

## Perfective but incomplete accomplishments

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## Work in progress

*Captatio benevolentiae*

## Work about

- The event type known as *accomplishments*,
- Which, however, are understood as *incomplete*
- Even when they appear in the *perfective viewpoint*.
- That is, it is a work about the intertwine of *Event types* with *viewpoint aspect*.

## Why is this an issue?

- Well,
- *Accomplishments* are supposed to entail an endpoint, culmination –that is the classical differentiation from activities:
  - (1) Ella ran for three hours.
  - (2) Ella ran two miles in three hours.

## *Lexical or Situation Aspect*

- Taxonomy of predicates, **event types**.
- Aristotle.
- Ryle 1949, Vendler 1957, Kenny 1963, Dowty 1979, Smith 1991

States	Non-actions; express the existence of the thing	<i>Be green, love, hate</i>
Activities	Actions with duration & no inherent endpoint	<i>Wander, swim, push</i> <i>*in an hour</i>
<b>Accomplishments</b>	Actions with duration & an inherent endpoint	<i>Build a house</i> <i>in an hour</i>
Achievements	Actions with endpoint but no duration	<i>Arrive, die, awaken</i>

## **Why is this an issue?**

- Especially when they appear in the viewpoint form called *perfective*.
- Why? Because the perfective is the viewpoint that brings the interpretation according to which the situation is ***finished***.

## Viewpoint aspect

- A semantic category
- Information about the unfolding of the *situation*;
  - About to start: prospective aspect  
(1) I am going to read the newspaper.
  - On-going: progressive aspect  
(2) I am reading the newspaper.
  - Finished: **perfective aspect**  
(3) I read the newspaper.

## The semantics of the *perfective*

Perfective form:

- situation finished;
- bounded;
- closed

Finished what?

Formal analysis based on the ordering on intervals:  
Klein 1994

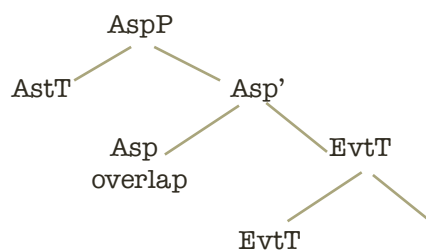
## The *perfective*

Klein (1994), Demirdache & Uribe-Etxebarria (2000, 2004, 2007).

Viewpoint as a relation between

- a Topic/Assertion Time  
(the interval the utterance is about)
- an Event Time  
(the interval the situation itself may extend over).

## The perfective:



- a. -----|xxxxxxxxxxxxx|-----  
 b. Topic Time total overlap with Event Time

## The Perfective

- Perfective viewpoint: the AstT and the Event Time (EvT) overlap completely.
- The consequence of this ordering is the ensue of the interpretation of ‘finished’, ‘culminated’ eventuality’ in the case of accomplishments
- That is, culmination is a consequence of an interval ordering operation.

## The *perfective*

- (2)
- |    |                                      |               |                |
|----|--------------------------------------|---------------|----------------|
| a. | Juan estuvo                          | enfermo.      | State          |
|    | Juan be <sup>estar</sup> -perfve.3ps | ill           |                |
| b. | Juan paseó                           | por la playa. | Activity       |
|    | Juan walk-perfve.3ps                 | by the beach  |                |
| c. | Juan pintó                           | la valla.     | Accomplishment |
|    | Juan paint-perfve.3ps                | the fence     |                |
| d. | Juan encontró                        | la aguja.     | Achievement    |
|    | Juan find-pfve.3ps                   | the needle    |                |

- In all of the sentences in the previous slide it is understood that the period of time during which the event took place is over.
- With telic predicates, it is also typically understood that the relevant point needed for the situation to be substantiated has been reached.
- That is to say, perfective accomplishments typically yield the interpretation of 'culminated'.

## However

- Facts such as the following ones are attested:

## Accomplishments in the *perfective*

**Hindi** (Arunachalam & Kothari 2010)

(3) 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.'

