ...
- Cover term for: *formal instruction, form-oriented instruction, Focus-on-Form(S)...*

## 2. Types of L2 Instruction



## Implicit FFI

- *attracts* attention to form
- form presented in context
- unobtrusive (minimal interruption of communication of meaning)
- no metalanguage
- free use of target form in spontaneous communication

## Explicit FFI

- *directs* attention to form
- form presented in isolation
- obtrusive (interruption of communication of meaning)
- use of metalanguage
- controlled practice of target form in focused tasks

- A. Read the following text and answer the content questions that follow it.

*Dear John,*

*I want to tell you what happened to me yesterday. I went to London by train because I wanted to visit my grandmother. When I arrived in Waterloo Station, I saw that there was a strike and I could not leave the station through the main exit. I decided to take the underground to Hyde Park and as I walked down the stairs to the ticket office, a man came up to me and showed me a picture of a young girl. He asked me if [...]*

Questions:

1. How many people are involved in this story?
2. What do you know about the writer of this letter?
3. Are the events in the past, the present or in the future?

A. Read the following text and concentrate on the coloured words.

What do both the yellow and green words have in common?

What do the yellow words have in common? What do the green words have in common? And the purple words?

*Dear John,*

*I want to tell you what happened to me yesterday. I went to London by train because I wanted to visit my grandmother. When I arrived in Waterloo Station, I saw that there was a strike and I could not leave the station through the main exit. I decided to take the underground to Hyde Park and as I walked down the stairs to the ticket office, a man came up to me and showed me a picture of a young girl. He asked me if [...]*

B. Write a letter to a friend describing what you did yesterday or last summer.

# The Simple Past

Meaning & Use: The Simple Past is a form of the verb which is used whenever the action or event expressed by the verb occurred in the past time.

e.g. *John works in London now* --> *John worked in London last year*.

## Form:

1. **Regular formation:** take the stem of the verb and add *-ed* in writing (pronounced as /t/ after a voiceless sound, as /d/ after a voiced sound, as /id/ after a /t/ or /d/).

e.g.    *work*       →     *worked* /t/  
          *kill*       →     *killed* /d/  
          *wait*       →     *waited* /id/

## 2. **Irregular formation:**

(a) verbs that do not change in the Simple Past:

e.g.    *hit*       →     *hit*  
          *put*       →     *put*

(b) verbs that change their base form:

e.g.    *go*       →     *went*  
          *teach*       →     *taught*  
          *sleep*       →     *slept*

Exercise: Put the verbs in brackets in the following sentences in the Simple Past form.

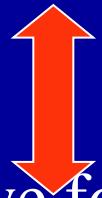
1. *I [go] \_\_\_\_\_ to London yesterday.*
2. *John [see] \_\_\_\_\_ Star Wars on television last week.*
3. *Carol [visit] \_\_\_\_\_ her grandmother two weeks ago.*

# Most effective: implicit or explicit L2 instruction?

- Meta-analysis (Norris & Ortega 2000): Explicit forms of instruction are significantly more effective than implicit forms (i.e. larger and more durable effects on various measures of L2 learning & use).
- But:
  - many biases in Norris & Ortega's sample of studies (eg. type of task/measure; cf. Doughty 2003)
  - many other intervening factors ...

## 2. Type of L2 Feature

- Is L2 instruction more effective for some L2 features than for others? Are some L2 features more susceptible or responsive to instruction (more 'teachable') than others? If so, which ones and why?
- Instruction is more effective for, and should focus on, **easy/simple** L2 features (DeKeyser 1995; Krashen 1994; Pica 1985, Robinson 1996)



Instruction is more effective for, and should focus on, **difficult/complex** L2 features (Hulstijn & de Graaff 1994, de Graaff 1997, Housen et al 2005)

## 2. Type of L2 Feature

What makes an L2 feature 'complex' or 'difficult'?:

- morphological *vs* syntactic *vs* lexical *vs* phonological *vs* socio-pragmatic?
- salient *vs* non-salient?
- frequent *vs* infrequent?
- meaningful *vs* redundant?
- semantically/functionally transparent *vs* opaque?
- structurally simple *vs* structurally elaborate?
- marked *vs* unmarked?
- prototypical/core *vs* peripheral
- similar *vs* different from L1 feature
- developmentally early *vs* late
- cognitively demanding *vs* undemanding
- ...

# Meta-analysis of effectiveness of instruction for simple vs complex L2 features (Spada & Tomita 2010)

- Classification of simple *vs* complex features based on 'number of linguistic transformations needed to derive target form from base form' (Hulstijn & de Graaff 1994)
- Finding 1: Explicit instruction is more effective than implicit instruction *for both simple and complex features*.
- Finding 2: type of language feature (complex *vs* simple) does not seem to influence the effectiveness of instruction as such nor the effectiveness of implicit *vs* explicit types of instruction
- But: 'We acknowledge that if we had chosen a different set of criteria to distinguish the two types of language features, the results may have been different' (p. 289).

### 3. L2 Learner factors

- age (eg. cognitive maturity)
- cognitive style (eg. holistic-analytic)
- aptitude
- motivation
- personality (eg. extraversion, anxiety)
- proficiency level / stage of development (eg. beginners, intermediate, advanced)
- ...

- For which type of L2 learner is a given type of L2 instruction the most effective?
- ?

# Summary research findings on effect(iveness) of L2 Instruction to date:

- Instruction (esp. FFI) can have a positive and durable effect on L2 learning when compared to naturalistic exposure to the L2.
- Possible effects include: faster learning, higher levels of proficiency/attainment, higher accuracy and complexity
- Instruction (esp. FFI) mainly affects the development of explicit knowledge (with possible indirect effects for implicit knowledge).
- Effects are mainly observed in L2 tasks that allow for planning (monitoring), less so in unplanned L2 tasks.
- Effects are mediated by type of instruction and possibly by type of target feature and the type of learner.

# A framework for investigating L2 instruction

## A. Possible roles & effects of L2 instruction for :

1. different dimensions of SLA
2. different components of SLA
3. different processes of SLA
4. different types of knowledge
5. different dimensions of L2 proficiency/performance
6. ...

## B. Factors mediating the effect(iveness) of instruction :

1. type of learner/instructee
2. type of instruction
3. type of L2 feature

# Thank you!

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