

Problems for a uniform analysis of *ancora* in Italian

Abstract:

The Italian additive particle *ancora* has uses that can be paraphrased by *again* and *still* in English. Ippolito (2004, 2007) offers a uniform analysis of *still* and *again* in English, which could be the foundation for a uniform analysis of the two uses of *ancora* in Italian. Her core idea is that *still* and *again* have the same presupposition about a (particular) past eventuality and differ only in the assertion such that *still* asserts that the same eventuality is still happening at the reference time while *again* asserts that another eventuality is happening at the reference time. We argue that Ippolito's analysis faces serious challenges. Firstly, her analysis of *again* fails to entail the 'discontinuity inference' that the past eventuality came to an end before the reference time. Secondly her analysis of *still* is not general enough to account for examples where the presupposition and assertion are about different eventualities. Through the critical discussion, we will elucidate the specific issues that need to be solved in order to achieve a uniform analysis of the different uses of *ancora*.

Keywords: *ancora*, *still*, *again*, presupposition, additivity, semantics.

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1. Introduction

The Italian additive particle *ancora* has uses that can be paraphrased by *again* and *still* in English, as illustrated by (1) and (2).

- (1) Maria sta parlando ancora con Gianni.
Maria is still talking to Gianni.
- (2) Maria ha parlato ancora con Gianni.
Maria has talked to Gianni again.

For (1), the inference attributable to *ancora* is that Maria's talking to Gianni has already begun before the time of the utterance. In the case of (2), it is that Mary had talked to Gianni at least once before, with (2) as a whole entailing that she talked to Gianni the second time.¹ As we will see with data later, these inferences are presuppositional in nature.

Formal semantic analyses of *still* and *again* can already be found in the literature (e.g. for *still*, König 1977, Löbner 1989, König 1991, Michaelis 1993, Mittwoch 1993, Krifka, 2000, Ippolito 2004, 2007, Greenberg 2009, Tellings 2017, Beck 2020; for *again*, Heim 1990, Ippolito 2004, 2007, Kripke 2009, among others), but these two particles have rarely been discussed together. The above observation that one and the same word, *ancora*, is used to convey these two meanings in Italian, however, calls for a uniform analysis whereby they share a semantic core. Ippolito (2004, 2007) offers an analysis of *still* and *again* that can be used to achieve a uniform analysis. Putting the details aside for now, her analysis is built on the intuition that both *still* and *again* trigger an additive presupposition that an eventuality — a state or event — of the same kind has already taken place before the 'reference time' — the time denoted by the tense— and their difference boils down to that *still* is about one eventuality, while *again* is about two distinct eventualities. Ippolito's analysis of *still* in particular has been quite influential (cf. Greenberg 2009 and Tellings 2017), but we will point out that it faces serious challenges.

Our contribution to the debate consists in putting forward the desiderata for proper analyses of *still* and *again*, and thereby clarifying what specific difficulties they pose in achieving an empirically adequate uniform theory. We will propose a specific semantics for *again*, but we argue that there is currently no empirically adequate analysis of *still*, with its 'continuity inference' being a major theoretical obstacle.

The present paper is structured as follows. In Section 2, we will examine the main empirical properties of the particle *ancora* in Italian. Section 3 will critically review Ippolito's (2004, 2007) influential analysis. In Section 4, we will highlight the issue of the continuity inference of (aspectual) *still*, and end the paper with concluding remarks in Section 5.

2. The different uses of *ancora*

2.1. Presuppositionality and polarity sensitivity

It can be easily demonstrated that *ancora* triggers presuppositional inferences. For example, the additive inferences we observed for (1) and (2) survive under negative and interrogative operators, as in (3)–(4).

- (3) Dubito che Maria stia ancora parlando con Gianni.

