

Already: just scalarity*

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1 Overview

The aspectual particles *still* and *already* are commonly thought of and analyzed as particles that mirror the other (Löbner 1989, Krifka 2000, Ippolito 2007, inter alia).

- (1) Mary is still in New York.
- (2) Mary is already in New York.

The particle *still* is analyzed as an additive particle in the same class as focus-sensitive particles like *also*:

- (3) [Mary]_F is also in New York.
 \rightsquigarrow Someone other than Mary is in New York.
- (4) Mary is still in New York.
 \rightsquigarrow Mary was in New York at some time before now.

The logical next step would be to posit a minimally different (‘dual’) semantics for *already*. However, there are puzzling asymmetries between the particles, for example, shown with temporal predicates:

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- (5) *You wake up in the morning after a full night of sleep, thinking that you’ve slept for the usual amount of time. You check your clock.*

It’s already nine o’clock!

- (6) *You wake up in the morning after a full night of sleep, thinking that you’ve overslept. You check your clock.*

It’s still six o’clock!

These examples suggest that a dual analysis of *still* and *already* would be difficult.

1.1 Roadmap

- Demonstrate that *still* is robustly additive.
- Evaluate two flavors of additivity that are possible presuppositions of *already* against the empirical facts.
- Point out a key empirical gap in an additive account of *already*, motivating an *even*-style scalar likelihood presupposition in its place.

2 The additivity of *still*

An example of a canonical additive particle *also*:

- (7) $[Mary]_F$ is also in New York.

a. $\exists x \neq Mary \in C[x \text{ is in New York}]$ additive presupposition

Someone other than Mary is in New York.

b. Mary is in New York. assertion

A first-pass analysis of *still* as an additive particle would share the basic template as *also*, with the following differences:

- No overt focus: C is a domain restrictor instead of a focus alternative set.
- C is set of times.
- A stronger restriction on the domain of quantification: anteriority to the reference time, rather than exclusion of the focused element.

- (8) Mary is still in New York.

- a. $\exists t' < t_{ref=now} \in C[\text{Mary is in New York at } t']$ additive presupposition
 Mary was in New York at an earlier time.
- b. Mary is in New York (now). assertion

We can check that the additivity of *still* is a presupposition, as it survives under questions and conditional antecedents:

- (9) a. Is Mary still in New York?
 \rightsquigarrow Mary was in New York earlier.
- b. If Al is still eating dinner with the president, we shouldn't call him.
 \rightsquigarrow Al was eating dinner with the president earlier.

2.1 Is *already* also additive?

We'll consider two flavors of additivity that have been proposed for *already*: positive and negative additivity:

- (10) Mary is already in New York.
- a. $\exists t' > t_{ref=now} \in C[\text{Mary is in New York at } t']$ positive (posterior) additivity
 Mary will be in New York at a later time.
- b. $\exists t' < t_{ref=now} \in C[\neg[\text{Mary is in New York at } t']]$ negative additivity (i.e. prior falsity)
 Mary was not in New York at an earlier time.

3 Against positive additivity

If we want an additive presupposition, positive (posterior) additivity (e.g. Krifka 2000, Ippolito 2007) would seem to be the null hypothesis.

- However, evidence from interaction with momentary states, perfective aspect, and modality demonstrate that positive additivity is too strong.

3.1 Momentary states

Already is felicitous with statives which, in a given context, can hold true only for a single moment.

- (11) *As we speak, John is running a 5-mile marathon continuously without stopping. He is running faster than usual.*

John's already right beside milepost three.

↗ John will be right beside milepost three at a future time.

- Posterior additivity presupposes that there will be a future time at which John is right beside milepost three, which incorrectly predicts an inference that John stopped at milepost three.
- In contrast, *still* is infelicitous with instantaneous statives:

- (12) *As we speak, John is running a 5-mile marathon continuously without stopping. He is running slower than usual.*

John is still right beside milepost three.

- Additivity is correct here: we're forced to infer, against the context, that John stopped at milepost three in the middle of the marathon.

3.2 Instantaneous events

A posterior additive semantics applies a predicate to two distinct time points. This would predict infelicity with perfective predicates, such as past perfective achievements. With an additive semantics, either:

- the achievement event would hold twice, or
- the achievement event would be forced to be continuous.