## Accomplishments in the *perfective*

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

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

'I fixed a fence, but I didn't finish.'



## Accomplishments in the *perfective*

**Thai** (Koenig & Muansuwan 2001)

--Semi perfectives; *k<sup>h</sup>urn* pfve marker.

(6) Surii tɛɛŋ      klɔ̀ɔn 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.'

## Accomplishments in the *perfective*

**Balkar** (Tatevosov 2008)

(7) Kerim esik-ni      ac-xan-di,      alaj bosa-ma-van-di  
 Kerim door-ACC open-PFT.3ps but finish-neg-PFT.3ps  
 'Kerim opened the door, but (he) did not finish'

## Accomplishments in the *perfective*

**Spanish** (Arche 2014a, c)

(7) Pedro pintó la valla, pero no terminó.  
Pedro paint-pfve.3ps the fence but not finished  
'Pedro painted the fence but he did not finish'

(8) Juan vació la piscina, pero no terminó.  
Juan empty-pfve.3ps the pool, but not finished.  
'Juan emptied the pool, but he did not finish'

## Accomplishments in the *perfective*

**Spanish** (Arche 2014a, c)

(7') Pedro pintó la valla, pero no del todo.  
Pedro paint-pfve.3ps the fence but not completely  
'Pedro painted the fence but not completely'

(8') Juan vació la piscina, pero no del todo.  
Juan empty-pfve.3ps the pool, but not completely  
'Juan emptied the pool, but not completely'

## Based on traditional tenets

- This should not happen!

## The research task

- Identify the source of the phenomenon.
  - Authors that put the weight on the *stem*.
  - This proposal: explore the weight and role of viewpoint semantics.

## The research task

- Identify the grammar limits of it examining
  - Variation in the grammar of viewpoint aspect
  - Variation in the stems allowed in nonculmination phenomena

## The role of viewpoint aspect

- Interpretation to focus on now:  
Partial success
- BUT they are **not IMPERFECTIVE** cases.
- In languages where inflection distinguishes between Imperfective and Perfective (e.g., Spanish) we can see the difference.

## The role of viewpoint aspect

(9) Pedro pintaba la valla.  
Pedro paint-IMPF.3ps the fence  
'Pedro was.impf painting the fence'  
→ no culmination reading.

(10) Pedro pintó la valla.  
Pedro paint-PFve.3ps the fence  
'Pedro painted the fence'  
→ culmination reading

## Some say it is in the stem

- Because it is partial success without (classical) imperfectivity involved, authors conclude that the source of the reading is in the computation of the eventuality type (Bar-el et al 2005; Tatevosov 2008).

## Some say it is in the stem

- Tatevosov (2008) also argues that the fact that nonculmination is found in other forms, such as the future, argues against any possible role played by the viewpoint aspect semantics. His examples are:

## Some say it is in the stem

### **Balkar**

- (11) Kerim eki sabat esik-ni      ac-ar-di.  
Kerim two hour door-ACC open-FUT.3ps  
'Kerim will open the door for two hours'

## My take

- True that classical imperfectivity is not at stake, as we have undisputable perfectives
- Admit that future examples fall within the same phenomenon.

BUT

- This does not mean that viewpoint semantics does not play a role.

## My take

- Viewpoint forms are not monolithic and can be more *complex (have more components)* than previously thought.
- Actually, we know that the semantics and the correspondences between form and meaning with other viewpoints is not that simple.
- See the case of the imperfect, to wit the treacherous terrain:

## Meanings and forms of viewpoint aspect

(11) Juan **cantaba**.  
Juan sing-impfv.3ps

IMPERFECT

- Meanings/readings in Spanish:
  - Habitual 'Juan used to sing'
  - Progressive 'Juan was singing'
  - Ability 'Juan knew how to sing'
- Arche 2006, 2014: shared core: ordering predicate meaning 'within' plus other different heads adding other information.

## Cross-linguistic variation

- Comrie 1976; Dahl 1985; Bybee et al 1994; Koontz-Garboden 2003, a.o.
- English: does not distinguish impfve/pfve inflectionally; rather it seems to distinguish ongoing/rest.