¹ The same meaning as (2) can be expressed by *di nuovo* or *nuovamente*, and some (though not all) speakers seem to prefer these options. In contrast, the meaning of (1) cannot be expressed by *di nuovo* or *nuovamente*. This suggests that we are dealing with lexical ambiguity rather than underspecification of meaning. We will see more evidence for this later.

I doubt that Maria is still talking to Gianni.

- (4) Dubito che Maria abbia parlato ancora con Gianni.
I doubt that Maria has talked to Gianni again.

Note that (3) and (4) contain a negative attitude predicate (*dubito*) in a higher tensed clause. With clause-mate negation, as in (5), it might look as if *ancora* has a reading that is paraphrased by *yet* in English, a (strong) negative polarity item (NPI).

- (5) Maria non sta ancora parlando con Gianni.
Mary is not talking to Gianni yet. = Mary is still not talking to Gianni.

However, to account for (5), we need not postulate a different use of *ancora* that is separate from the ‘still’-use, because the interpretation of (5) is paraphrased equally well with *still* taking scope over *not*. Certainly, the word order is one where the negation precedes *ancora*, but is potentially deceptive, because the position of the negation *non*, being a verbal proclitic, is fixed in Italian, and can take scope below a scopal item linearly following it, and *ancora* can well be one of them. Furthermore we will see immediately below that there is independent reason to think that *ancora* does not have a third ‘yet’-use.

It should also be pointed out that regardless of whether one assumes a ‘yet’-use or not, it needs to be assumed that the ‘still’-use of *ancora* is a positive polarity item (PPI), similarly to English *still*, because it would otherwise be wrongly predicted that (5) has a reading that presupposes the same thing as (1). Certainly, (3) does have a reading that presupposes exactly this, but this observation is in harmony with the PPI-hood of the ‘still’-use of *ancora*, as PPIs can generally take scope below non-clause-mate negative operators (Szabolcsi 2004, Nicolae 2017, Homer 2021, among others). Furthermore, the fact that (3) only has this reading could be taken as evidence against the existence of the ‘yet’-use, since if it existed (and was licensed by *dubito*), the sentence is wrongly predicted to have a reading presupposing that Maria was *not* talking to Gianni before the utterance time.

Now, we observe that the ‘again’-use of *ancora* is not a PPI, as evidenced by the availability of a reading of (6) that presupposes that Maria has talked to Gianni before.

- (6) Maria non ha parlato ancora con Gianni.
Maria has not talked to Gianni again.

While this example seems to prefer the reading where *ancora* takes scope below *non*, which presupposes that Maria talked to Gianni before, the other scopal reading, which presupposes that Maria did *not* talk to Gianni before, is available with a postposed *ancora*, as in (7), which is scopally ambiguous.

- (7) Maria non ha parlato con Gianni ancora.
Maria has not talked to Gianni again.

To be complete, we observe that with the word order in (8), the ‘still’-use of *ancora* is the most prominent reading, unlike (6) and (7), which are compatible with both uses.

- (8) Maria non ha ancora parlato con Gianni.
Maria still has not talked to Gianni.

The fact that the ‘still’-use is a PPI, while the ‘again’-use is not, strongly suggests that *ancora* is lexically ambiguous between the ‘still’- and ‘again’-uses.

2.2. Aspectual restrictions

The ‘still’-use and ‘again’-use of *ancora* show different aspectual restrictions, just like *still* and *again* in English. In English, *still* is only compatible with durative predicates, as in (9) vs. (10).²

- (9) a. Maria is still talking to Gianni.
b. Eva is still in New York.

- (10) a. #Maria still ate a hamburger.
b. #Maria still talked to Gianni.

On the other hand, *again* can combine with punctual predicates like *talk to Gianni* and *ate a hamburger* as well as with durative predicates like *be in New York*, as in (11) and (12).

- (11) a. Maria is talking to Gianni again.
b. Maria is in New York again.

- (12) a. Maria talked to Gianni again.
b. Maria ate a hamburger again.