This not borne out: *already* is compatible with past perfectives.

- (13) a. I already reached the summit.

- (14) a. I already left the party.

In contrast, *still* is infelicitous with perfective eventives unless interpreted concessively/habitually:

- (15) ? I still ate the fish.... past perfective, concessive
≈ I still ate the fish despite....

- (16) I still played soccer (in middle age). past habitual

One possible objection be that this is just a silent perfect.¹ However, this concern can be easily put to rest.

The English present perfect cannot occur with a temporal adverbial (the “present perfect puzzle” Klein 2002), with or without *already* (17):

- (17) a. Carla has left the party (*an hour ago).
b. Carla has already left the party (*an hour ago).

However, the simple past perfective with *already* can occur with a temporal adverbial (19).²

- (19) a. Carla left the party an hour ago.
b. Carla already left the party an hour ago.

It can also be demonstrated that *already* with a past perfective (20b) is not equivalent to a past perfect (20a).³

- (20) a. Ten minutes after the hurricane started, the dam had already broken.
b. ? Ten minutes after the hurricane started, the dam already broke.

3.3 Interaction with modality

Posterior additivity doesn’t have a straightforward way to account for (21), in which the aspectual particle scopes over the modal:

- (21) * He may already win. (Condoravdi, 2002: p. 19)
compare: He may still win.

- Condoravdi (2002) assumes a negative additive semantics for *already* and accounts for the badness of (21) as “possibilities decreasing over time”.

¹There is a related observation that in many languages *already* and the perfect are hard to distinguish (van der Klok and Matthewson, 2015).

²The felicitous temporal adverbial with *already* may have a relativity restriction; most speakers polled find (18) at least degraded compared to (19b). I leave this as a puzzle.

- (18) ? Carla already left the party at eight.

³Most speakers reported (20b) as degraded, but offered an interpretation in which its truth conditions differ from (20a): (20a) is compatible with a context in which the dam broke five minutes after the start of the hurricane; (20a) is not.

- However, with a positive additive presupposition, (21) should be fine in a context in which the possibilities haven't changed across the two times of evaluation. (21) would be predicted mean "his possibility of winning will continue".

4 Why not negative additivity?

Right now, negative additivity (e.g. Löbner 1989) might seem attractive, since it would have a way of accounting for the ill-formedness of (21). Let's review what negative additivity looks like:

(22) Mary is already in New York.

a. $\exists t' < t_{ref=now} \in C[\neg[\text{Mary is in New York at } t']]$ negative additive presupposition
 Mary was not in New York at an earlier time.

b. Mary is in New York (now). assertion

- This can account for (21), as "decreasing possibilities over time" would conflict with the negative presupposition, which would state that it was not possible for him to win at an earlier time and it is possible now.
- However, let us now examine arguments against negative additivity for *already*.

First, some theoretical reasons why we might not prefer negative additivity:

- Although particles with positive additivity are abundant in English and cross-linguistically, the negative additive presupposition has only been proposed for NPI-even in tandem with a reverse scalar presupposition.
- There does not exist a morpheme which functions as the negative-additive version of *also*, which would be a dual of *also* that presupposes that someone other than Mary didn't come:

(23) $[\text{Mary}]_F$ is also' in New York.

a. $\exists x \neq \text{Mary} \in C[\neg[x \text{ is in New York}]]$ additive presupposition
 Someone other than Mary is not in New York.

b. Mary is in New York. assertion

4.1 Negative additivity isn't necessary

Many examples are discussed in the literature for which negative additivity isn't met:

(24) *Of a newborn baby who receives an inheritance at birth:* (Mittwoch, 1993)

- a. He is already rich.
- b. If he is already American, he doesn't have to be naturalized.

- Negative additivity isn't met: there is no prior time at which the baby isn't rich, or isn't American.

(25) You don't want to bring your humidifier to Singapore. It's already humid there; you'd be drenched. adapted from (Michaelis, 1996)

- Negative additivity isn't met; Singapore is humid year-round.
- This example starts to hint at a scalar analysis of *already*, the intuition being that using a humidifier would make it feel even more humid.

