The Seeds of Aspect

María J. Arche

UNIVERSITY POMPEU FABRA, 22ND MARCH 2018

(WORK IN COLLABORATION WITH L. DOMINGUEZ & F. MYLES

UNIVERSITY *of* GREENWICH

UNIVERSITY OF Southampton

University of Essex

This talk

- Is about the temporal primitives of the three temporal realms typically recognized

  - Inner aspect, viewpoint aspect and tense

- How the understanding of the primitives can inform the theory of acquisition

- How their formal theorization matters when making hypotheses on how these temporal levels are/can be connected in the acquisition process.

- In particular, I want to explore how/if the feature content of one temporal category can constitute the basis of another temporal category in the acquisition process.

This talk

This question is relevant

- to assess the theoretical sustain of hypotheses about the (L2) acquisition of temporal categories (tense, viewpoint aspect);

- to decipher how exactly temporal categories attested in the L1 (inner aspect, viewpoint aspect, tense) can play a role in the acquisition of another temporal category (e.g., viewpoint aspect, tense) in the L2.

This talk

- Framework Acquisition Hypothesis: Feature Reassembly Hypothesis (Lardiere 2005, 2009, 2013).
  - Transfer and reassembly of L1 features to form L2 categories

- So the questions of this work are:

❖ Can material from one temporal category be transferred and reassembled to constitute the material of another temporal category at all?

❖ Which category material can be posited to be constituting material of another category?

❖ In particular, I will examine if inner aspect material can be the basis of viewpoint aspect.

This talk

❖ This is important because one of the most entertained hypothesis in the past decades has been the one known as Lexical Aspect Hypothesis (Andersen 1986), according to which the acquisition of viewpoint aspect in an L2 is guided, marked, by the inner aspect properties of the predicates.

- Atelics – imperfect – lack of bounds
- Telis – perfective -- bounds

❖ Intuitionally appealing – solidarity of notions.

❖ Is it really theoretically sustained?

This talk

- I will show that it can be theoretically supported that viewpoint aspect primitives can become the basis of tense, for example. And the other way around, even.

- But it is not proven yet that the primitives of inner aspect are the same as those of viewpoint aspect and can be used in its formation.

- While viewpoint aspect and tense belong to the same sortal domain (e.g., Svenonius & Ramchad 2014), that of situations where events are predicated of times, inner aspect belongs to the event domain, prior to time predication.

This talk

- On the other hand, the other prevalent hypothesis discussed over the years, the so-called Discourse Hypothesis, according to which learners base the distribution of aspectual forms (imperfect/perfective-preterit) relates to properties of the core elements contained in tense and aspect according to theories of tense and aspect (e.g., Stowell 1993; Demirdache & Uribe-Etxebarria 2000-2014).

- That is, what I will say is that one acquisition theory has theoretical roots that can be tracked, while the other has a question mark.

- The lack of consensual results over the years with respect to the Lexical Aspect Hypothesis (Mueller 2018) may be due to such lack of sustain. There was nothing underpinning it after all.

This talk

- This talk is

- part of collaborative work about the acquisition of viewpoint aspect (Spanish by English natives) done with Laura Dominguez and Florence Myles.

- part of my research in the theory of temporal categories, their acquisition and their crosslinguistic analysis.

Overall

- This work proposes a different research question(s).

Different Research Questions

- In general, most of previous research about the acquisition of viewpoint aspect:

1. **Emergence**: What is the pattern of Tense-Aspect development? Is there any aspect-tensed form that tends to appear first?

2. **LAH vs DH**: Can the observed pattern be accounted for by the Lexical Aspect Hypothesis? Does discourse structure play a role in determining the forms employed?

- This work:
  - Are we right even in entertaining such hypotheses?
  - What is at the bottom of the Internal Aspect Hypothesis?
  - What is at the bottom of the Discourse Hypothesis?
  - **What are the seeds of aspect?**

Lexical Aspect as a drive of L2 acquisition

- Hypothesis about the **pathway** of emergence of viewpoint forms.

1. Learners first use (perfective) past marking with achievement and accomplishment verbs, eventually extending use to activity and state verbs.

2. In languages that encode the perfective-imperfective distinction morphologically, imperfective past appears later than perfective past, and **imperfective past** marking begins with states and activities (i.e., **atelic verbs**), then extends to accomplishments and achievements (i.e., telic verbs.

(Andersen 1991; Andersen &Shirai, 1996; Bardovi-Harlig, 2002; Sugaya&Shirai, 2007):

NB: Emergence; production.

Lexical Aspect Hypothesis

- Atelic– Imperfective; Telic- Perfective

- Intuitive solidarity:
  - Atelicity—unboundedness
  - Telicity -- boundedness

- But how exactly does atelicity "translate into" unboundedness in the acquisition process?

- How do we go from atelicity to imperfectivity?

- How do we go from telicity to perfectivity?

- What theoretical rationale/underpinning can make us track the transit in a theoretically justified way?

Lexical Aspect Hypothesis

- Formal properties of (A) inner aspect

   Ingredients; way of working

- Formal properties of (B) viewpoint aspect

   Ingredients; way of working

- TRANSIT possible from A to B?

- HOW?

Properties of Lexical Aspect

Activities	dynamic events with no inherent culminating endpoint.	*Cry, caress*	ATELIC
States	non-dynamic events.	*Belong, love*	
Accomplishments	dynamic events with a delimitative endpoint.	*Draw a castle, read a message.*	TELIC
Achievements:	events that denote a culminating point.	*Explode, wake up.*	

Vendler 1957

Formal properties of Lexical/Inner Aspect

- **Borer (2005).** Atelic by default. They become telic if they combine with a quantity projection that makes the predicate divisive or heterogeneous (Krifka 1998).

Cumulative

P is cumulative iff $\forall x, y[P(x) \ \& \ P(y) \rightarrow P(x \cup y)]$

P is cumulative iff for all x and y with property P, the union of x and y also has property P.

Divisive

P is divisive iff $\forall x[P(x) \rightarrow \exists y[P(y) \& y < x] \& \forall x, y[P(x) \& P(y) \& y < x \rightarrow P(x-y)]]$

P is divisive iff for all x with property P there is a proper part y of x which also has property P, and for all x and y with property P if y is a proper part of x then the subtraction of y from x also has property P.

Formal properties of Lexical Aspect

- Kenny 1963. Perfect implications of the progressive

(1) a. I am wandering around the street.
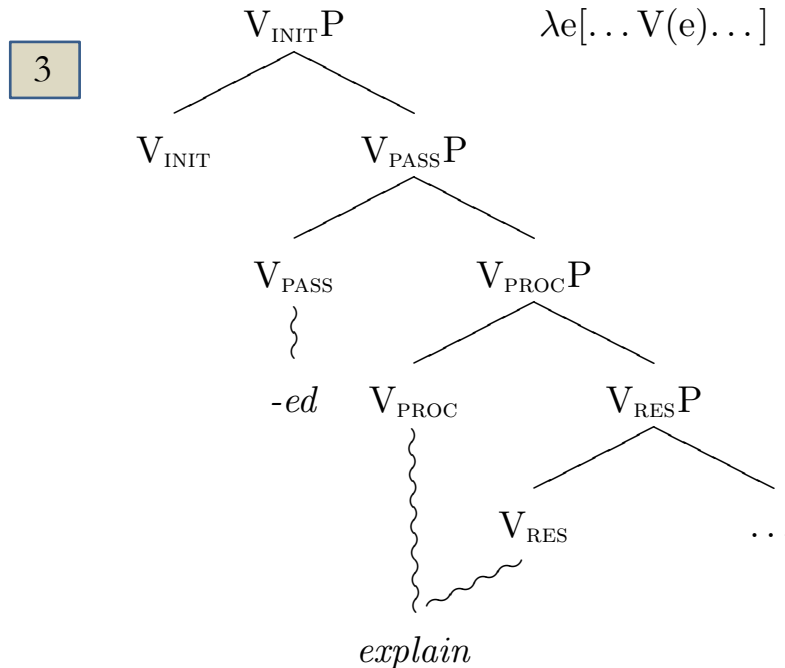
   b. I have wandered around the street.