(12) I was reading the book Progressive

(13) I read a book. Perfective

(14) I biked to school when I was a child. Habitual

(15) I read French even though I was never taught. Ability



- **Hindi**: distinguish imperfective/perfective dichotomy, but the Imperfect form cannot be interpreted as progressive.
- **Georgian** has the habitual but not the progressive explicitly marked.
- Furthermore, different ways of marking the contrasts: inflection (synthetic), auxiliaries – analytical, tone (Krongo), etc.

### **Accomplishments in the *perfective***

- What if the perfective is more complex than what we thought?
- Can involve other elements? –Be complex.
  
- Altshuler 2014; Arche 2014.

## Non culminating accomplishments

- Heterogeneous events
  - Borer (2005): have Quantity projected
- The situation is not understood as culminated.
- Tackle the heart of the relation between:
  - Telicity
    - **Heterogeneous** events
    - not event terminus/completion/**telos**
  - Perfective viewpoint aspect
    - Perfective: interval bounded

## Typical cases

Piñón 2008

### 1. Defeasible causatives (*teach; treat*)

(16) Le enseñé latín, pero no aprendió nada.

her taught Latin but not learnt anything

'I taught her Latin but she did not learn anything'

### 2. Verbs of creation (*build, draw, write, compose*)

(17) Pedro compuso el poema, pero no terminó.

Pedro composed the poem but not finished

'Pedro composed the poem but did not finish'

## Typical cases

Piñón 2008

3. Verbs of non-creation (colour, read, fill, empty)

(18) Pedro coloreó el castillo, pero no terminó.  
Pedro coloured.pfve the castle but not finished  
'Pedro coloured the castle but did not finish'

(19) Pedro vació la piscina, pero no terminó.  
Pedro emptied.pfve the pool but not finished  
'Pedro emptied the pool but did not finish'

## Typical cases

Piñón 2008

4. Performance-creation (*recite, play, sing*)

(18) Pedro tocó la sonata, pero no terminó.  
Pedro played.pfve the sonata but not finished  
'Pedro played the sonata but did not finish'

## Typical cases

- Different degrees of acceptability
- Creation >> performance >> non creation  
     ---                  +++                  +++
- Ongoing study of acceptability from native speakers of Spanish and French (Arche & Martin, in preparation).
- First phase: reaction time study with adults; native university undergraduates.
- Different verbs; with/without the adverbial; perfective/perfective progressive.

## Leading case

- For the sake of the discussion, I will focus on cases such as (19):

(19) Pedro **coloreó**                  **el castillo**, pero **no terminó**.  
 Pedro colour-pfve.3ps the castle, but not finished  
 'Pedro coloured the castle but he did not finish to'

## Points for exploration

1. Quality of the eventuality: true accomplishments?
2. Semantics of the perfective
3. Syntax-semantics of the temporal modifiers that seem to foster nonculmination in these cases

**“For x time”**

4. The **compatibility** of the overt clause declaring the lack of culmination explicitly **“not finish to”** (vs. not completely).

## I will explore

- A sort of correlation among these elements
- Which may point to the availability of **PARTITIVE** semantics in the **perfective** in Spanish.
- Which includes an additional syntactic head, which is partitive, progressive.

## Leading case

(19) Pedro coloreó el castillo, pero no terminó.  
 Pedro colour-pfve.3ps the castle, but not finished  
 'Pedro coloured the castle but he did not finish to'

- OK for many speakers but
  - some want to add "for x time modifier"
- Still an accomplishment?