4.2 Negative additivity isn't sufficient

Negative additivity permits contexts in which the prejacent is false throughout time.

(26) *Context: John is not married and I doubt he will ever get married.*

#If he were already married, he would be living in the suburbs now. (Ippolito: p. 16)⁴

(27) John isn't already married.⁵

#*Men like him don't ever get married.* adapted from (Ippolito, 2007: p. 17)

- In (26), negative additivity is satisfied for the antecedent of the counterfactual conditional, as John wasn't ever married before now; however, the sentence is infelicitous.
- In (27), a continuation which is compatible with the negative additive presupposition is infelicitous.

⁴We assume that the presupposition in the antecedent this counterfactual conditional is evaluated in the actual world.

⁵Ippolito uses *yet* in the example, which I do not assume to be equivalent to *already*. As *already* is a PPI, (27) may be infelicitous for some speakers. If so, (27) should be read as the negative answer to a question.

5 The move toward a scalar presupposition

5.1 Counter-expectation

- I present an infelicitous example which shows a major gap in any additive account, as both putative additive presuppositions are met.
- *Still* and *already* have been widely but controversially noted to contribute a meaning referred to as “counter-expectation” (see Löbner 1989, van der Auwera 1993, Michaelis 1996, Condoravdi, *inter alia*)).

- (28) a. *Context: I host a party, and tell my guests to arrive at 6pm, although it's convention to for guests to arrive later than the stated time. I'm in the kitchen when my co-host sees Bailey show up exactly at 6pm, and calls me to say:*
Bailey is already here! (But let's wait for the others.)
- b. *Context: I host a dinner at a hotel restaurant and tell my guests to arrive at 6:00pm, and it's convention for guests to arrive on time. I'm in the dining room when the concierge sees Bailey show up in the lobby at 6:20pm, and calls me to say:*
Bailey's already here! We can get started then.
compare: Bailey's here! We can get started then.

- Both putative presuppositions are met: Bailey was not at the hotel restaurant at an earlier time, and she will be there at a later time.
- (28b) feels infelicitous because *already* seems to convey that Bailey is here earlier than expected; this would clash with the later than expectedness in the context.
- No recent account can capture this inference.

5.2 Let's get even

The solution to the puzzling presupposition of *already* can be found in analogy to another focus-sensitive particle, *even*, which has been proposed to have both an additive and a scalar presupposition (Karttunen and Peters, 1979), the former of which is rather controversial. The focus on ‘Mary’ induces a set of alternatives C, i.e. {‘Mary’, ‘John’, ‘Kim’}:

- (29) a. Even Mary_F is in New York.

- b. $\exists x \neq \text{'Mary'} \in C [x \text{ is in NY}]$ additive presupposition
 \approx Someone other than Mary is in New York.
- c. $\forall x \neq \text{'Mary'} \in C [(Mary \text{ is in NY}) <_{likely} (x \text{ is in NY})]$ scalar presupposition
 \approx For every person x other than Mary, for Mary to be in New York is less likely than for x to be in New York.
- d. Mary is in New York. assertion

A cross-linguistic aside: both *still* and *already* can be near-homophonous with *even*.

Spanish *aún/aun*⁶ ‘still/even’:

- (30) a. **Aún** vive tu madre.
 Your mother is still alive. (Batchelor and Pountain, 2005: p. 82)
- b. **Aun** los más torpes lo acertaron.
 Even the dimmest people got it right. (Batchelor and Pountain, 2005: p. 82)

Turkish sentence-final/non-final *bile* ‘already/even’:

- (31) a. Ayşe hapşır-dı **bile**.
 Aisha sneeze-pst already
 ‘Aisha (has) already sneezed.’ (Taylan, 2002: p. 118)
- b. Ayşe **bile** o kitabı oku-du.
 Aisha even that book-acc read-pst
 ‘Even Aisha read that book.’ (Taylan, 2002: p. 118)

As it lacking an additive presupposition, let’s try to give *already* just a scalar presupposition.

