

Recent Research on the Role of Explicit Information in Instructed SLA: Processing of Accusatives and OVS Sequences in Spanish, Russian, and German"



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Some Basics

- What is acquisition?
 - Acquisition of underlying competence
 - Acquisition of skill
- All skill presumes some kind of underlying competence, so let's start there.

Underlying Competence



- Mental representation of language
 - An **implicit** and **abstract** system possessed by all speakers/learners of a language
 - Does not contain rules such as “object pronouns must precede a simple conjugated verb” but instead consists of **abstract principles** that work in concert to **derive or yield a structure that *looks like* a rule.**
 - **Lexicon** contains grammatical information and morphological representation
- So, the syntax and the lexicon interact to give us sentence structure. (You have no “rules” in your head. But you do have constraints.)

Subject, Anyone?

- What's a subject?
- *John eats a lot.* → *John is an eater.*
- *John loses a lot.* → *John is a loser.*
- *John knows a lot.* → ?*John is a knower.*
- *John dies a little each time.* → **John is a dier.*
- *John seems tired.* → **John is a seemer.*
- *John is happy.* → **John is a be-er.*
- *It rains a lot in Seattle* → **It is a rainer.*

More Subjects

- And what happens when the verb is not simple?
 - *John tries to do it.*
 - *John is trying to do it.*
 - *John has tried to do it.*
- Subjectness is an abstract relationship between verbs and noun phrases. We all know one when we see one (it's in our competence), but what exactly is a subject?

How Does Competence Develop?

- Interaction between linguistic data, language processors, and Universal Grammar.
- Linguistic data = *the input*
- Processors = *mechanisms that tag and code data so that it can be used by UG*
- Universal Grammar = *a set of constraints to make sure the developing language is a natural language (principles and parametric variations)*

More on Acquisition

- But we know the following about formal features and syntax:
 - Acquisition is staged
 - Acquisition is not always target-like
 - Acquisition is not instantaneous; it is sloooooow...

So...

- Language teaching **can never** be a short cut to acquisition.
- Language teaching **is not** a substitute for acquisition.
- Language teaching **is constrained** by acquisition.
- So, then....

What is the Purpose of Grammar Instruction?

- Currently, most grammar instruction involves this:

- Explain a rule
- Practice the rule
- Blame students for having no aptitude
- Blame students being lazy



- But if acquisition happens as a result of **input** + **processors** + **UG**, then what (processes or products) does the above approach act on?

First Steps



- First, we have to understand the roles of input and processors.
- Second, we have to jettison the idea that learners learn “rules” and “paradigms”
- Third, we have to understand and accept that competence evolves; it can't be taught directly. (Textbook rules do not “wind up in our heads.”)

Let's Redefine what Instruction Ought to Do

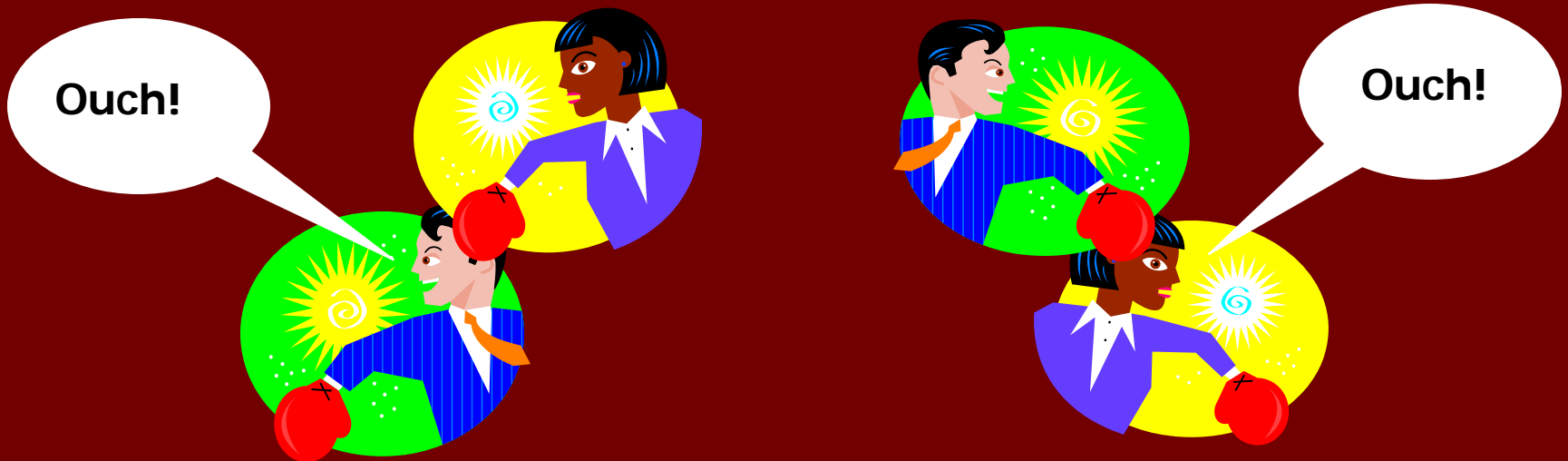
- Role of instruction ought to be the facilitation of SLA: “optimizing” input so that intake is enriched.
- In other words, how can we reconceptualize *grammar intervention* (not “instruction”) such that we help with input?