(20) Pedro coloreó el castillo durante un rato,  
 Pedro colour-pfve.3ps the castle for a while,  
 pero no terminó.  
 but not finished

## 1. Quality of the eventuality

True accomplishment? *yes*

### 1.1. Culmination is possible

(21) Pedro coloreó el castillo durante un rato y lo terminó.  
 P.coloured.pfve the castle for a while and it finished  
 'Pedro coloured the castle for a while and he finished it'

(22) Pedro nadó durante un rato (#y terminó).  
 Pedro swim-pfve.3ps for a while and finished.  
 'Pedro swan for a while and finished'

- The sentence

*Pedro coloreó el castillo durante un rato.*  
*Pedro colored.pfve the castle for a while.*

is **vague with respect to culmination**. It is compatible with both scenarios: one where there is no culmination and another one where there is (Arche 2014a).

- in a similar way in which we speak about vagueness in temporal ordering in the so-called Independent temporal construal observed in relative clauses (Stowell 1993; see Arche 2001 for Spanish).

## Quality of the eventuality

### 1.2. Ok after *finish*

(23) √Pedro no **terminó de** colorear el castillo.

Pedro did not finish colouring the castle

(24) \*Pedro no terminó de pasear.                    **\*ACTIVITIES**

Pedro did not finish strolling

- **(not) finish + accomplishments**: ok only (Pustejovsky 1988)
- Elided VP must be an accomplishment, just as the one it is a copy of, ergo, still an accomplishment despite the *for x time*.

## 2. The meaning of the perfective

- In all these cases, the perfective can be paraphrased with what can be called “perfective progressive”:

(25) Pedro **coloreó** el castillo, pero **no terminó**.

Pedro colour-pfve.3ps the castle, but not finished

‘Pedro coloured the castle but he did not finish to’

(26) Pedro **estuvo coloreando** el castillo, pero no terminó.

Pedro was.pfve coloring the castle, but not finished.

**N.B.** Note that this form **IS NOT** equivalent in any sense to an imperfective progressive (the typical form known as progressive in short).

## 3. The semantics of the temporal modifier

(27) Pedro coloreó el castillo, pero no terminó.

Pedro coloured the castle, but not finished (to)

- OK for some speakers, but many react by adding a “*for-time*” modifier.

(28) Pedro coloreó el castillo durante un rato, pero no terminó.

P. coloured.pfve the castle for a while, but not finished

‘Pedro coloured the castle for a while but did not finish’



## The meaning of the temporal modifier

- Q: Why does this adverbial make the sentence better?
- Q: What does it mean?
- Ans: *For a while* gives us the **size** of an interval
- Ans: Which interval? The TT or Assertion Time (Klein 1994)

(29) Pedro coloreó el castillo **durante tres horas**...

Pedro coloured the castle for three hours ...

(29) is **true** even if Pedro coloured the castle **for five hours**.

(Arche 2014)

## The meaning of the temporal modifier

- The Assertion Time → The interval we want to assert (the TT, AstT), rather than the interval of the whole event per se.
- *For three hours, for a while* give us only **part** of the interval the event may extend over.

## The meaning of the temporal modifier

- *For*-time adverbials sharply contrast with *in*-time adverbials:

(30) Pedro coloreó el castillo **en tres horas**.

Pedro coloured.pfve the castle in three hours

- **cannot be true** if it took Pedro five hours to colour the castle.
- **cannot** be continued by “**not finish to**”

(31) \*Pedro coloreó el castillo **en tres horas**,

Pedro coloured.pfve the castle in three hours,

pero no terminó

but not finished

## The meaning of the temporal modifier

*En tres horas*

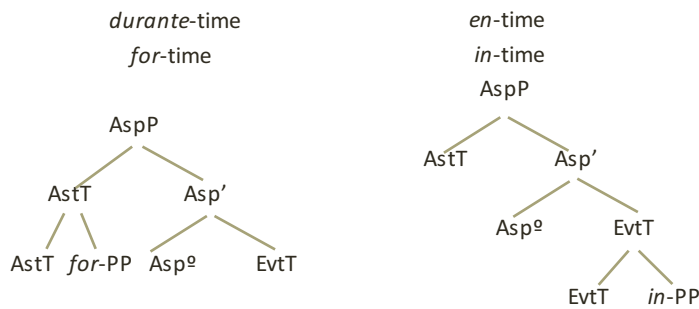
**in three hours** → interval of the whole actual event

*Durante tres horas*

**for three hours** → interval of the assertion

- Demirdache & Uribe-Etxebarria 2004: temporal adverbials are modifiers of the Assertion Time or the Event Time.