6 The proposal: scalar *already*

(32) Rough sketch of the proposal to come:

- a. Mary is already in New York (at t_{now}).
- b. $\forall t' > t_{now} \in C [(Mary \text{ is in New York at } t_{now}) <_{likely} (Mary \text{ was in New York at } t')]$ scalar presupposition
 \approx For Mary to be in New York now is less likely than for her to be in New York at a later time.
- c. Mary is in New York (now). assertion

⁶“Purists insist that these words are stressed differently, but many speakers pronounce them the same” (Batchelor and Pountain, 2005).

6.1 Before we begin: our technical setup

I assume at least the following setup based on Heim and Kratzer (1998):

- D_t is the set of all times (i.e. time intervals) t .
- D_v is the set of all event(ualitie)s e .
- D_s is the set of all possible worlds w .
- $\tau_{\langle v, i \rangle}(e)$ (read as “the runtime of e ”) is a function which returns the runtime of the event e .
- $f_{\langle s, st \rangle}$ is a function from worlds to modal bases (i.e. sets of worlds).
- $[t, t']$ (read as “the interval from t to t' ”) is a function which returns the smallest t'' which includes t and t' .
- $<_{\text{likely}_{f(w)}}$ (read as “is less likely than”) is a comparison function of two propositions.

A note about notation:

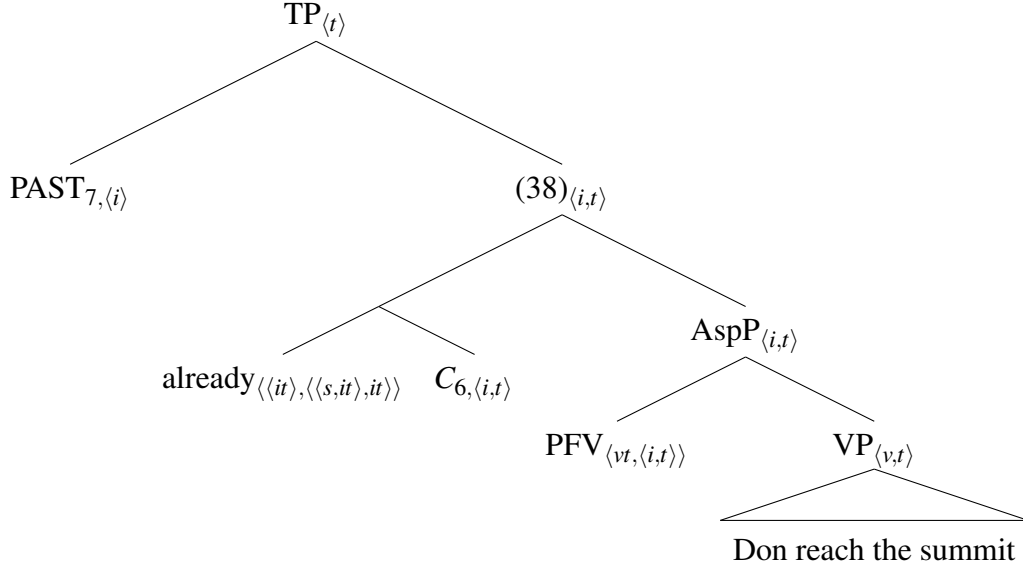
- In the general case, I use t to refer to time variables.
- I use t_{\dots} with a non-numerical subscript to refer to times in the object language.

For the sake of the derivation, I adopt a pronominal view of deictic tense (e.g. Kratzer 1998, Romero 2014):

- $\llbracket \text{PRES} \rrbracket$ is a pronoun referring to the reference time and introducing the presupposition that the reference time overlaps the utterance time.
- $\llbracket \text{PAST} \rrbracket$ is also a pronoun referring to the reference time and introducing the presupposition that the reference time precedes the utterance time.

For AspP, I adopt with slight modifications the event semantics of Beck and von Stechow (2015), in which the event is existentially bound within aspect. I present a derivation for a perfective achievement, which, as we can recall, neither additive presupposition could account for.

