



# *Syntax, semantics and morphology in acquisition*

Dr María J. Arche  
University of Greenwich

*Symposium Theoretical Linguistics and Language Acquisition*  
New York College, Thessaloniki 18<sup>th</sup> March 2018



# This session

- ❖ On how detailed syntactic, semantic and morphological analysis is crucial for
  - Gaining a finer-grained understanding of crosslinguistic variation and
  - Developing adequate predictions on (second) language acquisition learning tasks

# Why L1/L2 differences matter

- Native language plays a role in the success of the SLA process
  - Intuitional level – every lay person may have/ agree with that idea; may have experienced it herself.
  - Theoretical level: not an innocent idea. It entails a specific vision on what a language is and how the process of acquisition works.
    - How the initial state is defined. What defines it.



# The plan

- Why do we say crosslinguistic differences matter
- What exactly matters?
- How do we formalize what matters and how it affects the journey from one language to the other.



# WHY & HOW

- Why exactly do the properties of languages matter?
- How are the properties of native and second language related? How can they affect each other?

The devil is in the details... in depends on

**Theory of  
acquisition**



# Theory of acquisition

- That is, how the acquisition process works.
- Understood as a ***developmental*** process with:
  - An initial state –point of departure
  - A “growing” phase
  - Final attainment
    - Debate: possible?

# The SLA Initial State

- The LI
  - **Full Transfer-Full Access** (Schwartz & Sprouse 1994, 1996; White 2000).
- Universal Grammar (Flynn & Martohardjono 1994, Flynn 1996, Epstein et al 1998).
- Nothing: wild grammars

# Full Transfer-Full Access

Schwartz & Sprouse 1996, 2000

- Full Transfer of L1: initial state of L2 is the L1.
- Full Access to UG: in subsequent states.
  - Different L1 → different initial stages (e.g., contrast null subject languages)
  - The properties of the interlanguage grammar is UG constrained.
  - SLA process:
    - Access what L1 does not have (from scratch or not).
    - Sort of restructuring of what we have.



## The *what we transfer & need to acquire*

- What is it that we can transfer or not?
- How crosslinguistic differences matter for SLA?
- How does the route look like exactly?
- What do we need to acquire?
- So, exactly, precisely, what is it that we transfer, carry with us, our previous point of departure and what is our point of arrival, our target?

# WHAT

- What exactly matters?
- What properties?
  - Properties of the native language
  - Properties of the second language
- How are we going to define such properties?

The devil is in the details...

**Theory  
of  
language**

# A theory of Language

What is a language? How can we define it?  
(e.g., Chomsky 1995, 2001)

- Set of ingredients – “features”
  - There is a general set of features
  - Individual languages make different selections from it.
    - Open debate: is there any feature every language *must* include?
- A *recipe* to operate with them; a way of operating.
  - Alike across languages

# Language elements

- Different language units –for starters:
  - Vocabulary (lexical): nouns (*table*), verbs (*walk*), adjs (*pretty*)
  - **Functional items:** e.g., *-ed*.
- Language units: collections of
  - Phonetic information: how they sound.
  - Morpho-syntactic information: how they behave wrt word-formation = *walked* vs. *\*edwalk* or *\*ed walk* (but *will walk*); wrt word order “*I will walk*” vs “*\*walk I will*”
  - **Meaning information:** what they refer to.





# Language elements

- Pairs of form and meaning
- If different in L1 & L2 (the usual case), high(er) difficulty predicted.

# An illustrative example

- Three aims:
  - Raise awareness of crosslinguistic variation
  - Raise awareness of how specific theoretical detail can be
  - Give an example on how these two respects are used in second language analysis and predictions.
- The acquisition of Grammatical Aspect: Arche 2014b; Domínguez, Arche & Myles 2017

# Grammatical aspect

- “Grammatical aspect”, “viewpoint aspect” (Smith 1991), or “outer aspect” (Verkuyl 1993).
  - Gives us information about the unfolding of a situation in time.
    - Ongoing: *He was cleaning the table.*  
*IMPERFECTIVE*
    - Finished: *He cleaned the table.*  
*PERFECTIVE*
    - Not started yet: *He was about to clean the table.*  
*PROSPECTIVE*



# Crosslinguistic awareness

- The contrast imperfective/perfective is the most commonly marked in the languages of the world (Comrie 1976).