Atelic

(2) a. I am assembling the table.

   b. #I have assembled the table.

Telic

Formal properties of Inner Aspect

- Ramchand (2008 and ss work): telicity is determined by the subcomponents of predicates.

$V_{INIT}P$ $\lambda e[\ldots V(e)\ldots]$

3

V_{INIT} $V_{PASS}P$

V_{PASS} $V_{PROC}P$

-ed V_{PROC} $V_{RES}P$

V_{RES} $\ldots$

explain

Formal properties of Inner Aspect (recap)

- Heterogeneity vs homogeneity

- Derived from functional projection acting as a Classifier (Borer)

- Derived from functional projection adding Result (Ramchand)

Properties of viewpoint aspect

- Viewpoint aspect informs about the developmental status of an event in time

(4) Juan pintó   la habitación   *Finished*

   Juan paint-pfve the room

(5) Juan estaba   pintando la habitación.   *Ongoing*

   Juan was.impfve painting the room

(6) Juan iba   a pintar la habitación   *About to start*

   Juan went.impfve to paint the room

All situations before the Utterance Time "past"; *in a different moment of its internal life.*

"Viewpoint Aspect"; "Grammatical Aspect"; "Outer Aspect"

Properties of viewpoint aspect

(7) Cuando Tim abrió la puerta, Juan estaba besando a María.

When Tim opened the door, John was kissing Mary

(8) Cuando Tim abrió la puerta, Juan besó a María.

When Tim opened the door, John kissed Mary

Tim opening the door   x

John kissing Mary   /

Are *ordered* in a different manner depending on their Aspect:

(7')   -------////x///---------

(8')   -------x-/---

Therefore: Aspect also contributes to *temporal ordering* → it is a ordering predicate

Properties of viewpoint aspect

- Aspect establishes a relation between the Time of the Situation (Event Time) and the Time the sentence refers to (Topic Time).

- Aspect is thus conceived as an ordering predicate establishing (temporal) topological relations.

- Analogous to Tense

- Difference lies in the times/intervals they order

- Klein 1994; Demirdache & Uribe-Etxebarria 2000
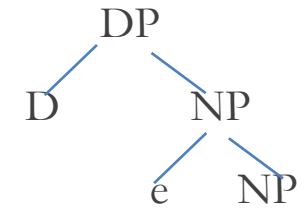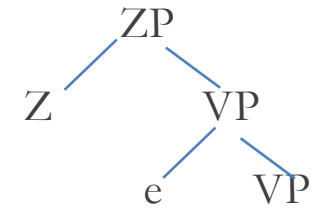
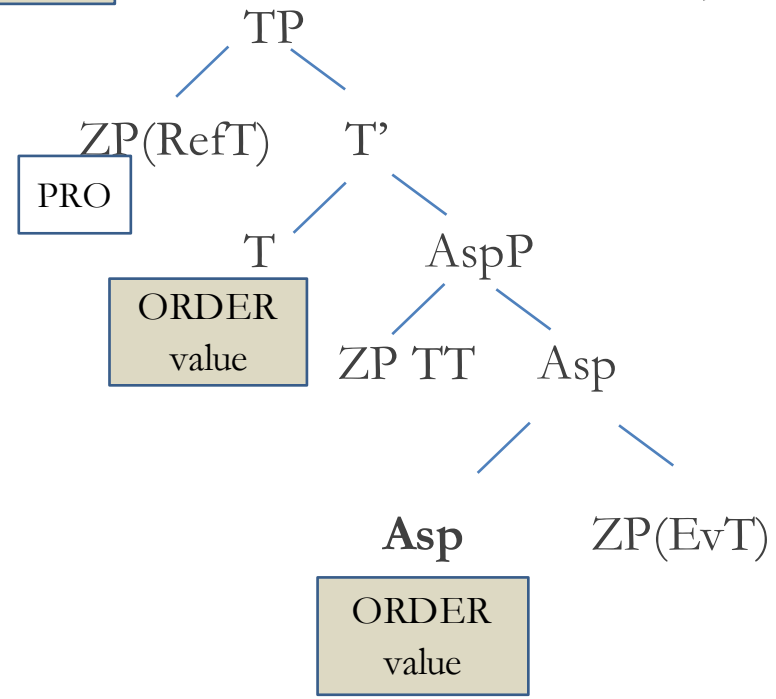# Properties of viewpoint aspect

What are the intervals to be ordered?

- Topic Time: the time the sentence refers to, speaks about

- Event Time: the time the situation runs over

- Reference Time: the time with respect to which the TT is ordered (yielding past, present, future).

Syntax of Tense and Aspect

(9)

RefT, TT and EvT are Zeit Phrases (ZPs); Stowell 1993

TP
- ZP(RefT)
  - PRO
- T'
  - T
    - ORDER value
  - AspP
    - ZP TT
    - Asp
      - **Asp**
        - ORDER value
      - ZP(EvT)

ZP
- Z
- VP
  - e
  - VP

DP
- D
- NP
  - e
  - NP

Maria was <u>washing</u> the car (<u>when I saw her</u>)

///EvT   x TT

----------[///////X////////////-----Utterance Time

Properties of viewpoint aspect

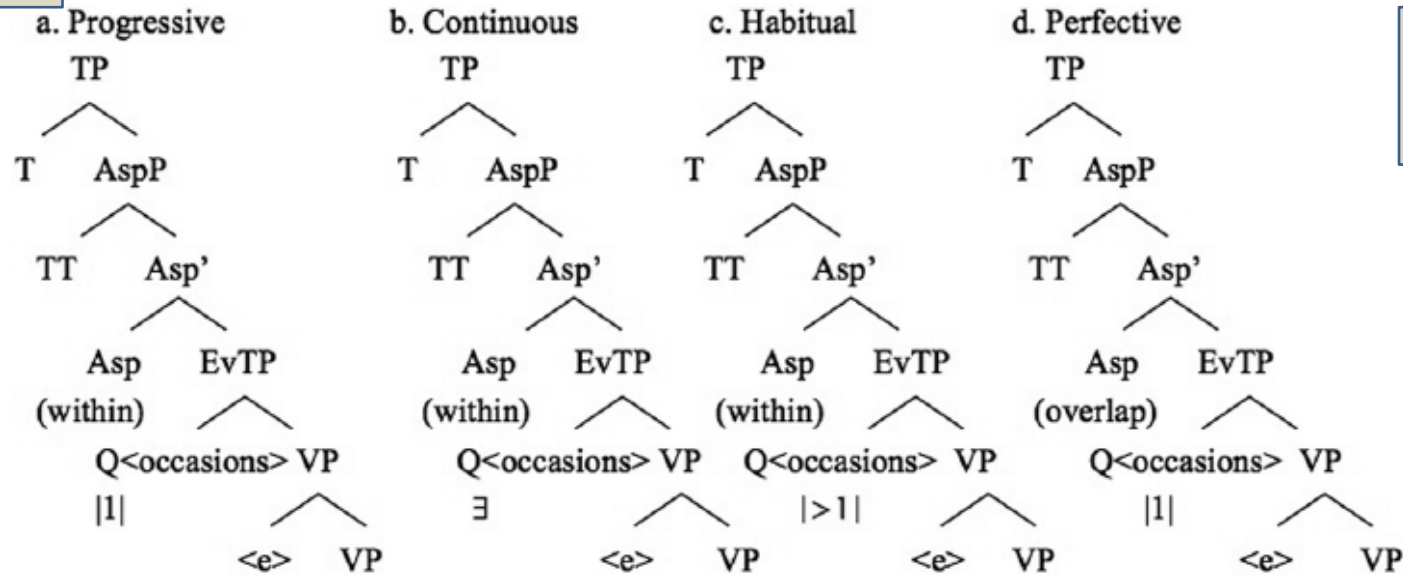| Viewpoint	Ordering Predicate	Effects	Interpretation	Traditional intuitions
Imperfective	TT (WITH)IN EvT	only **part** is asserted unbounded	ongoing	seen from the inside
Perfective	TT AT EvT (Total overlap)	the **whole** is asserted bounded	finished	seen from the outside; unanalyzed whole