6.2 A sample derivation



(33) $\llbracket \text{Don reach the summit} \rrbracket^{c,g,w} = \lambda e. e \text{ is an event of Don reaching the summit in } w$

(34) $\llbracket \text{IMP} \rrbracket^{c,g,w} = \lambda P_{\langle v,t \rangle} \lambda t. \exists e[t \subseteq \tau(e) \wedge P(e) = 1]$

(35) $\llbracket \text{PFV} \rrbracket^{c,g,w} = \lambda P_{\langle v,t \rangle} \lambda t. \exists e[\tau(e) \subseteq t \wedge P(e) = 1]$

Since Intensional Functional Application (von Fintel and Heim, 2011) applies at the node labeled (38), we need to intensionalize AspP.

(36) $\llbracket \text{AspP} \rrbracket_{\phi}^{c,g} = \llbracket \text{PFV Don reach the summit} \rrbracket_{\phi}^{c,g} = \lambda w \lambda t. \exists e[\tau(e) \subseteq t \wedge e \text{ is an event of Don reaching the summit in } w]$

(37) $\llbracket \text{already} \rrbracket^{c,g,w} = \lambda C_{\langle it \rangle} \lambda P_{\langle s,it \rangle} \lambda t :$ [revised below]
 $\forall t' \in C[t' > t \rightarrow [\lambda w' P(w')(t) <_{\text{likely}_{fc}(w)} \lambda w'' P(w'')(t')]].$ (scalar) presupposition
 $P(w)(t) = 1$ assertion

Let us now compose $\llbracket \text{already} \rrbracket^{c,g,w}$ with its domain restrictor C_6 given as $\{t_{9am}, t_{10am}\}$, and AspP (36).

(38) $\llbracket [\text{already } C_6] \text{ AspP} \rrbracket^{c,g,w} = \lambda t : \forall t' \in C_6[t' > t \rightarrow [\lambda w' \exists e[\tau(e) \subseteq t \wedge e \text{ is an event of Don reaching the summit in } w'] <_{\text{likely}_{fc}(w)} [\text{exh}_{\{t,t'\}} \lambda w'' \exists e[\tau(e) \subseteq t' \wedge e \text{ is an event of Don reaching the summit in } w'']]]].$
 $\exists e[\tau(e) \subseteq t \wedge e \text{ is an event of Don reaching the summit in } w]$

I now compose (38) with the tense pronoun $\llbracket \text{PAST}_7 \rrbracket^{c,g,w}$ and give its paraphrase. Some more assumptions:

- The context c provides t_c as the utterance time.
- The assignment function g assigns the reference time t_{ref} to the numerical index 7.
- $t_c = t_{10am}$ and $t_{ref} = t_{9am}$.

$$(39) \quad \llbracket \text{PAST}_7 \rrbracket^{c,g,w} \text{ is defined only if } g(7) < t_c \\ \text{and if defined, } \llbracket \text{PAST}_7 \rrbracket^{c,g,w} = g(7) = t_{ref}.$$

As we'll need it soon, let's also define PRES.

$$(40) \quad \llbracket \text{PRES}_9 \rrbracket^{c,g,w} \text{ is defined only if } g(9) \circ t_c \\ \text{and if defined, } \llbracket \text{PRES}_9 \rrbracket^{c,g,w} = g(9) = t_{ref}.$$

Let us collapse quantification over C_6 , as the only element of C_6 after t_{ref} is t_{10am} .

$$(41) \quad \llbracket \text{PAST}_7 \llbracket [\text{already } C_6] \text{ AspP} \rrbracket \rrbracket^{c,g,w} \text{ is defined only if} \\ [\lambda w' \exists e [\tau(e) \subseteq t_{9am} \wedge e \text{ is an event of Don reaching the summit in } w'] <_{\text{likely}_{fc}(w)} \\ [\text{exh}_{\{t,t'\}} \lambda w'' \exists e [\tau(e) \subseteq t_{10am} \wedge e \text{ is an event of Don reaching the summit in } w'']] \wedge \\ t_{ref} < t_c \\ \text{and if defined, } \llbracket \text{PAST}_7 \llbracket [\text{already } C_6] \text{ AspP} \rrbracket \rrbracket^{c,g,w} = 1 \text{ if} \\ \exists e [\tau(e) \subseteq t_{9am} \wedge e \text{ is an event of Don reaching the summit in } w].$$

I give a paraphrase of (41) (ignoring the tense presupposition):

- (42) Don already reached the summit.
- presupposition: For there to be an event [whose runtime is included within 9am] of Don reaching the summit is less likely than for there to be an event [whose runtime is included within 10am] of Don reaching the summit.
 \approx [For Don to reach the summit at 9am] is less likely than [for him to reach the summit at 10am].
 - assertion: There is an event whose runtime is included within 9am of Don reaching the summit.
 \approx Don reached the summit at 9am.