# However!

- *World Atlas of Language Structures* (Dahl & Velupillai 2011)
- out of the 222 languages included in their crosslinguistic study, more than half of them (121) do not show any grammatical marking of the imperfective/perfective distinction.

## Even more...

- Of the languages that mark such a distinction, not all of them:

A) Use the same grammatical means, varying between inflection and analytical (periphrastic) forms.

B) Even if they use the same grammatical means, not all of them have the same interpretations.



# **EXAMPLES OF CROSSLINGUISTIC VARIATION**

# Spanish

- Spanish has a dedicated **inflectional paradigm** that can express the readings of the imperfect (in parallel with additional periphrastic ways) in sharp opposition to the perfective.





# Stop over

- Imperfective readings:

- Progressive: ongoing action

(1) *Juan comía carne cuando lo vi.*

Juan eat-impfve.3ps meat when him saw.1st p.s  
'Juan was eating meat when I saw him'

- Habitual: repeated action that denotes a habit

(2) *Juan comía carne cuando era joven.*

Juan eat-impfve.3ps meat when was.imp.1st p.s young  
'Juan used to eat meat when he was young'

- Attitudinal: attitude or ability

(3) *Juan comía carne cuando era joven.*

Juan eat-impfve.3ps meat when was.imp.1st p.s young  
'Juan did not object to eating meat when he was young'

- Ongoing state

(4) *Juan estaba enfermo cuando lo visité.*

Juan was.impf.3ps ill when him visited.pfve.1ps  
'Juan was ill when I visited him'



# Hindi

- Hindi presents an inflectional imperfective/perfective dichotomy, but the Imperfect form cannot be interpreted as progressive.

# English

- Habitual, attitudinal and ongoing states (impfve) and perfective interpretations are represented by the same morpheme :
- John ate meat (when he was young).
- John ate meat (but now he is a vegetarian)
- John was ill when I visited him.
- John ate meat yesterday. (Pfve)
- John was ill the whole winter of 2001. (Pfve)

# Russian

- Russian Imperfective is reported to be compatible with a culminated situation, typical of the perfective viewpoint (Altshuler 2014).

- K nam **priežža-l** otec, no vskore u-exa-l.

To us arrive.IPF-PST father but in.a.rush  
PFV-go-PST

‘Father came to see us, but went away again soon’

(example from Rassudova 1968).

# Hindi, Liloet Salish, Thai, and Karachai-Balkar

- The Perfective allows for reference to *incomplete* situations, which is expected from the Imperfect.
- **Hindi** (Arunachalam & Kothari 2010)  
maayaa-ne biskuT-ko **khaa-yaa**,  
Maya-ERG cookie-ACC eat-PFV  
par use puuraa nahiin khaa-yaa  
but it-ACC finish not eat-PFV  
'Maya ate the cookie, but did not finish it'

- **Lilooet Salish** (St'át'imcets) (Bar-el et al 2005)

(4) máys-en-lhkan ti q'láxan-a, t'u7  
 cw7ay t'u7 kw-s tsúkw-s-an  
 fix-TR-1SG.SU DET fence-DET but  
 NEG just DET-NOM finish-CAU-1SG.ERG  
 'I fixed a fence, but I didn't finish.'

- **Thai** (Koening & Muansuwan 2001)

(6) Surii tɛɛŋ klɔɔn k<sup>h</sup>urn tɛɛ jarj maj sed  
 Surii compose poem ascend but still not  
 finish

'Surii composed a/the poem, but has not finished it yet.'