## The syntax of *interval size modifiers*



## Semantics of interval size modifiers

- Both *for-time* & *in-time* give the **size** of an interval
  - Hence both are compatible **only with perfective** (in Spanish)
- ❖ *For-time*: measures the Assertion Time, hence the interval can give us only **PART** of the Event Time.
- ❖ *In-time*: measures the Event Time (→ bounds the **whole event**- and that is why it is not okay with activities or states.)

#### 4) Compatibility with “not finish to” vs. “not completely”

- Both used in the literature as expressions marking incompatibility with culmination
- However, as noticed by Demirdache & Martin 2015, it is not the case that both are equally compatible with any case of nonculmination.
  - This seems to be the case in the Spanish cases contemplated here:

(32) Pedro coloreó el castillo durante tres horas pero no  
 Pedro coloured.pfv the castle for three hours but not  
 terminó.  
 finished

‘Pedro coloured the castle for three hours but did not finish’

(33) \*Pedro coloreó el castillo durante tres horas pero no  
 Pedro coloured.pfv the castle for three hours but not  
 del todo.  
 completely

‘Pedro coloured the castle for three hours but not completely’

### “not finish to” vs. “not completely” & pfve progr

(34) Pedro estuvo coloreando el castillo durante tres horas, pero no terminó.

Pedro was pfve colouring the castle for three hours but not finished

‘Pedro was colouring the castle for three hours but did not finish’

(35) \* Pedro estuvo coloreando el castillo durante tres horas, pero no del todo

Pedro was pfve colouring the castle for three hours but not completely

‘Pedro was colouring the castle for three hours, but not completely’

### The correlations noted here

- |                     |                     |
|---------------------|---------------------|
| ▶ *Pfve progressive | ▶ √Pfve progressive |
| ▶ *For-time         | ▶ √ For-time        |
| ▶ *Not completely   | ▶ √ not finished to |

## Correlations

1. *For*-time: partitive
2. Perfective is progressive: partitive
3. “Not finished to”: compatible with those cases that allow for perfective progressive and *for*-time adverbials

## Some working idea to add to the puzzle

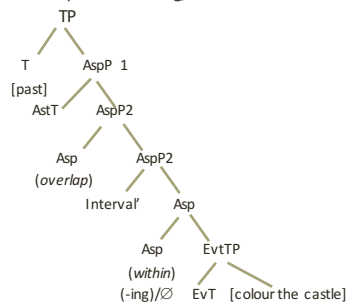
- Spanish perfective can be a partitive perfective
- Viewpoint aspect properties are responsible for making the partial completion available (Arche 2014a; Demirdache & Martin 2015)

- The cases where the above-mentioned correlations hold are argued to be accounted for by the properties of the syntax-semantics of viewpoint aspect, that is:
  - where the perfective can be paraphrased by a perfective progressive.
  - In these cases, the perfective is homophonous with the non-progressive one but it has different syntax-semantics, as in Arche 2014a (next slide)

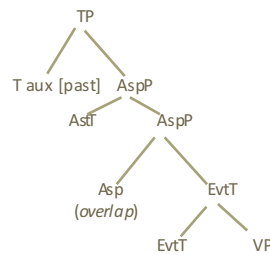
## Syntax of the Spanish perfective

(36) Pfv Progressive (analytical & synthetic)