Processing Instruction

- First, we identify what learners are doing with input. That is, what are their processors doing to the language they are exposed to? Are there identifiable *processing problems*?
- Next, we construct *particular kinds of input-oriented activities* that push learners away from processing strategies that aren't helping them or are causing them to get something wrong.
- Note: these can't be just any old input activities and we NOT saying "just throw lots of input at the students" (though, that isn't a bad thing itself)

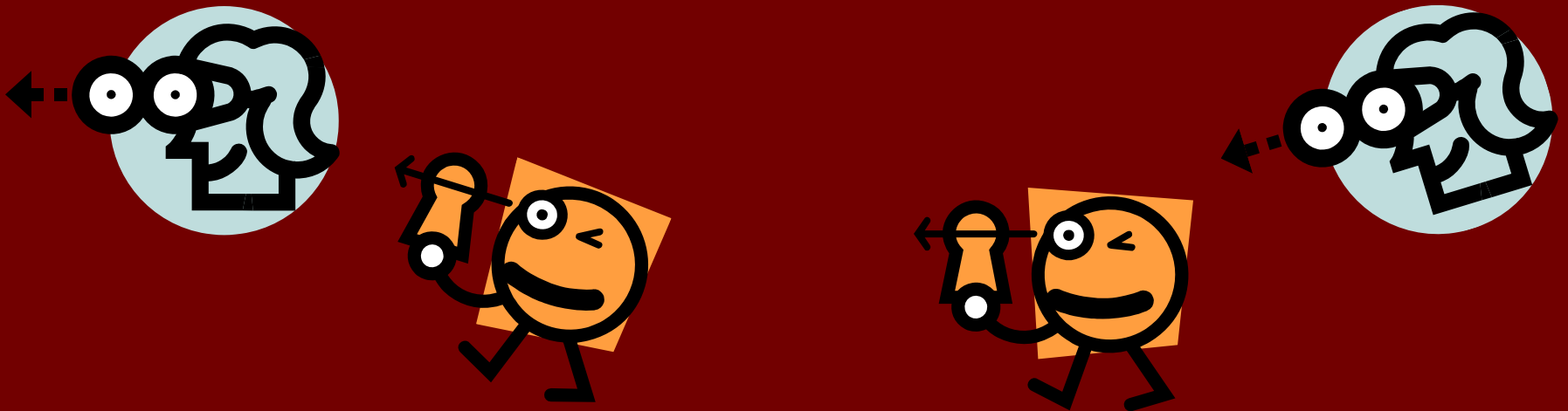
VanPatten & Cadierno (1993)

- VP & C identified the First Noun Principle: *learners tend to tag the first (pro)noun they encounter in a sentence as the subject/agent.*



VanPatten & Cadierno (1993)

- The FNP is fine for subject-verb-object (SVO) sentences. But what about...?
 - *Lo ve María.* = *He sees Mary.
 - *A Juan le gusta María.* = John *likes Mary.
 - *Se levanta tarde* = He gets up late (*se = he)