# Conclusions for SLA

- The SLA process can be argued to involve:
  - The acquisition of ingredients inexistent in the LI of the learner.
    - Debate about whether there is a difference in the accessibility of the feature depending on whether it is interpretable (semantic) or not.
  - The re-organization of the form-meaning correspondences if transfer (total or partial).  
(Montrul & Slabakova 2003; Lardiere 2008; Arche 2014a; Domínguez, Arche & Myles 2017)



# Need to acquire the category

- The case if there is no Aspect in LI or its semantics is conveyed through different means. See related discussion about Tense:





# Theoretical nuances & SLA

## Illustrative Case

- Domínguez, Arche & Myles 2017
- L2 acquisition of Spanish by English natives
- English & Spanish:
  - Different?
  - How exactly?
    - Need to acquire imperfect?
    - Does English have any imperfective features?
  - The how determines the L2 learning task

# English vs Spanish differences

Meaning	Number occasions	Status	English form	Spanish form
Perfective	1	Finished	Past <i>Marta was ill last Sunday</i>	Preterit <i>Marta estuvo enferma el domingo pasado</i>
Continuous	∃	Unfinished	Past <i>Marta was ill (when I visited her)</i>	Imperfect <i>Marta estaba enferma (cuando la visité)</i>
Habitual	>1	Period unfinished Each instance finished	Past/Other means (used to/would) <i>Marta used to sing in a choir</i>	Imperfect/Periphrasis (soler + Inf) <i>Marta cantaba/solía cantar en un coro</i>
Progressive	1	Unfinished	Periphrases (copula + V-ing) <i>Marta was singing when we arrived.</i>	Imperfect/Periphrasis (copula + V-ndo) <i>Marta cantaba/estaba cantando cuando llegamos.</i>

Table 1. Characteristics of Perfective and Imperfective in English and Spanish

# Semantics-Morphology correspondences

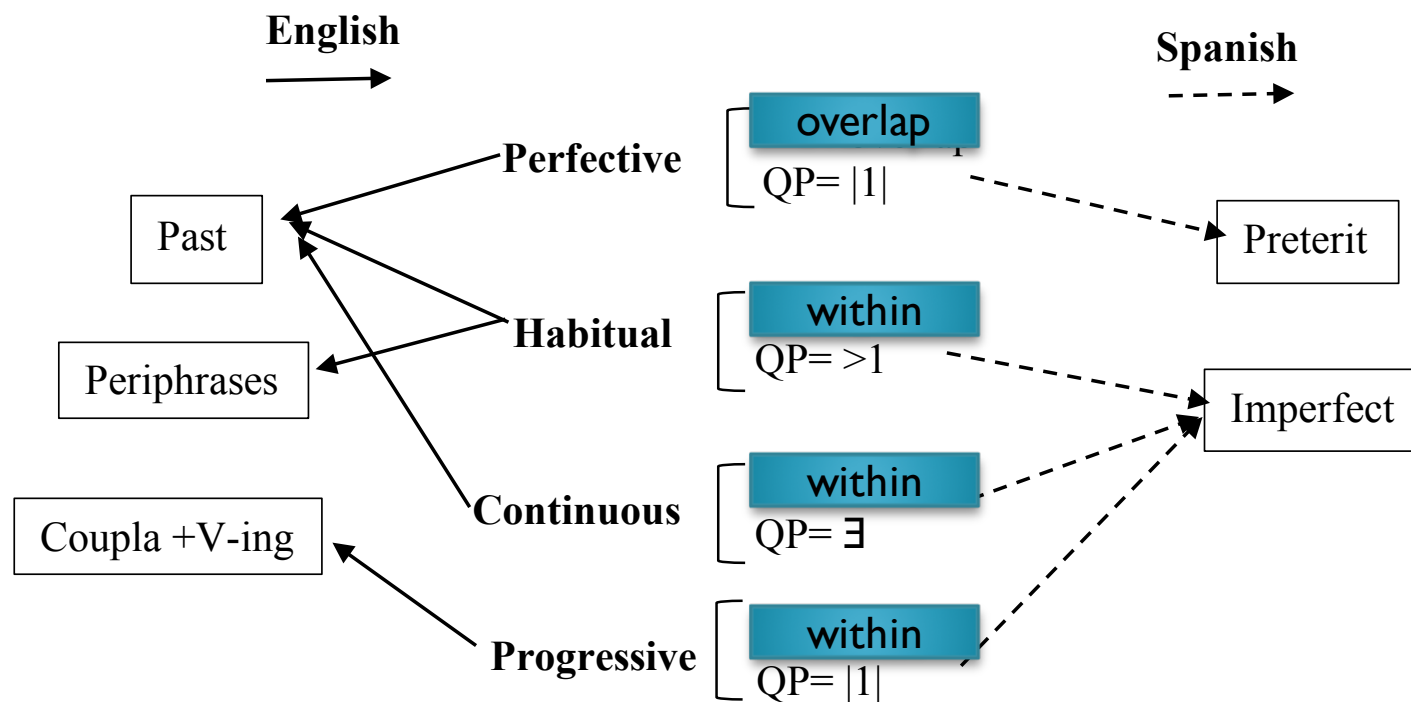
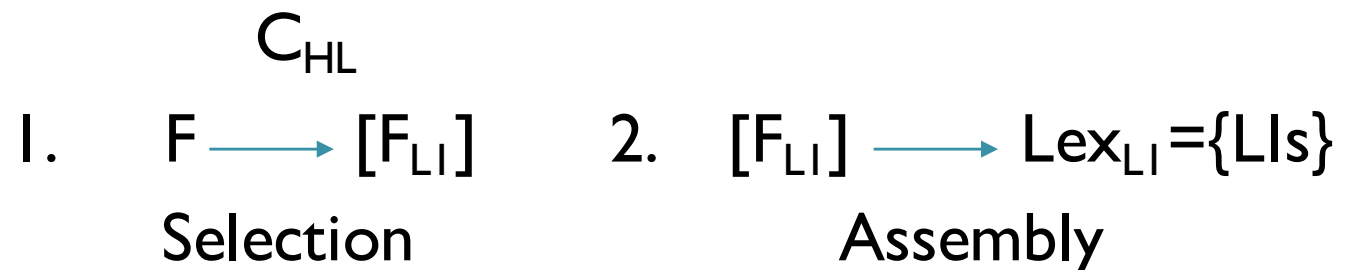


