An Alternative Semantics for English Aspectual Particles

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Overview

Previous Approaches
Löbner (1989)
Križka (2000)
Problems

Properties of Aspectual Particles
Continuity & verb licensing
Expectations & positive inferences
Negative polarity
Non-temporal uses

An Exhaustification-Based Account
Topology
Syntax & semantics
Exhaustification

What’s Left
Previous accounts of the aspectual particles *already* and *still* do not account for all their properties, particularly the negative polarity of their counterparts *yet* and *anymore* (respectively).

Goals for today:

- Present the facts
- Sketch the beginnings of a solution.
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What’s Left
Löbner (1989)

- Löbner: *already* and *still* are logically dual operators on predicates over times.

<table>
<thead>
<tr>
<th>Particle</th>
<th>Assertion</th>
<th>Presupposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>already((t, \phi))</td>
<td>$\phi$ holds at $t$</td>
<td>$\neg\phi$ was true before $t$</td>
</tr>
<tr>
<td>still((t, \phi))</td>
<td>$\phi$ holds at $t$</td>
<td>$\phi$ was true before $t$</td>
</tr>
<tr>
<td>not yet((t, \phi))</td>
<td>$\neg\phi$ holds at $t$</td>
<td>$\neg\phi$ was true before $t$</td>
</tr>
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<td>not anymore((t, \phi))</td>
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</tr>
</tbody>
</table>

Table: Löbner (1989) semantics of aspectual particles (tabulated in Krifka (2000)).

- With *yet* and *anymore*, they form a logical square of opposition.
Krifka (2000)

- Krifka: aspectual particles are restrictors for scalar alternatives:
  - *Already* restricts alternatives to those greater than the assertion,
  - *Still* restricts alternatives to those lower.

- Extending this account to non-temporal scales accounts for “marginality *still*”:

  (1) **Marginality**: Death Valley is still in California.
Problems with previous accounts

- Neither accounts for the negative polarity of *yet/anymore*.

- On Löhner’s account, particles have mutually exclusive presuppositions, but this is not the case:
  
  (2)  
  a. Does anyone still talk to John anymore?  
  b. We still haven’t gotten there yet.  
  c. I haven’t already bought the tickets yet.  

  (see Cinque, 1999)

- Many other properties are left unaccounted for.
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Still $p$ presupposes that $p$ holds continuously along some interval prior to the time of speech.

(3)  # It’s still raining. *(if it has just begun raining)*

Still, unlike *already*, is licensed only for particular event types.

(4)  a.  It was still raining.
    b.  # It (has) still rained.

(5)  a.  It was already raining.
    b.  It (has) already rained.
**Expectations & positive inferences**

- *Already/still* express a speaker’s expectations about the earliness/lateness of an event.

  (6)  
  a. It’s *already* raining.
  \[\sim\] I expected it to start raining later.
  
  b. It’s *still* raining.
  \[\sim\] I expected it to have stopped raining sooner.

- *Yet/anymore* are negative, but give rise to strong positive expectations.

  (7)  
  a. It hasn’t rained *yet*.
  \[\sim\] I expect it to rain later.
  
  b. It isn’t raining *anymore*.
  \[\sim\] I believe that it was raining earlier.
The negative particles are not licensed in certain NPI-licensing environments:

(8) Antecedents of conditionals & universals
   a. Everyone who’s taken this class (already/*yet) may leave.
   b. If you talk to John (still/*anymore), give him my regards.

(9) Complements of emotive factives
   a. I’m sorry I found out the ending (already/*yet).
   b. I’m sorry the TV is broken (still/*anymore).

(10) Scope of only
   a. Only John has arrived (already/??yet).
   b. Only John talks to Bill (still/anymore).

(see Levinson, 2008)
Negative polarity

- *Anymore* (and, to a lesser extent, *yet*) give rise to negative bias in questions.

  (11) —Do you guys still hear from John? —Yes.

  (12) —Do you guys hear from John anymore? ?# —Yes.

(see Guerzoni, 2004)
Still has several related senses in addition to the temporal sense:

13. Marginality: Death Valley is still in California.

14. Concessive: We told Bill not to come, but he still came.

(Michaelis, 1993)
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What’s Left
Still picks out the right edge of an event.

(15) It’s still raining.

In order to satisfy the continuity property, we can make the event maximal over the interval on which in holds.
still not $p \equiv$ not yet $p$

(16) It’s still not raining.
(17) It’s not still raining.
Crater (1998): Aspect heads denote functions from properties of events to properties of times: \( \langle \langle l, \langle s, t \rangle \rangle, \langle i, \langle s, t \rangle \rangle \rangle \).

So aspectual adverbs might denote functions from properties of events to the edges of events: \( \langle \langle l, \langle s, t \rangle \rangle, \langle l, \langle s, t \rangle \rangle \rangle \).

A semantics for *still* might look like:

\[
\llbracket \text{still} \rrbracket = \lambda P_{\langle l, st \rangle}. \lambda e. \lambda w. \exists e' \left[ P_w(e) \land \text{Max}(e) \land \text{RightEdge}(e, e') \right]
\]
**SYNTAX & SEMANTICS**

**Tree Diagram: Aspectual Particles**

```
TP_{s,t}  
  └── Ti
     └── AspP_{i,st}
          ├── Asp
              └── ⟨⟨l,st⟩⟩, ⟨i,st⟩⟩
          └── AdvP_{l,st}
              └── already/yet
                  ├── AdvP_{l,st}
                      └── still/anymore
                          └── VP
                              └── ⟨l,st⟩
```

(Cinque, 1999; Hacquard, 2006; Kratzer, 1998)
I propose that *already* and *still* (and *yet* and *anymore*) have a presuppositional *even* exhaustification operator.

This accounts for the implications of earliness/lateness.

Crnič (2011): for some probability ordering relation $\prec_C$, 

$$\lbrack \text{even} \rbrack = \exists q \in \text{ALTS} \ [p \prec_C q]$$

This could be modified to account for negative polarity (Chierchia, 2013) and the negative bias the NPIs show in questions (Guerzoni, 2004).
I assume a monotone probability scale on the relevant interval:

\[
\text{still } p
\]

(18) It’s still raining.
The probability scale is reversed under negation.

still not \( p \equiv \text{not yet } p \)

(19) It’s still not raining.
Less clear here—*even* does not scope below negation.

\[ \text{not still } p \equiv \text{not anymore } p \]

(20) It’s not still raining.
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What’s Left
A semantics of *still* which picks out only the imperfective.

Extension to non-temporal uses of *still*.

A principled account of the positive inferences of *yet* and *anymore*. 
References


Thank you!