These observations carry over to the two uses of *ancora* in Italian (as well as to *di nuovo/nuovamente*; data omitted here). Let us first examine the ‘still’-use. The contrast in acceptability between (13) and (14) demonstrates that the ‘still’-use is incompatible with punctual predicates. As remarked above, in the word order of these examples, the ‘still’-use is the most prominent reading.

- (13) a. Maria sta ancora parlando con Gianni.
Maria is still talking to Gianni.
b. Eva è ancora a New York.
Eva is still in New York.

- (14) a. ?Maria ha ancora mangiato una pizza.
#Maria has still eaten a pizza.
b. ?Maria ha ancora parlato con Gianni.
#Maria has still talked to Gianni.

An observation that will be important later is that inserting negation in (14), as in (15), drastically improves the acceptability.³

- (15) a. Maria non ha ancora mangiato una pizza.
Maria still has not eaten a pizza.
b. Maria non ha ancora parlato con Gianni.
Maria still has not talked to Gianni.

We will claim later that this is because the negative predicate of not having eaten a pizza, unlike its positive counterpart, is durative.

Turning now to the ‘again’-use of *ancora*, it is compatible with both durative and punctual predicates, as illustrated by (16) and (17) similarly to English *still*.

² (10) is felicitous on a concessive reading of *still*. The same remark does not apply to the Italian counterpart in (13), which lacks a concessive reading.

³ Note that inserting the negation in the English sentence in (10) does not make the sentence fully acceptable, unless it receives a concessive reading, while its perfect counterpart is much more acceptable. We will come back to this point in fn. 6.

- (16) a. Maria sta mangiando ancora una pizza.
Maria is eating a pizza again.
b. Eva è a New York ancora.
Eva is in New York again.

- (17) a. Maria ha mangiato ancora una pizza.
Maria ate a pizza again.
b. Maria ha parlato ancora con Gianni.
Maria talked to Gianni again.

2.3 Other uses of *ancora*

Although our main empirical focus in this paper is the ‘still’- and ‘again’-uses of *ancora* as exemplified by the examples above, we would like to briefly remark at this juncture that *ancora* has other uses as well.

Firstly, it is known that *still* in English and *noch* in German have several different uses (König 1977, Löbner 1989, Michaelis 1993, Krifka 2000, Ippolito 2004, 2007, Beck 2020). We observe that *ancora* in Italian exhibits a similar range of readings in its ‘still’-use, if not identical. What we have been mainly describing as the ‘still’-use of *ancora* so far corresponds to the so-called aspectual (or continuity) reading of *still* in the literature. In addition to this reading, *still* has a concessive reading, but *ancora* lacks this use, as illustrated by the infelicity of (18).

- (18) #Abbiamo fatto del nostro meglio per convincere Patrick a non andare in Slovenia, ma alla fine lui ancora ci è andato.
We did our best to persuade Patrick not to go to Slovenia, but he still did in the end.

Like *still*, *ancora* can receive a so-called marginality reading.

- (19) a. Se vai a Pola, oltre il confine con la Slovenia, la gente parla ancora Italiano.
If you drive to Pola, beyond the border with Slovenia, people still speak Italian
b. La Smart turbo è una macchina molto veloce, ma è ancora un’utilitaria.
Smart turbo is a very fast car but it is still a utility car.

In addition, *ancora* has a use that *still* and *again* in English do not display, an additive reading in the nominal domain. This use seems to be focus sensitive.

- (20) a. Silvia berrà ~~una vodka e~~ ancora una birra.
Silvia will drink vodka and one more beer.
b. Silvia berrà ~~una vodka e~~, ancora, una birra.
Silvia will drink vodka and one more beer.

To be felicitous, the use of *ancora* in (20a) requires a previous event of Silvia drinking a beer, and that in (20b) a previous event of Silvia drinking something else (which could be vodka). What is particularly interesting about this observation is that the semantic scope of *ancora* is broader than what its surface position suggests and includes the verb *berrà* ‘will drink’ (see Greenberg 2012 and Beck 2020 for related discussion).