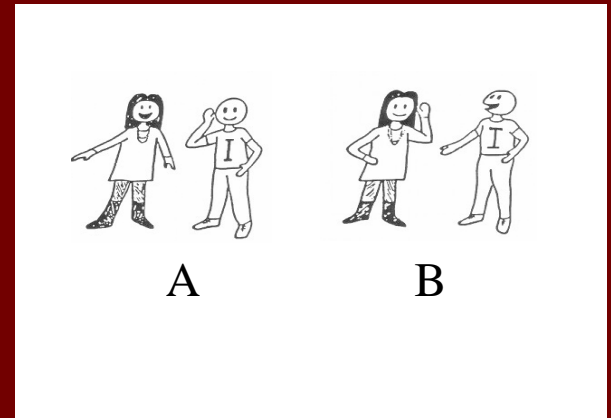


VP & C

- **Explicit information (EI)** = standard info on object pronouns and comparison to subject pronouns; info on bad processing strategy.
- **Structured input (SI)** = activities in which learners heard/read sentences and had to process for meaning, correctly demonstrating knowledge of who did what to whom.

Structured Input

- **Referential activities:** have right or wrong answers.
- **Hear/Read a sentence...**
 - select from one of two pictures
 - select from one of two ways to complete a sentence
 - select from one of two L1 equivalentsand so on.



Structured Input (cont')

- **Affective activities:** learners respond with information about themselves, the world around them, they offer opinions, and so on.
- Ex: Which of the following are true about you and your mother?
 - La admiro.
 - La detesto.
 - La respeto.
 - La ___?___



VP & C

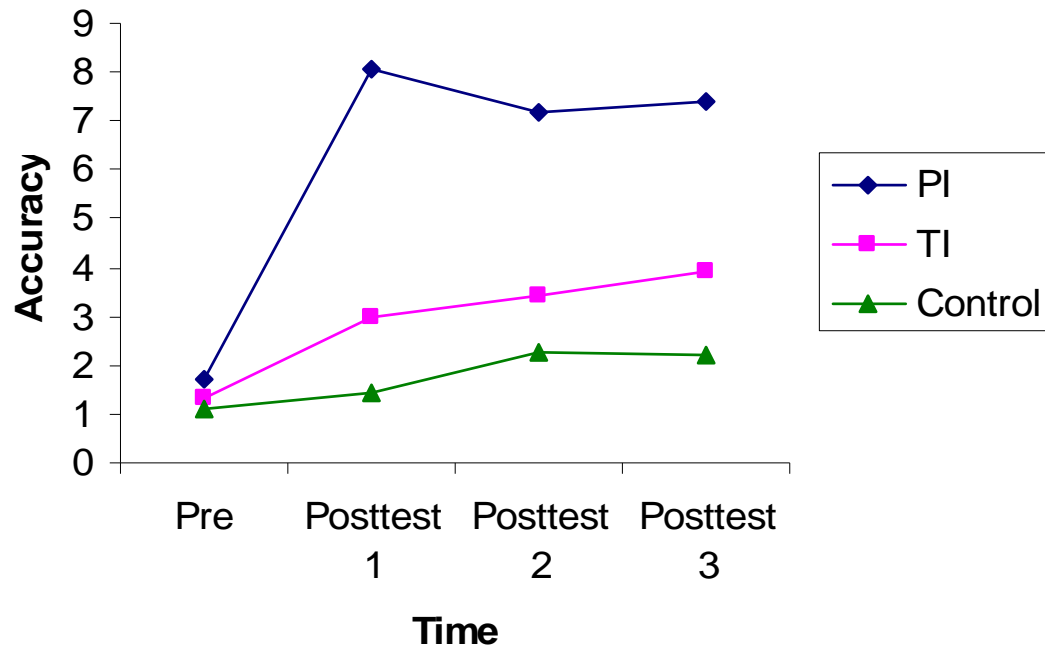
- They compared PI to traditional instruction (TI) and Control
- TI = explanation plus drill and communicative exercises
 - **Mech:** *Juan pone los platos en la mesa → Juan los pone en la mesa.*
 - **Meaning:** *¿Dónde pone el profesor sus libros al entrar? → Los pone en el escritorio.*
 - **Comm:** *¿Dónde pone Joe sus llaves cuando llega a casa? → Las pone en la mesa.*
 - Note: so called “contextualization” does not make drills meaningful or communicative
- Control = no instruction