We've reached a sensible meaning for (42), demonstrating that this account can cover instantaneous eventualities which positive additivity cannot.

6.3 The problem with the perfect

Without going through the derivation, let's give a semantics to an example in which *already* combines with the present perfect.

- Let's embed the meaning of the perfect inside VP, transforming it into a stative corresponding to the perfect result state:

(43) $\llbracket \text{Don have reach the summit} \rrbracket^{c,g,w} = \lambda e. e$ is an event (result state) of Don having reached the summit in w

- Therefore, we'll need IMP instead of PFV.
- We'll set the domain restrictor C_8 as $\{t_{now}, t_{tonight}\}$, and $t_{ref} = t_{now}$.

(44) $\llbracket \text{PRES}_9 \llbracket [\text{already } C_8] [\text{Don have reached the summit}] \rrbracket \rrbracket^{c,g,w}$ is defined only if
 $[\lambda w' \exists e [t_{now} \subseteq \tau(e) \wedge e \text{ is an event of Don having reached the summit in } w']] <_{likely_{f_c(w)}} [\lambda w'' \exists e [t_{tonight} \subseteq \tau(e) \wedge e \text{ is an event of Don having reached the summit in } w'']]$ and $t_{ref} \circ t_c$
 and if defined, $\llbracket \text{PAST}_7 \llbracket [\text{already } C_6] \text{ AspP} \rrbracket \rrbracket^{c,g,w} = 1$ if
 $\exists e [\tau(e) \subseteq t_{9am} \wedge e \text{ is an event of Don having reached the summit in } w]$.

- (45) Don has already reached the summit.
- presupposition: For there to be an event [whose runtime includes now] of Don have reached the summit is less likely than for there to be an event [whose runtime includes tonight] of Don having reached the summit.
 \approx [For Don to have reached the summit now] is less likely than [for him to have reached the summit tonight].
 - assertion: There is an event whose runtime includes now of Don having reached the summit.
 \approx Don has reached the summit (now).

We've run into a problem:

- The lesser-side (LHS) proposition p of (45a) entails the greater-side (RHS) proposition q .
- [For Don to have reached the summit (by) now] entails [for Don to have reached the summit (by) tonight].
- If p entails q , it follows that q is (equally or) more likely than p , and the scalar presupposition would near-trivial and hard to falsify.

6.4 The solution: exhaustification

In order to get rid of the entailment relation, we should replace q with $q \setminus p$. We can use the $\text{exh}(\text{austivity})$ operator⁷ to do this, revising $\llbracket \text{already} \rrbracket^{c,g,w}$ in (37):

$$(46) \quad \llbracket \text{already} \rrbracket^{c,g,w} = \lambda C_{\langle it \rangle} \lambda P_{\langle s, it \rangle} \lambda t : \quad \text{[final version]} \\ \forall t' \in C[t' > t \rightarrow [\lambda w' P(w')(t) <_{\text{likely}_{fc(w)}} \text{exh}_{\{t, t'\}} \lambda w'' P(w'')(t')]]. \quad \text{(scalar) presupposition} \\ P(w)(t) = 1 \quad \text{assertion}$$

Let's go back and revise (45):

- (47) Don has already reached the summit.
- a. presupposition: For there to be an event [whose runtime includes now] of Don have reached the summit is less likely than [[for there to be an event [whose runtime includes tonight] of Don having reached the summit] and **not** [for there to be an event [whose runtime includes now] of Don having reached the summit]].
 \approx [For Don to have reached the summit (by) now] is less likely than [for him to have reached the summit (by) tonight but not now].
 \approx [For Don to have reached the summit (by) now] is less likely than [for him to reach the summit between now and tonight].
 - b. assertion: There is an event whose runtime includes now of Don having reached the summit.
 \approx Don has reached the summit (now).