Comrie 1976
Smith 1991

Viewpoint aspect

	Viewpoint	Number of occasions	Status	Examples
I M P E R F E C T	Perfective	1	Finished	John walked in the park; John was sick the whole 2002.
	Progressive	1	Unfinished	John was walking in the park
	Habitual	>1	Period unfinished; Each instance, finished	John used to walk in the park
	Continuous	Ǝ	Unfinished	John was sick when I visited him

- Arche 2006; Comrie 1976, Smith 1991, Verkuyl 1993, Demirdache & Uribe-Etxebarria 2000.

Viewpoint aspect

a. Progressive
```
         TP
        /  \
       T   AspP
          /   \
        TT    Asp'
             /   \
           Asp   EvTP
        (within)  / \
         Q<occasions> VP
          |1|        / \
                   <e>  VP
```

b. Continuous
```
         TP
        /  \
       T   AspP
          /   \
        TT    Asp'
             /   \
           Asp   EvTP
        (within)  / \
         Q<occasions> VP
          ∃          / \
                   <e>  VP
```

c. Habitual
```
         TP
        /  \
       T   AspP
          /   \
        TT    Asp'
             /   \
           Asp   EvTP
        (within)  / \
         Q<occasions> VP
          |>1|       / \
                   <e>  VP
```

d. Perfective
```
         TP
        /  \
       T   AspP
          /   \
        TT    Asp'
             /   \
           Asp   EvTP
        (overlap) / \
         Q<occasions> VP
          |1|        / \
                   <e>  VP
```

Arche 2006, 2014.
Dominguez et al 2017

Formal properties of Aspect (recap)

INNER ASPECT:

- Heterogeneity vs homogeneity

- Derived from functional projection acting as a Classifier (Borer)

- Derived from functional projection adding Result (Ramchand)

VIEWPOINT ASPECT:

- Predicates of interval ordering

- Quantifiers over occasions

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

$$C_{HL}$$

1. $F \longrightarrow [F_{L1}]$ 2. $[F_{L1}] \longrightarrow Lex_{L1} = \{LIs\}$

   Selection   Assembly
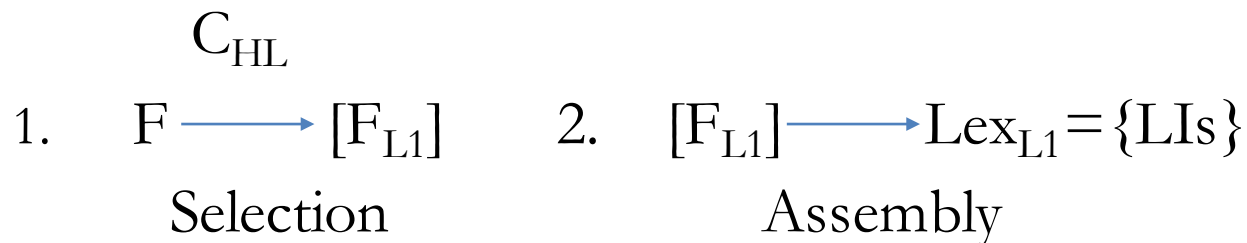
Previous premises to settle

- Reassembly Hypothesis

- Internal Aspect Hypothesis

- Transfer/take as starting point: lexical/internal aspect material

- Reassembly into/convert into viewpoint material.

The question

- Can homo/heterogenity (internal aspect) become material of interval ordering (viewpoint)

- Can we go from subevents to interval ordering?

- **Can we obtain interval ordering from heterogeneity?**

- If we find a way: then

- **Tense/Viewpoint Aspect/Internal Aspect same primitives.**

From lexical aspect to interval ordering

• E.g., *Assemble the table*, the cause subevent takes place before the process event and the process before the result subevent of having the table assembled. Under this view, the heads of the subevents could be conceptualized as heads establishing temporal order.

(11)   Assemble the table

{t, t, t, t, t, t, t, t, t, t, t, **t** }

table is assembled

From lexical aspect to interval ordering

- Homogeneous eventualities: intervals also follow one another (i.e. an interval can be located 'after' the other), which suggests that order of intervals cannot be at the root of the contrast telic/atelic.
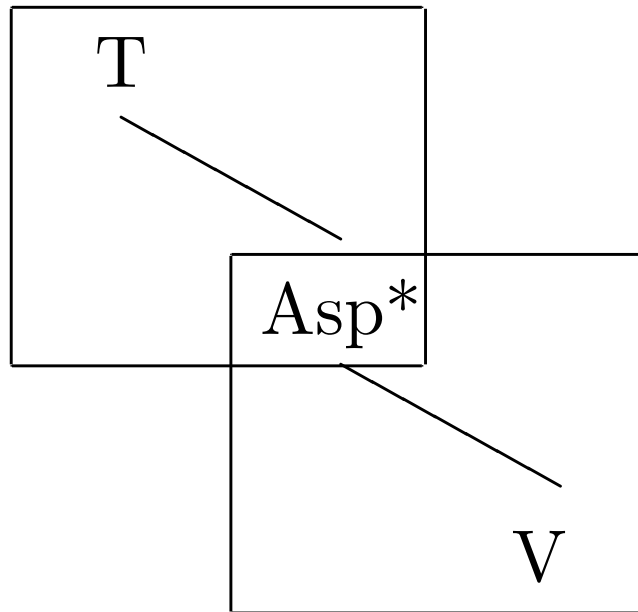
(12) Wander around the street

$\{t, \mathbf{t}, t, t, t, \mathbf{t}, t, t, t, t, t, \mathbf{t} \}$

#street is wandered

Sortal domains
(Svenonius & Ramchand 2014)

(13)

```
┌──────────────────┐
│   T              │
│        \         │
│         \        │
│          \       │
│      ┌────\─────────────┐
│      │ Asp*             │
└──────┤        \         │
       │         \        │
       │          \       │
       │           \      │
       │      V     \     │
       └──────────────────┘
```

situation, domain of sort s

transition: $\exists e.R(s,e)$

event, domain of sort e

Sortal domains

- If they are so, then Tense and Aspect belong to one domain, event properties to another.

- No obvious way of re-assembling internal aspect features into viewpoint aspect ones.

Relation in the form of restrictions

- If correlations between event types and viewpoint aspect forms existed in Spanish (the target language of the learners we contemplate in this work) they would be produced by the grammar system and evidenced in the form of restrictions.