VP & C

- Two measures: ability to interpret sentences, ability to produce sentences. Standard pretest/posttest design with delayed posttests
- $PI > TI =$ Control on interpretation (OVS vs. SVO sentences)
- $PI = TI >$ Control on sentence production (OV sentences)

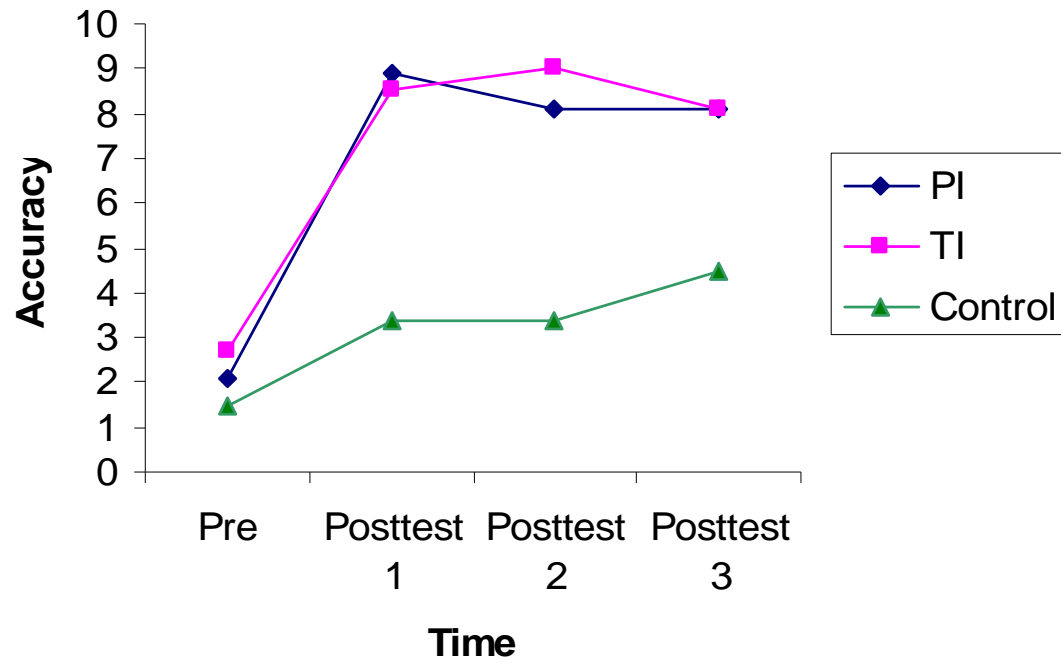
VP & C

Results of VP & C (1993): Interpretation



VP & C

Results of VP & C (1993): Production



VP & C

- **These results were revolutionary:** remember that the PI group never once produced object pronouns during the lesson.
- “What appears to have happened in this study is that processing instruction altered the way in which the subjects processed input, which in turn had an effect on the developing system and what the subjects could access for production” (p. 238)

Along Comes VanPatten & Oikkenon (1996)

- EI = the information about a target structure or feature provided prior to treatment; that is, “The Explanation/Rule Presentation”
- Possible criticism of VP & C: EI was not the same in the two treatments. Could “superiority” of PI be due to better EI?



VanPatten & Oikkinen

- VP & O compared three groups: PI, structured input (SI) only, and EI only using all the materials from VP & C
- Results:
 - Interpretation: $PI = SI > EI$
 - Production: $PI = SI; PI > EI; SI = EI$
- Repeated in a number of studies with different structures and languages, but SI better than EI across the board in those studies.

So . . .

- Explicit information does not appear to be necessary or even useful in PI; Structured input alone is sufficient to bring about changes in knowledge and performance.
- It appears that EI was not causing the results in the VP & C study.



But...