Another such use that is absent with *still* in English but *ancora* has is the comparative use. As the translation in (21) indicates, English uses *even* to express the same meaning.

- (21) Giovanna è ancora più simpatica di quanto mi ricordassi!
Giovanna is even nicer than I remember.

Ultimately, we would like to achieve a uniform analysis of all these different uses of *ancora*, but in the present article, we will exclusively focus on the ‘(aspectual) still’- and ‘again’-uses.

3. Ippolito’s (2004, 2007) uniform analysis of *still* and *again*

In this section, we will critically discuss Ippolito’s (2004, 2007) uniform analysis of *still* and *again* in English, which has also been adopted by others (e.g., Greenberg 2009, Tellings 2017). It does have certain attractive features, among which is the fact that it postulates a common semantic core for these two particles. When applied to Italian, therefore, it will provide a natural explanation as to why the same word, *ancora*, is used to express the two meanings. However, Ippolito’s analysis faces some significant challenges. In particular, we will argue that her analysis of *again* requires a certain amendment, which ultimately forces us to renounce the elegant uniformity between *still* and *again*. Furthermore, we will claim that the core idea behind her analysis of *still* simply cannot be upheld.

3.1 Aspect and tense in event semantics

Ippolito’s idea is that both *still* and *again* introduce additive presuppositions about eventualities, and their difference is simply whether the presuppositions are about the same eventuality as what the assertion mentions or a different one. To flesh out this idea, she makes use of event semantics in which a verb phrase denotes a property of eventualities, and an aspect relates an eventuality and a time interval without closing the event argument of the verb phrase, as in (22) (for an imperfective and perfective AspP, respectively). For the sake of simplicity, we will ignore possible worlds.

- (22) a. $\llbracket \llbracket \text{AspP IMP } \llbracket \text{VP Eva be in NY} \rrbracket \rrbracket^{c,g}$
 $= \lambda e_v. \lambda t_i. [\llbracket \text{Eva be in NY} \rrbracket^{c,g} (e) \wedge t_i \subseteq \text{time}(e)]$
 b. $\llbracket \llbracket \text{AspP PERF } \llbracket \text{VP Maria arrive in NY} \rrbracket \rrbracket^{c,g}$
 $= \lambda e_v. \lambda t_i. [\llbracket \text{Maria arrive in NY} \rrbracket^{c,g} (e) \wedge \text{time}(e) \subseteq t_i]$

The eventuality argument of an AspP will be saturated either by an operator that performs Existential Closure, denoted by ‘ \exists ’, or an item like *still*. After that comes a tense node, which will saturate the remaining temporal argument. For ease of exposition, let us assume a simple referential theory of tense, but nothing crucial hinges on it. The present tense denotes the time of the utterance context c , denoted by c_t .

- (23) $\llbracket \text{Pres} \rrbracket^{c,g} = c_t$

The past tense is analyzed as a temporal pronoun bearing an index with a presupposition that its referent precedes c_t . For convenience, we represent the index as a separate node. Below $<$ denotes the temporal precedence relation.

- (24) a. $[\text{Past } t_i] \in \text{dom}(\llbracket \rrbracket^{c,g}) \Leftrightarrow \llbracket t_i \rrbracket^{c,g} < c_t \Leftrightarrow g(t_i) < c_t$
 b. If so, $\llbracket [\text{Past } t_i] \rrbracket^{c,g} = g(t_i)$

Here are some example sentences and their denotations.