- Ungrammaticality should ensue out of the combination of atelic predicates and Perfective marking and telic predicates and Imperfect marking.

- However, at least in Spanish, no restrictions of such sort can be observed.

- No selection restrictions.

No Restrictions in the target L2

(14) *Progressive*

a. Marta estaba disfrutando la película.   *State*

   Marta was^{IMPF} enjoying the film

b. Marta estaba nadando.   *Activity*

   Marta was^{IMPF} swimming

c. Marta estaba dibujando un castillo.   *Accomplishment*

   Marta was^{IMPF} drawing a castle

d. Marta estaba llegando a la meta.   *Achievement*

   Marta was^{IMPF} arriving at the goal

No Restrictions in the target L2

(15) Habitual

a. Marta disfrutaba la película (normalmente).   *State*

Marta enjoyed[IMPF] the movie (usually).

b. Marta nadaba (normalmente).   *Activity*

Marta swam[IMPF] (usually).

c. Marta dibujaba un castillo (normalmente).   *Accomplishment*

Marta drew[IMPF] a castle (usually).

d. Marta llegaba a la meta la primera (normalmente).   *Achievement*

Marta arrived[IMPF] at the goal the first one (usually).

No Restrictions in the target L2

(16) Continuous

a. Marta disfrutaba la película. *State*

   Marta enjoyed[IMPF] the movie

b. Marta caminaba. *Activity*

   Marta walk[IMPF]

c. Marta escribía el acta de la reunión. *Accomplishment*

   Marta wrote[IMPF] the minutes of the meeting

d. Marta llegaba a la meta. *Achievement*

   Marta arrived[IMPF] at the goal

No Restrictions in the target L2

(17) Perfective

a. Marta disfrutó la película.   *State*

   Marta enjoyed^{PFVE} the movie

b. Marta nadó.   *Activity*

   Marta swam^{PFVE}

c. Marta dibujó un castillo.   *Accomplishment*

   Marta drew^{PFVE} a castle

d. Marta llegó a la meta.   *Achievement*

   Marta arrived^{PFVE} at the goal

Transferred restrictions?

- The other logical possibility: correlations of the sort argued by the LAH hold in the L1 and be transferred.

- Bohnemeyer and Swift (2004): English marked by dynamicity not by telicity: if the predicate refers to a dynamic event, the preference will be to interpret it as perfective; if stative, as imperfective.

- **Only tendencies.**

- Division in preferences not be based on telicity.

- Telicity is not operative in the L2 Spanish to determine the acquisition pathway of viewpoint aspect.

"Tenseless" languages

- Internal Aspect-Viewpoint Aspect-Tense

- Bohnemeyer and Swift 2004 (Inuktitut) ; Lin 2006 (Chinese)

- Default aspect gives aspect/tense

- Not really – Klein et al 2000; Sun 2014 Chinese

- Default aspect gives the right predictions with states in Chinese (present) but not with activities.

- For independent reasons: Asp generic; Tense non future.

- Telic events do not give rise to past readings necessarily:

- Reis and Matthewson 2007 (argue for a null Tense in Blackfoot)

- preferred interpretation of statives is present, but past interpretations are possible in the right context.

What can be reassembled into Aspect: Tense and Aspect

- Note that the semantic content of Aspect can be reassembled into the content of Tense.

- The nodes share content.

- There is consensus that the level of Aspect introduces times.

Aspect material reassembled into Aspect

- The acquisition task and its pathway will be therefore determined by what exactly the variation between the languages at hand consists of:

- (i) the properties that viewpoint aspect predicates have in each language and

- (ii) the mapping between the syntax-semantic features and the morphological makeup.

Aspect material reassembled into Aspect

- When the correspondences between semantic features and morphological markers are different between the L1 and the L2 (e.g., if one form in one language is used to represent two semantic values which are represented separately in the other language), a readjustment will be needed

- Difficulties predicted in such meaning-form correspondences.

- **Semantic Redistribution Hypothesis**.

- English and Spanish: the cases of highest difficulty predicted by the SRH are predicted to be non-problematic by the LAH, which allows us to compare and assess the two hypotheses empirically.

What can be reassembled into Aspect: Tense and Aspect

- We argue that in the L2 acquisition process from English to Spanish it is aspect features that are reassembled into new pairs of form and meaning.

- English counts with the semantic content needed for viewpoint Spanish Aspect

- Different morphological distribution

Semantic Redistribution Hypothesis

- Slababova & Montrul 2002, Montrul & Slabakova 2003; Domínguez, Arche & Myles 2017.

Viewpoint meaning	English form	Spanish form
Perfective	Past	perfective
Habitual	Past or periphrasis (*used to*)	Imperfective or periphrasis (*soler + inf*)
Continuous	Past	imperfective
Progressive	Progressive (*periphrasis be+V-ing*)	Imperfective or progressive periphrasis (*estar + V-ing*)

Learning task –English native learning Spanish

- Re-mapping the forms and the meanings they can express.

- Semantic content of opposite sign (e.g., perfective and imperfective continuous or habitual) appear under the same form in the L1, which means that learners have to disentangle the two meanings and assign them different forms in the L2.

- We furthermore conjecture that recognition of two meanings when they appear under the same form in the L1 is problematic and even more when there is no ancillary form that can be used to paraphrase and recognize the same meaning: the case of the continuous & perfective.

- The latter draws a distinction between the continuous imperfective and the progressive and habitual, which both have alternative periphrastically ways of being expressed. We conjecture that having a morphological unequivocal form in the L1 contributes to making the semantics more salient and easier to search for in an L2.

Contrasting predictions

- Semantic Redistribution Hypothesis: the continuous imperfective (states) to be the most difficult to acquire

- LAH: states with imperfect be the earliest

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.