This gets us a plausible presupposition for (47), which roughly conveys that Don is more likely to reach the summit after now than before now.

6.5 Coverage of the data

We can now demonstrate that this account has better empirical coverage than the two previous accounts:

- Through the example in the derivation, we have already demonstrated that this account can handle counterexamples to positive additivity, e.g. instantaneous eventualities such as perfective achievements.

⁷For the purposes here, exh is an operator that negates all non-entailed alternatives.

- Let's check if we can cover two counterexamples to negative additivity:

(48) *Of a baby receiving an inheritance at birth:*

She is already rich. [(24a) repeated]

- The scalar presupposition conveys that it is less likely that the baby is rich at birth than at later times in the context set; this is sensible and predicts felicity.

(49) *Context: John is not married and I doubt he will ever get married.* [(26) repeated]

#If he were already married, he would be living in the suburbs now.

(50) John isn't already married. [(27) repeated]

#Men like him don't ever get married.

- In both (49) and (50), the scalar presupposition of *already* conveys that it is less likely for John to be married now than at a future time.

→ This conflicts with the contextual information in which John's future marriedness is no more likely.

6.6 Back to modality

“Possibilities decreas[e] over time” (Condoravdi, 2002):

(51) * He may already win. [21 repeated]

compare: He may still win.

- The scalar presupposition would state that the possibility of him winning now is less likely⁸ now than the possibility of him winning in the future.

→ This goes against “possibilities decreasing over time”, correctly predicting infelicity.

6.7 Two objections, one response

Two possible objections:

1. I don't account for the putative inference in (52) below.
2. I don't derive absolute counter-expectation per se (i.e. that the greater-side proposition is expected), but just a relative expectation ('likelihood').

⁸Should *<likely* and *may* share a modal base here?

- (52) Was Mary already in New York on Monday?
at issue: \rightsquigarrow Mary was in New York on a later day.

I would have to say that the inference in (52) is pragmatically strengthening from the greater likelihood that Mary would be in New York on a day later than Monday. In fact, the instantiation of the prejacent at some (later) time does not always arise:

- (53) *I hike up a mountain with a group of hikers including Sally and Tom, and we decided that we should hike at our own pace and turn around whenever we want, or continue up to the summit and descend via a different, less steep trail. Sally will keep track of everyone's status via a GPS tracker. The trail goes from a forested subalpine zone to the treeless alpine zone. I reach the alpine zone at noon and, gaining visibility of my surroundings, don't see Tom. Half an hour later, I reach the summit, and I still don't see Tom. I wait for Sally to reach the summit and ask her:*
Was Tom already at the summit at noon?

- This example does not commit to Tom ever reaching the summit.

→ No instantiation of the prejacent at any time.

- It is not expected that Tom be at the summit at a later time, but just that this is more likely than him being there now.

7 Conclusion

- I showed that both previous camps of accounts for *already*, positive and negative additivity, were problematic.
- I proposed a new semantics for *already* in which its presupposition is scalar (in the style of *even*) and not additive.
- Such a proposal necessitates using exhaustivity as a tool to prevent near-triviality.
- I showed that this proposal accounts for counterexamples to both previous camps and introduces no new problems.

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An open question: the link between additivity and scalarity

The additive and scalar presuppositions are stated independently of each other. However, the positive additive proposition tends to be related to that on the greater side of the $<_{likely}$ comparator. In other words, no such following particle *even'* has been proposed:

- (54) a. Even' Mary_F is in New York.
- b. $\exists x \neq \text{'Mary'} \in C [x \text{ is in NY}]$ additive presupposition
 \approx Someone other than Mary is in New York.
- c. $\forall x \neq \text{'Mary'} \in C [(x \text{ is in NY}) <_{likely} (\text{Mary is in NY})]$ scalar presupposition
 \approx For every person x other than Mary, for x to be in New York is less likely than for Mary to be in New York.
- d. Mary is in New York. assertion

Without positing additional constraints, such a relation cannot be taken for granted. Also, there seems to be widespread homophony between putative additive and scalar particles (e.g. Hindi *bhi* ‘even’/‘too’).