- Imagine the following scenario: Learner A in +EI group and Learner B in –EI group.
- During class, after the explicit information, Learner A begins to process the target feature relatively soon—maybe during the first activity.
- Learner B, however, takes longer to begin to process correctly. However, by the end of the lesson, Learner B is at the same place as Learner A.

But...

- Thus, there could be a “hidden” effect for EI masked by a pretest/posttest experiment.
 - Learner A “got there” sooner than Learner B, we just couldn’t see it.
- What is needed a research design where learners are tracked during the treatment.



Fernandez (2008)

- Took the referential materials from VP & C and loaded them into e-Prime. Target = word order and object pronouns, First Noun Principle
- Assessment = trials to criterion, reaction time after criterion
- Trials to criterion = answering three targets in a row plus one distractor

Fernandez (cont')

- Results:
 - For word order and object pronouns (FNP):
no difference between +/-EI on any measure
- Conclusion: EI doesn't play a hidden role in processing object pronouns and word order in Spanish

To Be Sure



- German has case markings on articles; and word order can vary. Like Spanish, it's possible to have OVS sentences. Case markings would be redundant in SVO sentences, hence the major processing problem for learners of German.
 - **Der** Mann ruft die Frau. (SVO)
 - **Den** Mann ruft die Frau. (OVS)
- So, let's see if Fernandez's results hold for L2 German.

Henry, Culman & VanPatten (2009)

- Followed Fernandez's design as closely as possible.
- Two groups: +EI/-EI.
- Responses were tracked and reaction times recorded.

Henry, Culman & VanPatten (cont')

- We found an effect for EI. Those in the +EI group began processing OVS sentences sooner than those in -EI. No reaction time differences.
- Conclusion: the FNP may interact differently with different structures depending on the formal cues that learners are forced to attend to.
- However, at no time have we shown that EI is necessary. At best, it is beneficial. -EI groups always wind up in the same place as +EI groups in the end.

Our Current Research

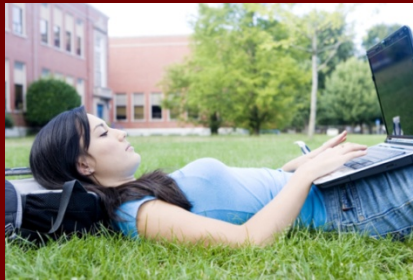
- The problem with the previous studies is with population differences, you always have problems of comparability. So...
- A large scale study with the same population pool in Spanish, German, and Russian.
- OVS
 - Clitic objects and word order in Spanish
 - Case marking on articles (German) and on nouns (Russian)

Preliminary Results

- Spanish data match Fernandez: no effect for explicit information
- Trend for an for both German and Russian ($p = .07$)

Conclusions

- This kind of research has both theoretical importance as well as practical importance.
- **Theoretical importance:** (1) underscores the role of input in SLA for building a linguistic system; (2) demonstrates that SLA does not proceed from explanation to internalization of "rules."
- **Practical importance:** the development of on-line materials to supplement classroom practice. Students are notorious for not reading intro material.



Conclusions (cont')

- Because Fernandez, and our studies use on-line methods, they demonstrate the adaptability of PI to on-line out-of-class work.

Conclusion

- So, here we are at the end. How would I like to wrap up?
 - “If you have the right activities (and by implication you have identified the learning + processing problem), explanations you provide are icing on the cake. They’re not as important as you might think.”
- What something like PI can do is interface with the learning processes to push along underlying competence.

**Daddy, are you
coming home now?**



Bill

- Paso 1. Cuando Bill llega a casa, ¿qué hace con las llaves?
 - Las deja en la mesa.
 - Las pone en un cajón.
 - Las cuelga.
 - Las _____? _____ .



Bill

- Paso 2. Después de la cena, ¿qué hace Bill con los platos?
 - Los lava en seguida.
 - Los deja para más tarde.
 - Los mete en el lavaplatos.
 - Los ____? ____



Bill

- Paso 3. Indica lo que hace Bill en cada situación.
 - Cuando Bill llega a casa, se quita los zapatos y los _____. Luego, se quita la ropa y la _____. Después se toma un martini...



How Does Competence Develop? (cont')