- (25) $\llbracket \text{Pres } [\exists \llbracket \text{AspP IMP } \llbracket \text{VP Eva be in NY} \rrbracket \rrbracket] \rrbracket^{c,g}$
 $\Leftrightarrow \exists e [\llbracket \text{Eva be in NY} \rrbracket^{c,g} (e) \wedge c_t \subseteq \text{time}(e)]$
- (26) a. $[_T \text{Past } t_3] [\exists \llbracket \text{AspP PERF } \llbracket \text{VP Maria arrive in NY} \rrbracket \rrbracket] \in \text{dom}(\llbracket \rrbracket^{c,g})$
 $\Leftrightarrow g(t_3) < c_t$

- b. If so, $\llbracket [\text{T Past } t_i] [\exists [\text{AspP PERF } [\text{VP Maria arrive in NY }]]] \rrbracket^{c,g}$
 $\Leftrightarrow \exists e [\llbracket \text{Maria arrive in NY } \rrbracket^{c,g} (e) \wedge \text{time}(e) \subseteq g(t_3)]$

3.2 Again

Ippolito proposes the following denotation for *again*, assuming that the first argument of *again* is a covert eventuality variable represented, e_i .⁴

- (27) a. $\text{T } \llbracket [\text{again } e_i] \text{ AspP } \rrbracket \in \text{dom}(\llbracket \rrbracket^{c,g}) \Leftrightarrow \exists t' < \llbracket \text{T } \rrbracket^{c,g} [\llbracket \text{AspP } \rrbracket^{c,g} (g(e_i))(t')]$
 b. If so, $\llbracket \text{T } \llbracket [\text{again } e_i] \text{ AspP } \rrbracket \rrbracket^{c,g} \Leftrightarrow \exists e' [\llbracket \text{AspP } \rrbracket^{c,g} (e')(\llbracket \text{T } \rrbracket^{c,g})]$

(27a) is the presupposition of the sentence containing *again* that there is a time t' before the reference time denoted at which the eventuality the covert eventuality variable e_i refers to has the property denoted by AspP. We will discuss the role of e_i shortly, but essentially this presupposition ensures that there is a past eventuality that satisfies AspP. (27b) is the assertion of the sentence, that there is an eventuality e' that has the property denoted by AspP at the time of the tense node.

Notice that according to this analysis, *again* does not change the assertion in any significant way, as its assertive meaning is simply identical to what \exists would derive, e.g.:

- (28) a. $[\text{T Past } t_3] \llbracket [\text{again } e_5] [\text{AspP PERF } [\text{VP Maria arrive in NY }]]] \rrbracket \in \text{dom}(\llbracket \rrbracket^{c,g})$
 $\Leftrightarrow g(t_3) < c_t \wedge \exists t' < g(t_3) [\llbracket \text{Maria arrive in NY } \rrbracket^{c,g} (g(e_5)) \wedge \text{time}(g(e_5)) \subseteq g(t_3)]$
 b. If so, $\llbracket [\text{T Past } t_3] \llbracket [\text{again } e_5] [\text{AspP PERF } [\text{VP Maria arrive in NY }]]] \rrbracket \rrbracket^{c,g}$
 $\Leftrightarrow \exists e [\llbracket \text{Maria arrive in NY } \rrbracket^{c,g} (e) \wedge \text{time}(e) \subseteq g(t_3)]$

The presupposition (28a) states that e_5 denotes an event of Maria arriving in NY before the time denoted by the past time variable t_3 . Ippolito assumes that this eventuality variable e_5 denotes some contextually salient eventuality, in order to capture the observation that the meaning of *again* can be discourse anaphoric (cf. Soames 1989, Heim 1990, and Kripke 2009, among others). Specifically, Heim observes that while (29a) is neutral with respect to which birthday comes first, adding *again* to the sentence as in (29b) will end up with an entailment that John's birthday precedes Mary's birthday.

- (29) a. We will have pizza on John's birthday. So we shouldn't have pizza on Mary's birthday.
 b. We will have pizza on John's birthday. So we shouldn't have pizza again on Mary's birthday.

This is taken as showing that the presupposition of *again* is anaphoric and in this example the natural interpretation is one where the anaphora is resolved to the event of having pizza at John's birthday.