Figure 1. Mapping of features of Aspect (Asp) and the quantifier <occasions> (Q) for the perfective and imperfective (habitual, continuous and progressive) onto corresponding forms in English and in Spanish.

# Previous premises to settle re: acquisition

- The process of L2 acquisition.
- Lardiere 2005, 2008, 2009; Lardiere & Hwang 2013.  
Transfer of features + Reassembly into new (functional) categories
- Chomsky 2000, 2004.  
First Language Acquisition: feature selection from UG + assembly



# Predictions for SLA

- Assuming Transfer of Semantics
- English speakers may accept the Imperfect in the appropriate contexts but they may not reject the use of the Preterit in ‘continuous’ and ‘habitual’ contexts --- reassembly of an existing feature onto a new form is required.
- Acute issues in differentiating imperfective vs perfective (states) –no ancillary periphrasis exists to aid associating right.



# The study

# Participants

Group	Number	Age	Hours of Instruction
Year 10	20	14-15	c200
Year 13	20	17-18	c500
Undergraduates	20	21-23	Post Year Abroad
Native Speakers	15	14-28	n/a

# Comprehension task

- Sentence-context matching task
- 32 sentences

CONTEXT	TYPE OF PREDICATE	TARGET FORM
Habitual	Eventive	Imperfect
Habitual	Stative	Imperfect
One-off event	Eventive	Preterit
One-off event	Stative	Preterit
Continuous	Stative	Imperfect
Progressive	Eventive (non-achievements)	Imperfect
Progressive	Eventive (achievements) coercion	Imperfect



# Comprehension Task

pregunta 5 de 32 Participante 5102

**Me levanté muy tarde y perdí el autobús del colegio así que tuve que llamar a mi madre y pedirle que me llevara a clase.**