Learners were given the prompt in English

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

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

Five-point Likert scale

siguiente pregunta

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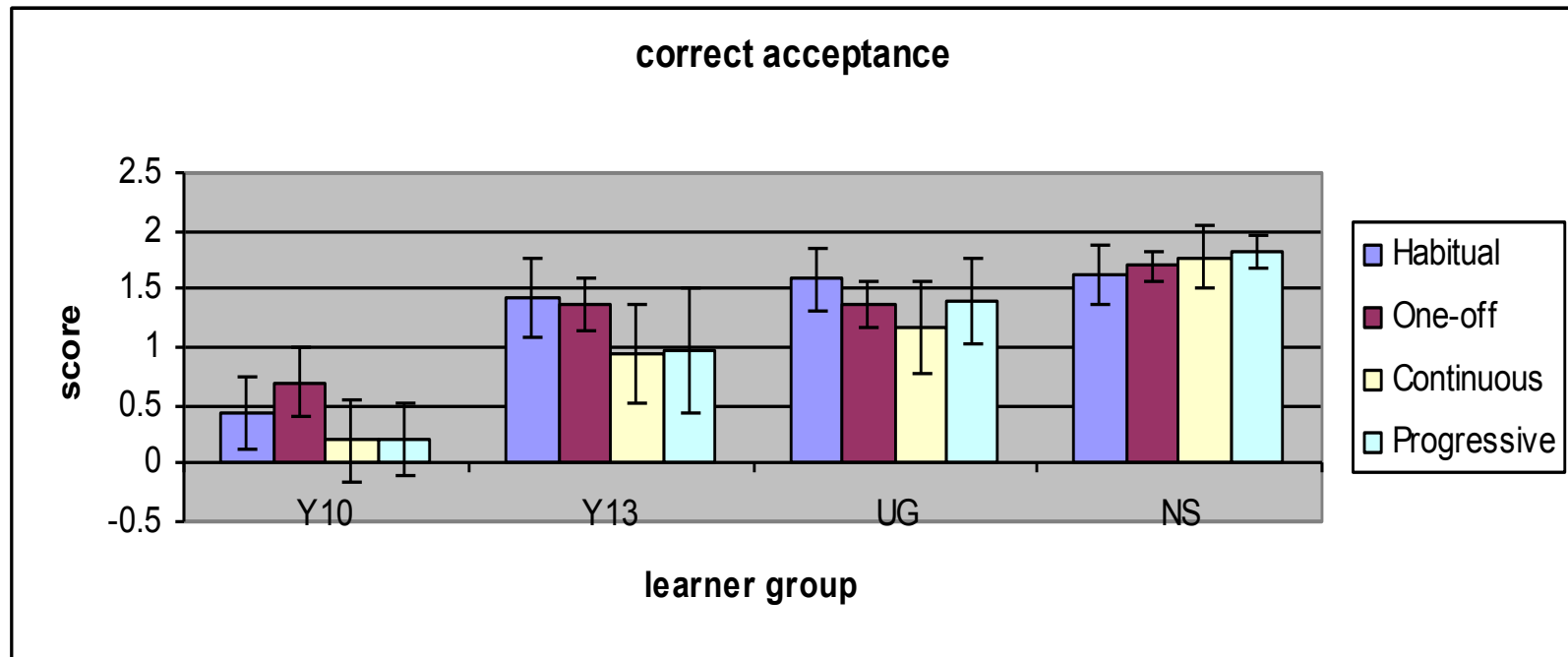
Results
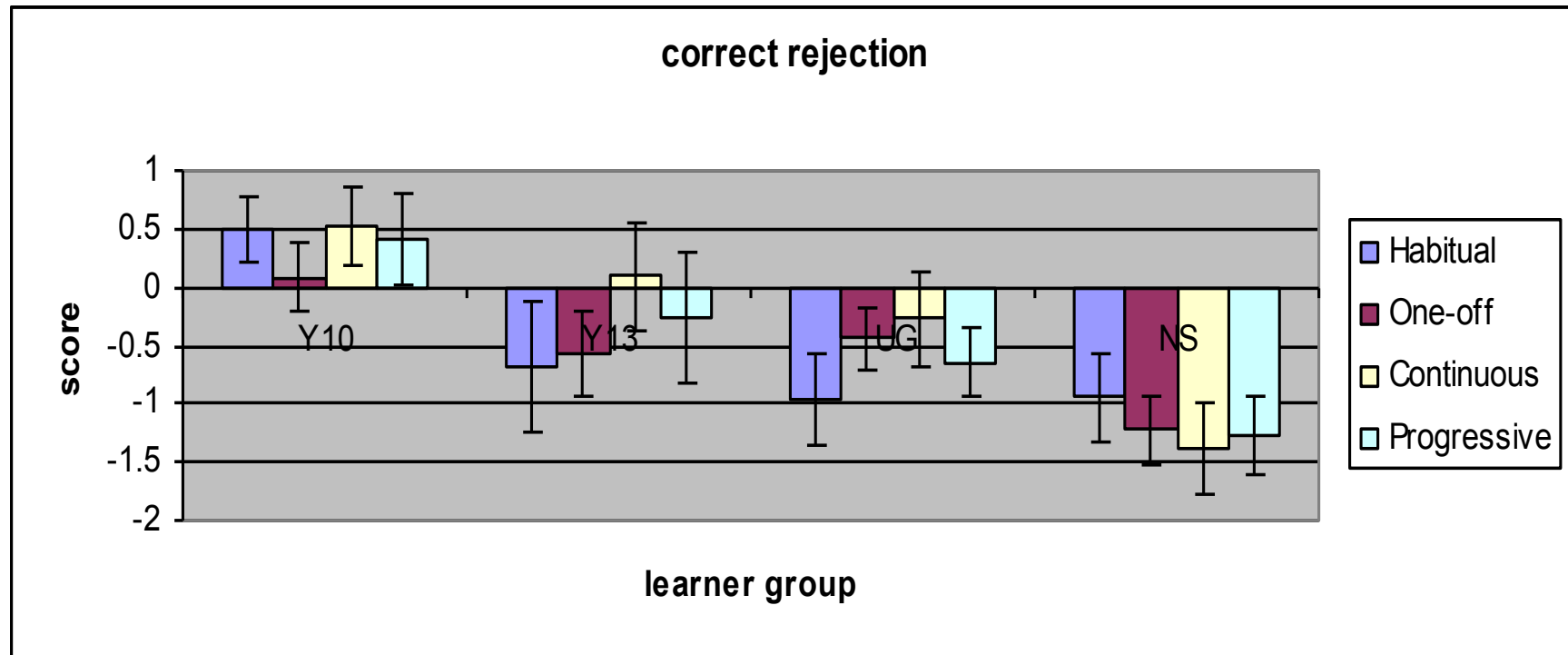
Results
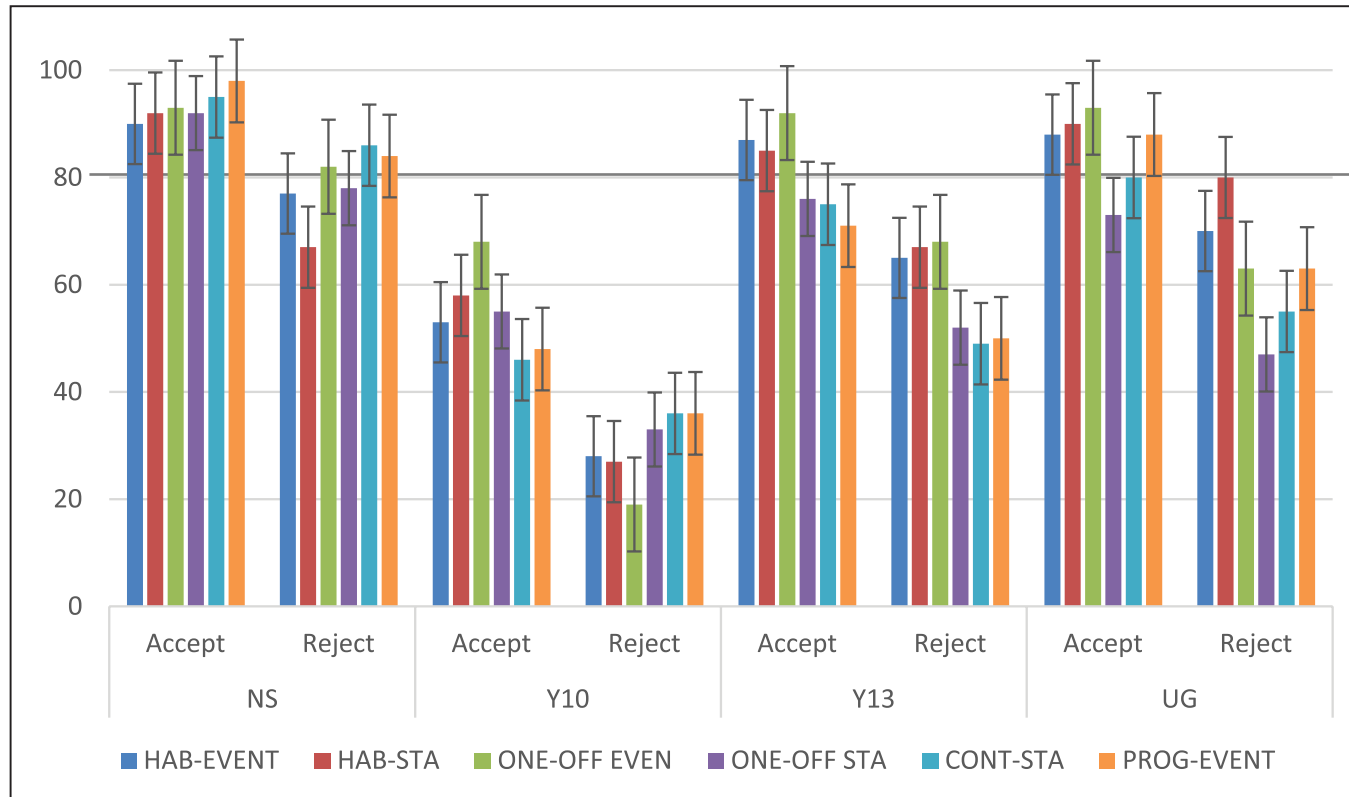
Figure 2. Mean acceptance and rejection scores for the two input sentences across contexts. *Notes.* HAB-EVENT = habitual event; HAB-STA = habitual state; ONE-OFF EVEN = one-off event; ONE-OFF STA = one-off state; CONT-STA = continuous state; PROG-EVENT = progressive event; NS = native speaker; Y10 =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