This analysis, however, requires further refinements, because it makes the wrong predictions about imperfective cases. Consider the following example.

- (30) a. $[\text{T Pres }] \llbracket [\text{again } e_5] [\text{AspP IMPERF } [\text{VP Eva be in NY }]]] \rrbracket \in \text{dom}(\llbracket \rrbracket^{c,g})$
 $\Leftrightarrow \exists t' < c_t [\llbracket \text{Eva be in NY } \rrbracket^{c,g} (g(e_5)) \wedge t' \subseteq \text{time}(g(e_5))]$
 b. If so, $\llbracket [\text{T Pres }] \llbracket [\text{again } e_5] [\text{AspP IMPERF } [\text{VP Eva be in NY }]]] \rrbracket \rrbracket^{c,g}$
 $\Leftrightarrow \exists e [\llbracket \text{Eva be in NY } \rrbracket^{c,g} (e) \wedge c_t \subseteq \text{time}(e)]$

⁴ For both *again* and *still*, Ippolito (2007) assumes that there is a covert temporal variable bound by the tense node as well, which she assumes bears a focus feature (while Ippolito 2004 assume that the tense node is focused). Focus, however, is not crucial in the discussion to follow, so we will ignore it here to simplify the exposition.

As in the previous example, *again* does not affect the assertion, so (30b) is identical to (25) above and the presupposition states that the covert eventuality variable e_5 denotes a state of Eva being in New York and its run time contains some back time interval t' .

We argue that this presupposition is too weak. As stated above, Ippolito assumes that e_5 is anaphoric to some contextually salient eventuality. It can be additionally assumed that the existential quantification over eventualities in the assertion is subject to the Novelty Condition such that the new eventuality be distinct from what e_5 Refers to. However, even with this condition, this analysis wrongly predicts that the presupposition will be satisfied and the assertion will be true in the following scenario, contrary to intuition: Suppose that Eva came to New York for the first time in her life two days ago, and she has been in New York since then as she now lives there. That this scenario intuitively does not satisfy the presupposition of the sentence is illustrated more acutely by the infelicity of the following example.

- (31) Eva came to New York two days ago for the first time in her life. She spent the rest of the first day in Soho, where she had arranged a temporary apartment. On the second day, she was in other parts of New York. Today, #she is in New York again.

Intuitively, the presupposition failure is due to the fact that the use of *again* implies that Eva has left New York at least once since her arrival, which contradicts what is said in other parts of the scenario. Ippolito's analysis does not capture this, because the assertion will be true with there being an infinitely many states of Eva being in New York that contains the utterance time c_t . The presupposition will also be satisfied, because in the scenario, we can find a previous mention of an eventuality of Eva being in New York. In fact, there are two: one about the first day and one about the second day.

The gist problem is that even though Eva has been in New York continuously, we can find two sub-states of that long stay such that one satisfies the presupposition and the other one verifies the assertion. Note that this problem would not arise with punctual events because it is guaranteed that between any two distinct punctual events of the same kind there is an interval, however small, in which there is no punctual event of the same kind, as punctual events cannot be continuous. Ippolito's analysis works for punctual events for this reason but does not work for eventualities that may be continuous and contain sub-eventualities of the same kind.

Let us consider a possible way of fixing Ippolito's analysis. Since the observed judgment of the problematic scenario in (31) is infelicity, rather than falsity, we could consider strengthening the presupposition, e.g. by assuming that the presupposition of *again* actually implies 'discontinuity', i.e., that the past eventuality of the same kind as the assertion terminated before the reference time.⁵ This amounts to requiring 'perfectivity' in the presupposition that the maximal eventuality that contains the referent of e_5 that satisfies the event predicate and is temporally contiguous with the referent of e_5 has terminated before the reference time, as in (32). Here, $\sup()$ is the supremum operator with respect to the part-whole relation \sqsubseteq over eventualities.