Yo llegué tarde a las clases.  
-2  -1  0  +1  +2

Yo llegaba tarde a las clases.  
-2  -1  0  +1  +2

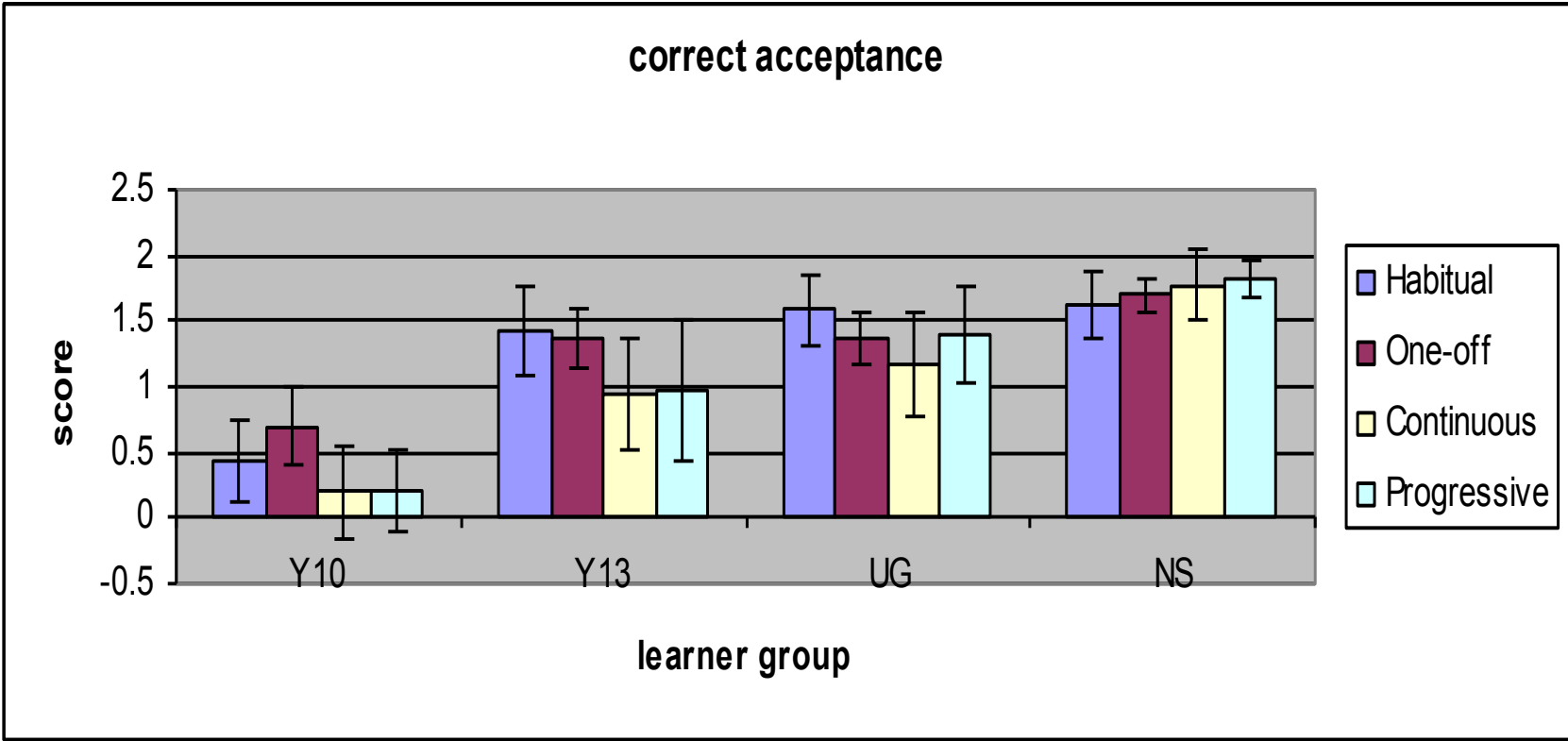
[siguiente pregunta](#)