*Estuvo coloreando/coloreó*  
was.pfv coloring/coloured



(37) Non-progressive

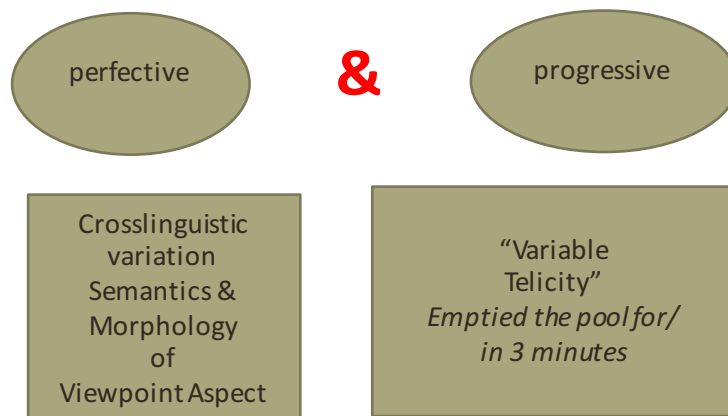


## Summary & Conclusions

- I have made a proposal whereby nonculmination is due to the properties of functional material.
- In particular, I have proposed that lack of culmination is due to a complex viewpoint head, consisting of a perfective head and a progressive one.
- Progressive is not 100% synonymous with imperfect.



## Perfective but/and progressive





## Faring with previous proposals

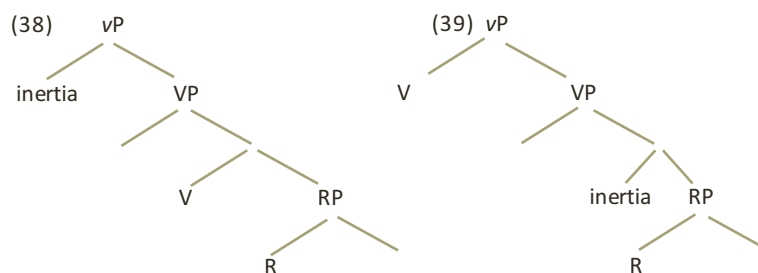
### Previous proposals

- Koenig & Muansuwan 2001: Thai semiperfectives involve an *imperfective operator* in the *lexical* meaning of accomplishments.
  - “Thai perfectives describe subparts of inherently bounded eventualities” (p.2)
  - “Thai stems are fundamentally biased towards imperfectivity” (p.15)
  - “Thai bare sentences are similar to sentences marked with the progressive in English”
  - Completion is just a strong implicature.

## Previous proposals

- Tatevosov 2008: “non culmination must be part of the computation of the eventuality type, not grammatical aspect.”
- The same happens in the future.
- Inertia worlds as part of the first phase syntax (Ramchand 2008).

## Inertia worlds in vP syntax



## Advantages and loose ends

- The proposal pursued in this talk does not need to stipulate the existence of modal material in the lexical stems of accomplishments.
- The proposal also accounts for the availability of non-culmination with other tense/aspect forms such as the future:

(40) Pedro coloreará el castillo durante dos horas,  
 Pedro colour-fut.3ps the castle for two hours  
 (pero no lo terminará).

but not it finish-FUT.3ps

'Pedro will colour the castle for two hours but will not finish it'

means...

(41) Pedro estará coloreando el castillo durante dos horas.  
 Pedro be-fut.3ps colouring the castle for two hours

'Pedro will be colouring the castle for two hours'

## Advantages and loose ends

- That is, it is again the progressive head that can be blamed for the interpretation.

## Advantages and lose ends

- The syntactic division proposed by Tatevosov aimed at accounting for the two types of nonculmination observed in the literature: partial success and failed attempt.
- It could seem that the inclusion of a progressive head can straightforwardly account for the partial success reading, since progressive heads return “parts”.
- However, failed attempt readings exist (to some extent in Spanish), precisely only with the explicit version of the perfective progressive:

(42) Estuve enhebrando la aguja durante dos horas.  
was.pfve.1ps threading the needle for two hours  
'I was threading the needle for two hours'  
'I was trying to thread the needle for two hours'

(iterative reading discarded here; available with the synthetic perfective)

- Failed attempt reading is unavailable with the impf.:

(43) Estaba enhebrando la aguja.  
was.pfve.1ps threading the needle

- Conceptualization of the event itself.
- Cf. *I am building a house* – able to include the preparatory stage of doing the blueprints.

# Thank you!

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