- (32) a. $[[\text{Pres}]] \llbracket [\text{again } e_5] \llbracket [\text{AspP IMPERF} [\text{VP Eva be in NY}]] \rrbracket \rrbracket \in \text{dom}(\llbracket \llbracket \rrbracket^{c,g})$
 $\Leftrightarrow \exists t' < c_t \llbracket \llbracket [\text{Eva be in NY}] \rrbracket^{c,g} (g(e_5)) \wedge t' \subseteq \text{time}(g(e_5))$
 $\wedge \text{time}(\sup\{e \mid g(e_5) \sqsubseteq e \wedge \exists t'' \llbracket \llbracket [\text{Eva be in NY}] \rrbracket^{c,g} (e) \wedge t'' \subseteq \text{time}(e)\}) < c_t$
 b. If so, $\llbracket [\text{Pres}]] \llbracket [\text{again } e_5] \llbracket [\text{AspP IMPERF} [\text{VP Eva be in NY}]] \rrbracket \rrbracket \llbracket \llbracket \rrbracket^{c,g}$
 $\Leftrightarrow \exists e \llbracket \llbracket [\text{Eva be in NY}] \rrbracket^{c,g} (e) \wedge c_t \subseteq \text{time}(e)$

⁵ Another analytical possibility is to strengthen the presupposition in competition with *still*. The idea is that whenever one can use *still*, *again* cannot be used. This explains the infelicity we observed above. However, this analysis makes wrong predictions for ignorance contexts: If it is unknown whether the durative predicate holds continuously or not, it should be able to use *again*, given that *still* cannot be used in such a context. The fact is, however, both *still* and *again* are infelicitous in such an ignorance context, suggesting that neither is neutral with respect to (dis)continuity. It also makes wrong predictions for quantificational sentences, but as we will discuss below.

More generally, our modification of Ippolito's analysis is as follows.

- (33) a. $\mathbf{T} [[\text{again } e_i] \text{ AspP}] \in \text{dom}(\llbracket \cdot \rrbracket^{c,g}) \Leftrightarrow \exists t' < \llbracket \mathbf{T} \rrbracket^{c,g} [\llbracket \text{AspP} \rrbracket^{c,g} (g(e_i))(t')]$
 $\wedge \text{time}(\text{sup} \{e \mid g(e_i) \sqsubseteq e \wedge \exists t'' \llbracket \text{AspP} \rrbracket^{c,g} (e)(t'')\}) < \llbracket \mathbf{T} \rrbracket^{c,g}$
 b. If so, $\llbracket \mathbf{T} [[\text{again } e_i] \text{ AspP}] \rrbracket^{c,g} \Leftrightarrow \exists e' \llbracket \text{AspP} \rrbracket^{c,g} (e')(\llbracket \mathbf{T} \rrbracket^{c,g})$

This modification is vacuous in the case of punctual eventualities, as punctual eventualities cease to hold as soon as they happen, vacuously entailing the perfectivity presupposition.

To sum up the discussion, while Ippolito's original analysis of *again* faces an issue, we do not think it cannot be salvaged. However, as we will discuss now, it comes at a price: We will not be able to maintain a completely uniform analysis of *again* and *still*, as the former, but not the latter, encodes discontinuity.

3.3 *Still*

Ippolito proposes that unlike *again*, which existentially quantifies over eventualities in the assertion, both the presupposition and assertion of *still* are about the eventuality denoted by the covert eventuality variable, as in (34).

- (34) a. $\mathbf{T} [[\text{still } e_i] \text{ AspP}] \in \text{dom}(\llbracket \cdot \rrbracket^{c,g}) \Leftrightarrow \exists t' < \llbracket \mathbf{T} \rrbracket^{c,g} [\llbracket \text{AspP} \rrbracket^{c,g} (g(e_i))(t')]$
 b. If so, $\llbracket \mathbf{T} [[\text{still } e_i] \text{ AspP}] \rrbracket^{c,g} \Leftrightarrow \llbracket \text{AspP} \rrbracket^{c,g} (g(e_i))(\llbracket \mathbf{T} \rrbracket^{c,g})$

Ippolito observes that *still* has a similar anaphoric property as *again*. This is illustrated by (35).