**Learners were given the prompt in English**

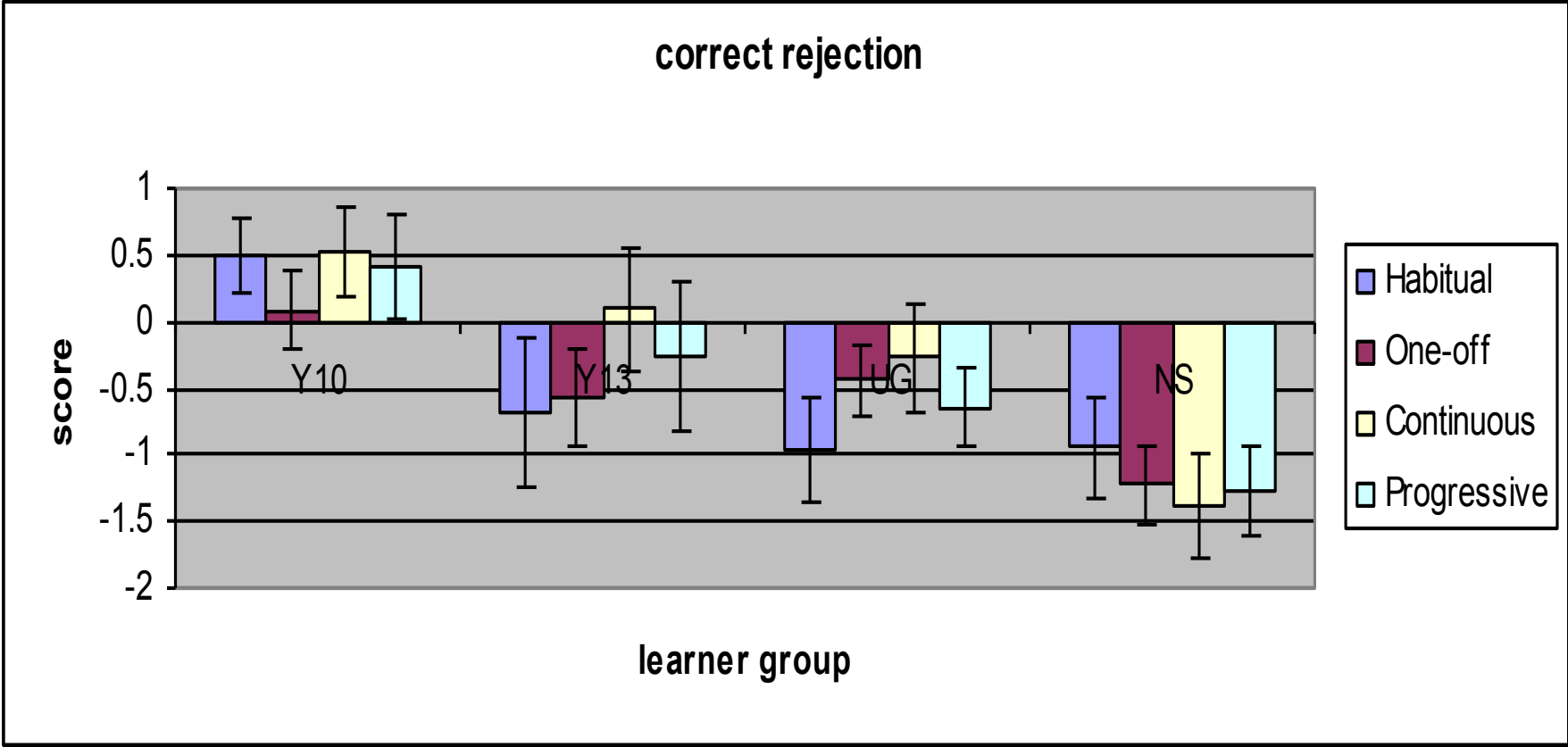
**Test measures both acceptance of the correct form and rejection of the incorrect one**