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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.

- Unexpected under Lexical Aspect Hypothesis.

- But it is a form early produced with states (Domínguez, Arche & Myles 2017)

- Alternative explanation?

❖ Frequency in the input.

Task tokens in native corpus (Davies 2002)
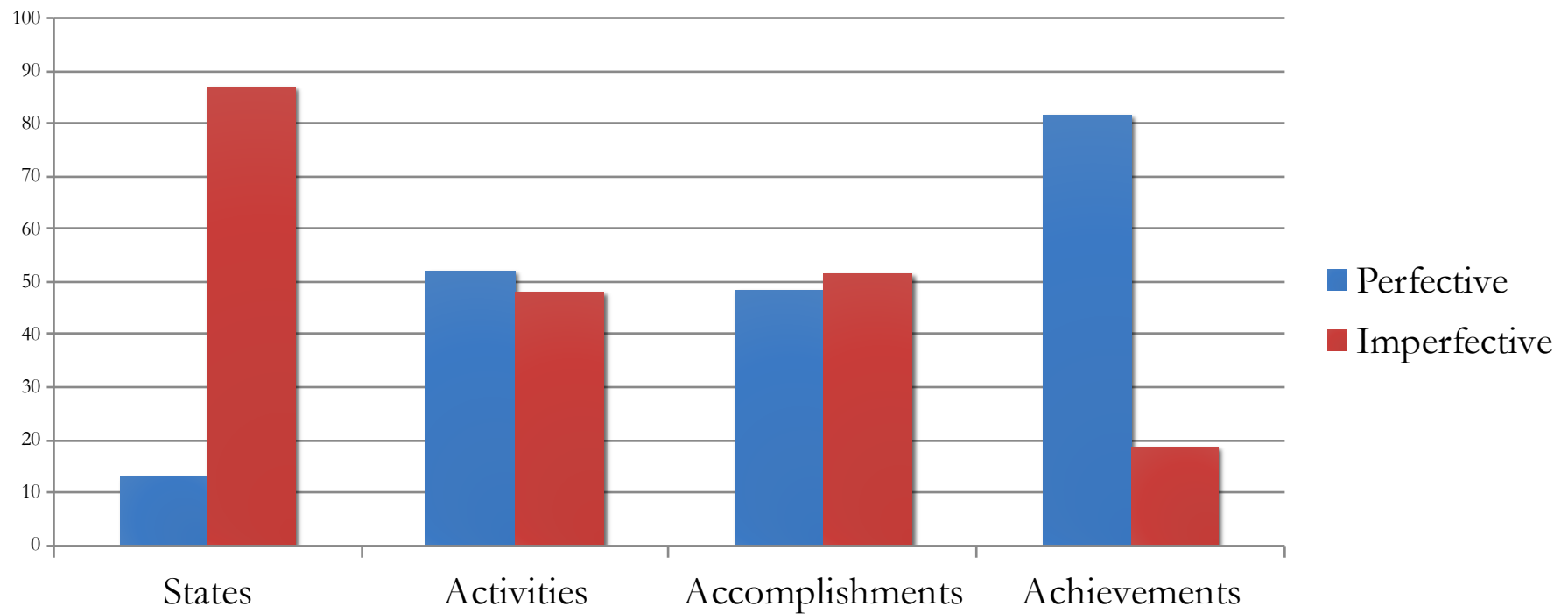
Corpus

- Corpus data: a snapshot of the input; how input has actually occurred, it may occur and any learner may be exposed to it.

- High rate of states in the Imperfect: why learners produce states in the Imperfect form robustly.

- However, high rates in production does not amount to attained acquisition.

Conclusion

- Again no support for LAH

- Impact of it may be due to *accidental* frequency in the input.

- Difficult to demonstrate how Lexical Aspect functional content can be reassembled into Viewpoint Aspect.

- At least in Spanish and English.

Discourse Hypothesis

- Hopper 1982: the nature of aspectual distinctions in languages like French (or Spanish for that matter) cannot be characterized by *semantics* in a consistent way; the adequate reference may

  only come from a GLOBAL DISCOURSE FUNCTION.

- Reinhart (1984) : foreground: narrativity, punctuality, and completeness -- serve more easily as foreground.

- Bardovi-Harlig (1995): feature of "newness" (new information is more relevant for the foreground).

- Salaberry 2011. The tight association between a narrative functional device and grammatical form becomes a good "rule of thumb", so to speak, for learners.
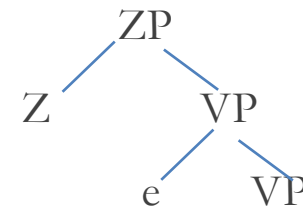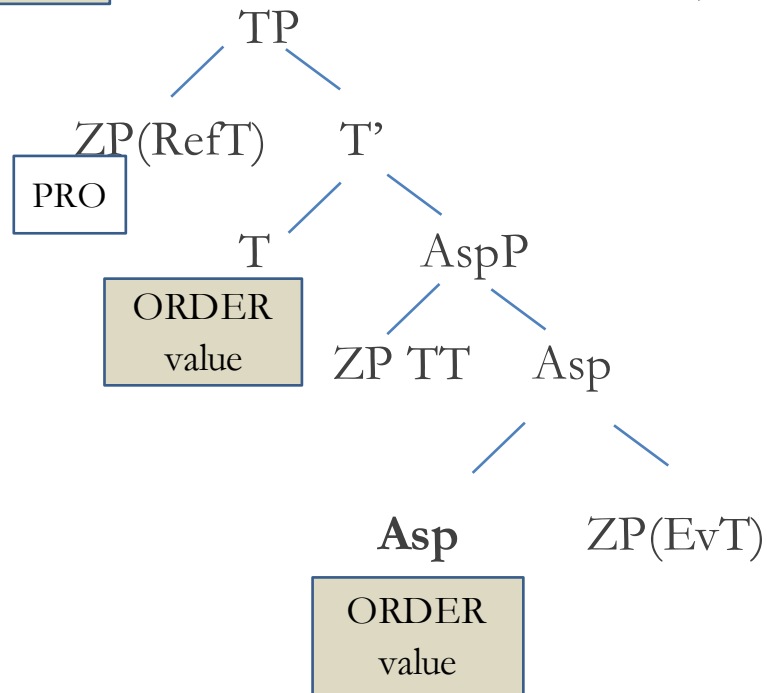
At least one point about the Discourse Hypothesis

- "Newness" – foreground.