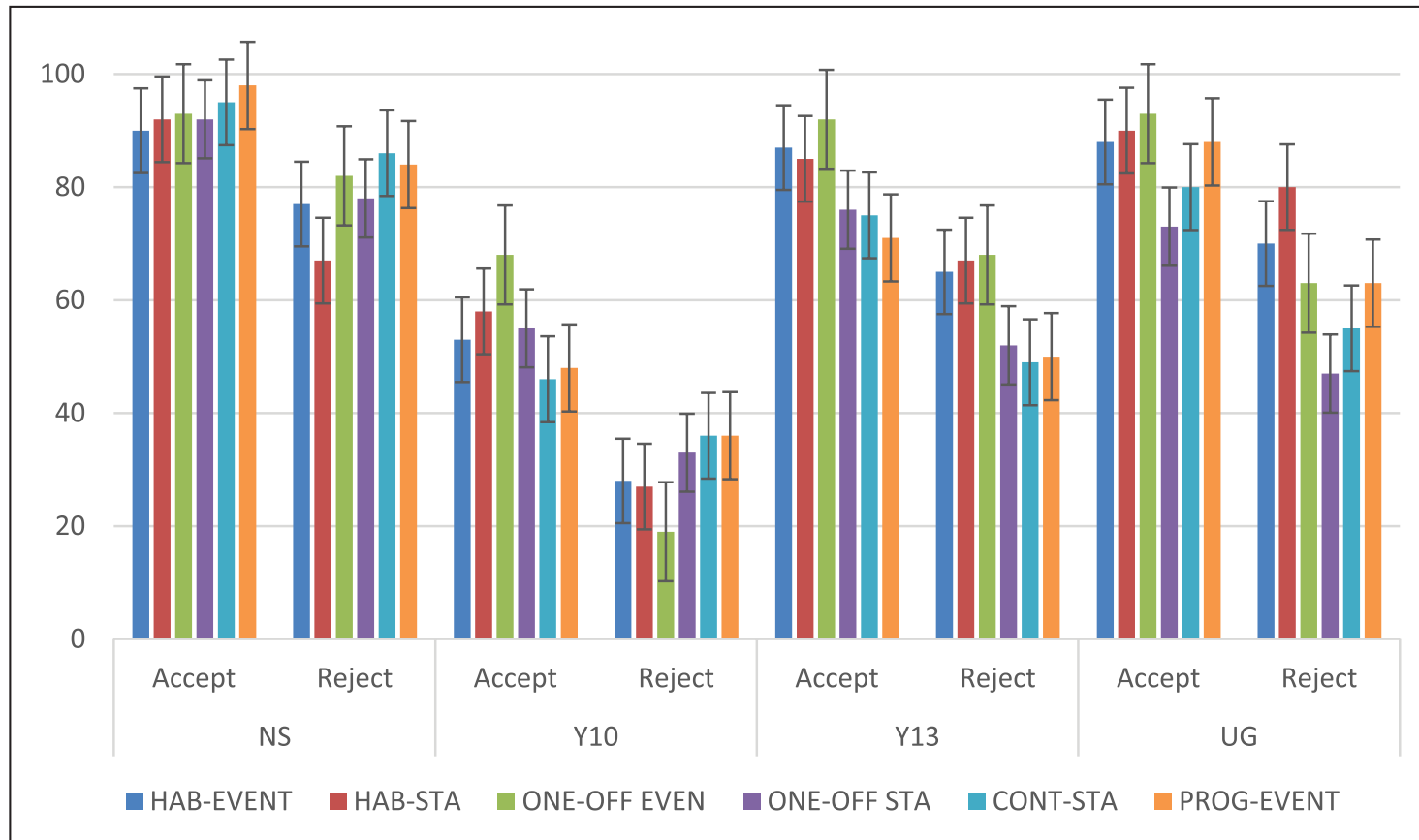
**Five-point Likert scale**

# Results



# Results



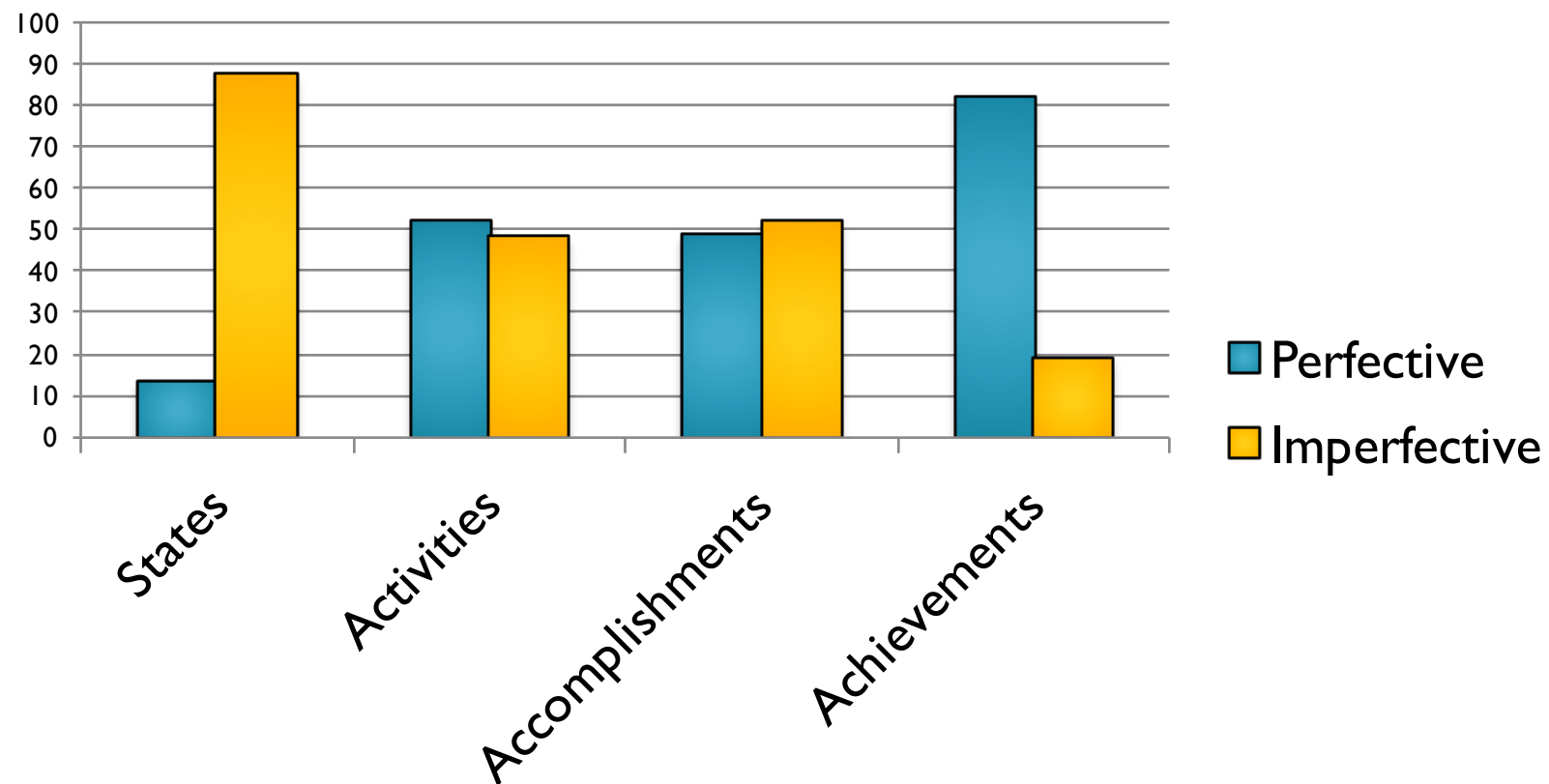


**Figure 2.** Mean acceptance and rejection scores for the two input sentences across contexts. Notes. HAB-EVENT = habitual event; HAB-STA = habitual state; ONE-OFF EVEN = one-off event; ONE-OFF STA = one-off state; CONT-STA = continuous state; PROG-EVENT = progressive event; NS = native speaker; Y10 = year 10; Y13 = year 13; UG = undergraduate students.

# Discussion

- Problems with the imperfective, not as a whole, but with certain interpretations.
- Problems with the habitual are not high in the comprehension data.
- Even at high levels of proficiency, persistent problems in rejecting the preterit in imperfective contexts with the continuous meaning.
- That is, the imperfective with STATES is not acquired at late stages.
- Although it is a form early produced with states
- Alternative explanation?
- ❖ Frequency in the input (Arche, Domínguez & Myles 2018)

# Task tokens in native corpus (Davies 2002)





# Conclusions

- SLA analysis has to take detailed crosslinguistic differences into account.
- SLA analysis has to be narrowed down to the fine detail.





 **THANK YOU**




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