- New-indefinite

- Indefiniteness/definiteness is a property likely encoded in the ZPs.

- ZPs are the arguments of Aspect, which English natives can transfer.

Syntax of Tense and Aspect

(9)

RefT, TT and EvT are Zeit Phrases (ZPs); Stowell 1993

```
              TP
            /    \
    ZP(RefT)      T'
    [PRO]        /   \
            T       AspP
        [ORDER    /    \
         value]  ZP TT  Asp
                       /    \
                    Asp      ZP(EvT)
                 [ORDER
                  value]
```

```
        ZP                 DP
       /  \               /  \
      Z    VP            D    NP
          /  \               /  \
         e    VP            e    NP
```
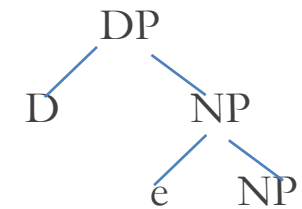
Maria was <u>washing</u> the car (<u>when I saw her</u>)

       ///EvT   x TT

-----------[///////X////////////-----Utterance Time

At least one point

- Imperfect: anaphoric –refers back; does not advance.

- Perfective/preterit: correferential or indefinite.

- In any case: viewpoint aspect material-based

Conclusion

- At least in Spanish and English, it seems that material belonging to the *Situation part* of the clause is what can be transferred and use for the reassembly operation to form the category of viewpoint aspect.

- These categories are involved in the Discourse Hypothesis but not in the Lexical Aspect Hypothesis.

Thanks

Abstract – The Seeds of Aspect

María J. Arche

In the past decades two hypotheses have dominated the research on the acquisition of (viewpoint) aspect in Spanish. One is known as the Aspect Hypothesis (Andersen 1986; Andersen and Shirai 1994), according to which the emergence and distribution of contrasts such as the one known as imperfective/perfective is driven by the inner aspect properties of the predicates in question (if atelic, imperfective; if telic perfective, simplifying the scenario). The other major hypothesis is the so-called Discourse Hypothesis (Bardovi-Harlig 1992, 2000), according to which it is the function that the different (Imperfect/Perfective) forms deploy in discourse (if foreground information, Perfective form; if background information, Imperfect) that drives the distribution of such forms. Over the years a big body of empirical research has been devoted to assess the validity of the hypotheses, their compatibility and the primacy of one over the other (Salaberry 2011) without arriving at a clear consensus. In this talk I will dissect what each one of these hypotheses mean and entail in (minimalist) theoretical terms (Chomsky 1995 et ss work) and discuss their theoretical sustainability. I will argue that (i) the two hypotheses are independent from each other since their rationales are based on different constructs; (ii) the relation between discursive fore/backgrounding of the forms can find a theoretical sustain in the properties of the intervals that Aspect takes as arguments (Stowell 1993, 2007; Demirdache & Uribe-Etxebarria 2000, 2004, 2014); (iii) if inner aspect played a principled role in the development of viewpoint aspect content (associated to forms), it should be based either on principled selection restrictions (which are not found in Spanish, where (a)telics can appear in (Im)Perfectives and the other way around) or on some form of feature reassembly (Lardiere 2008); in particular, if inner aspect features could be used to found the content of the viewpoint aspect category. However, according to current theory (e.g., Borer 2005), the syntactic categories in charge of inner aspect have the nature of classifiers, while those of viewpoint aspect are heads that order intervals (Klein 1994, Demirdache & Uribe-Etxebarria 2000). I argue that classifier-like content cannot constitute the basis of viewpoint aspect heads, which need ordering material as their core. If there is no way in the grammar model for inner aspect to be the basis for the content of viewpoint aspect, the lack of clear-cut and converging results reported over the years, always rendered as mere tendencies at the end, is explained. There may have been no principled reason to expect such correlations except that based on frequent co-occurrences in the input. Instead, the ones defended between (Im)Perfective and fore/backgrounding can have a rationale supported in theoretical terms.

BIN

Results

1. Beginners do not show acquisition of imperfect.

2. Rates of correct acceptance of the imperfect and correct rejection of the preterit were significantly lower in continuous contexts for the intermediate and advanced groups.

2. No statistical differences in acceptance of the imperfect and rejection of the preterit were found according to type of predicates (stative or eventive).
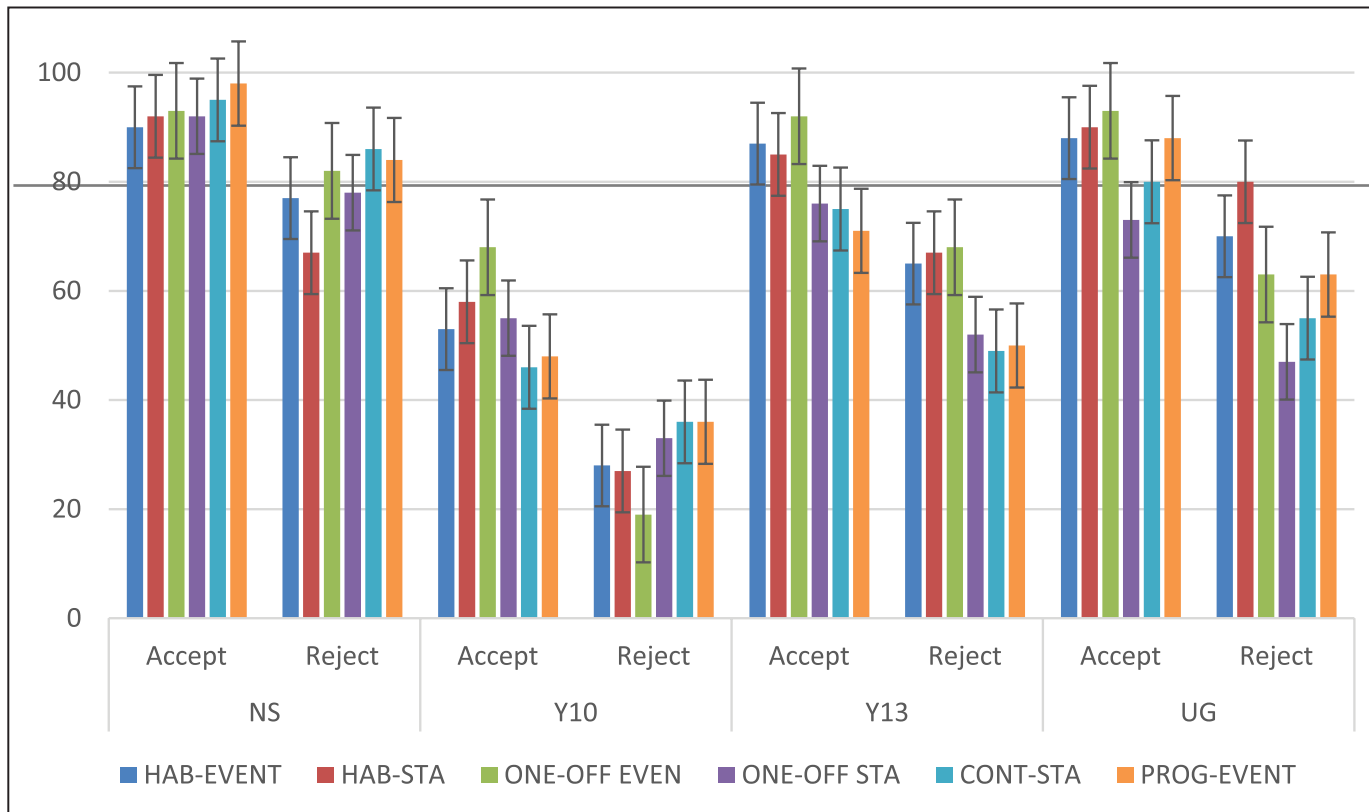
Continuous
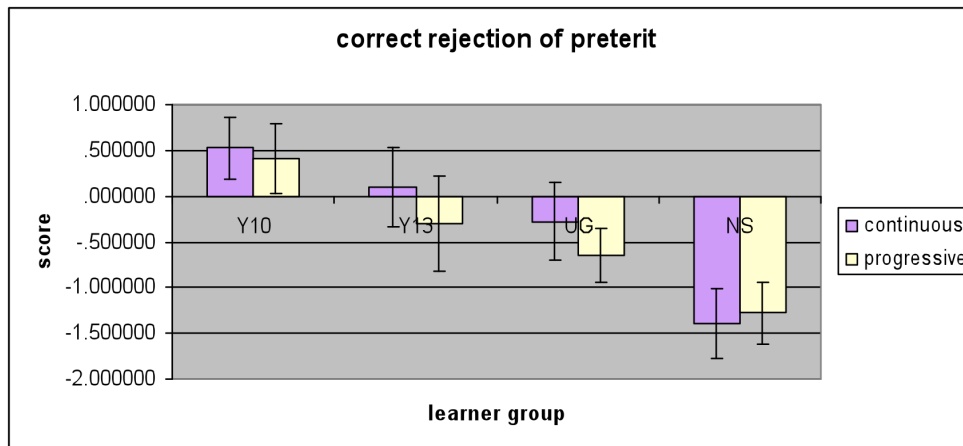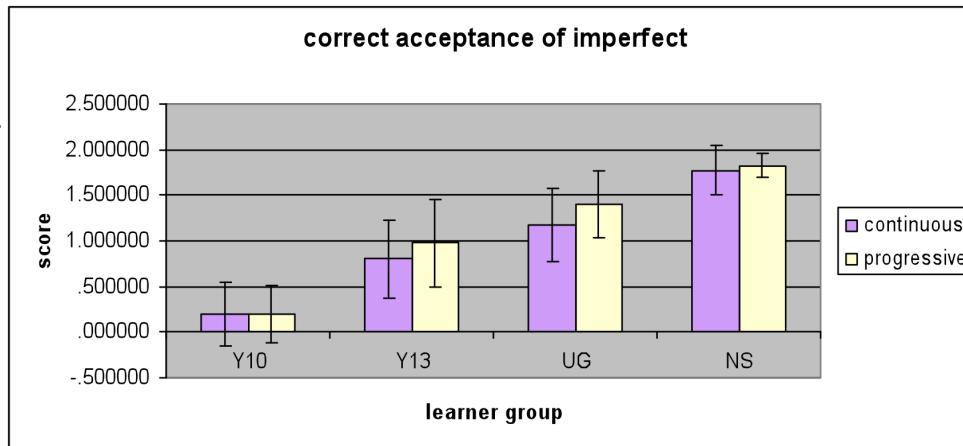
- Intermediate learners had lower scores than advanced learners but not significantly lower.
- **There is no significant difference between the mean in the continuous and the mean in the progressive (eventive) for any of the learner groups.**

Habitual

correct acceptance of imperfect

correct rejection of the preterit
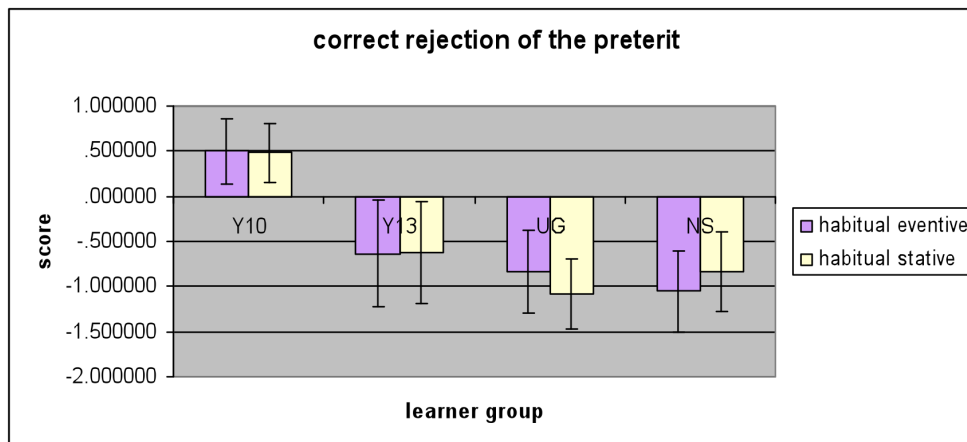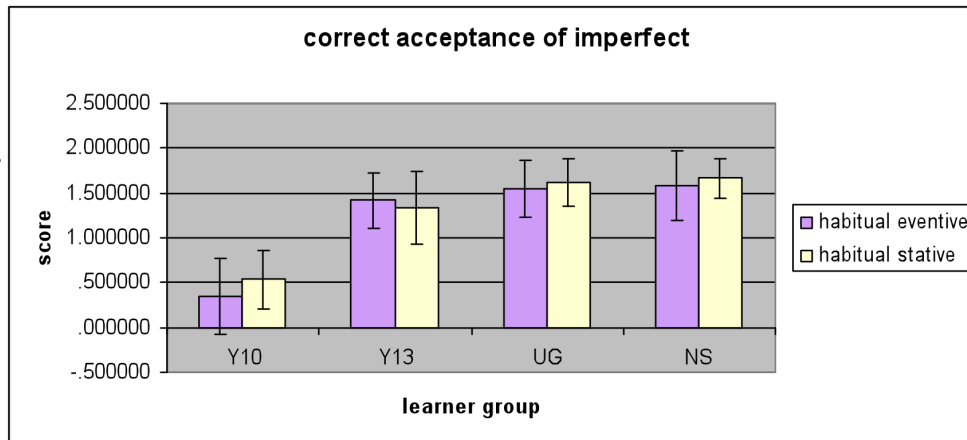
- According to the paired t-test, there is **no significant difference** between the mean in the habitual **eventive** and the mean in the habitual **stative** tasks for any of the learner groups.

- This means that none of the groups' results were influenced by the aspectual properties of the verbs. (Being eventive or stative did not affect the participants' choices)

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 and conclusions

1. Acquisition looks gradual and attainable (advanced group behaved mostly native-like in some scenarios).

2. Beginners don't seem to distinguish between the meanings.

3. Intermediate and advanced learners do distinguish between the meanings of the imperfect and are better with some of them than with others. Not all of the meanings of the imperfect are equally problematic.
   ◦ The habitual meaning seems to be the earliest and best acquired.

4. Continuous meaning (available only with states) is the one where learners perform the worst.

5. Difficulty cannot be explained by lexical aspect properties of the predicate, but by the need of establishing a new semantic-morphology mapping with no morphological equivalent in L1.

6. Event type does not have an impact on the correct acceptance of imperfect and rejection of the preterit.

- The semantics of the imperfect is not first acquired with states. Lexical properties do not seem to be at the root of learner's choices.

(12)   Event Composition Rule I

e = e1 ⌣ e2: e consists of two subevents, e1, e2 such that e1 leads to or causes e2.

(13)   Event Composition Rule II

e = < e1, e2 >: e consists of two subevents, e1, e2, such that e1 and e2 form a telic event structure where e1 is the process/transition portion and e2 is a state interpreted as the result state of the transition.