- (35) a. Two days ago, Eva was in her office. She is in her office now.
 b. Two days ago, Eva was in her office. She is still in her office now.

(35a) is neutral with respect to whether or not Eva left her office two days ago. (35b), which contains *still*, however, entails that she has never left her office since two days ago. Ippolito explains this observation using the covert eventuality variable, as in the case of *again*. That is, in this example, the covert eventuality variable refers to the eventuality mentioned in the first sentence. Since the assertion says that that same eventuality is still happening at the utterance time, it must be the case that the event has to be continuously running.

This analysis explains the aspectual restriction of *still* discussed in the previous section: If e_i refers to a punctual event, it will be simultaneously presupposed to happen at some time prior to the reference time and asserted to happen at the reference time. This will be a contradiction since the event is punctual by assumption and hence happens only at one time.

Note that this also means that we cannot add the perfectivity presupposition to *still*, which we proposed to add to *again* above to account for its discontinuity inference. If we did, we would end up with a meaning that presupposes that whatever (durative) event e_i refers to terminates before the reference time, but is at the same time asserted to take place at the reference time, which is contradictory.

To summarize the discussion so far, we postulate a perfectivity presupposition for *again*, but not for *still*, whereby giving up on the elegant uniform analysis. In addition, furthermore, we will discuss below two further potential issues of Ippolito's analysis of *again* and *still*.

3.4 The problem of negation

For Ippolito, *again* and *still* have the same presupposition. A problem arises when negation is taken into consideration. Consider (36).

(36) Eva is not at home again.

In this example the scope of *again* is ambiguous relative to the negation. When understood as taking narrow scope, *again* triggers the additive presupposition that Eva was previously at home, and this presupposition projects out through the negation. This will be unproblematic for Ippolito, but crucially, *again* can also be understood as taking scope over the negation, triggering the additive presupposition that Eva was previously *not* at home. This latter interpretation poses a problem for Ippolito's analysis.

According to Ippolito's analysis, the additive presupposition is about the eventuality denoted by the covert eventuality variable, as in (37). To be faithful to Ippolito's original analysis, for now, we ignore for the moment the discontinuity inference.

- (37) a. $[_T \text{ Pres}] [[\text{again } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ Eva be at home }]]]]$
 $\in \text{dom}([\]^{c,g})$
 $\Leftrightarrow \exists t' < c_t \neg [[\text{Eva be at home}]^{c,g} (g(e_5)) \wedge t' \subseteq \text{time}(g(e_5))]$
 b. If so, $[\]^{c,g} [_T \text{ Pres}][[\text{again } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ Eva be at home }]]]]]^{c,g}$
 $\Leftrightarrow \neg \exists e [[\text{Eva be at home}]^{c,g} (e) \wedge c_t \subseteq \text{time}(e)]$

Since *again* does not affect the assertion, (37b) is just the negation of *Eva is at home*, meaning that there is no eventuality of Eva being at home at the utterance time. This is fine, but the presupposition in (37a) is too weak: It only requires that the referent of e_5 be not an eventuality of Eva being at home happening at some time t' prior to the utterance time. In particular, the presupposition will be satisfied as soon as e_5 refers to any eventuality that is not Eva being at home, e.g., Maria being sleepy at church, or Eva's existing. What this means is that the presupposition would be satisfied even if Eva was at home at t' , as long as e_5 referred to some other type of eventuality. Ippolito assumes that e_5 needs to be a contextually salient event, but this will not help us out of this issue. Concretely, the analysis predicts that the first sentence of (38) should be able to satisfy the presupposition of *again* in the second sentence, as it mentions an eventuality that is not Eva's being at home, and the second sentence should not imply that Eva previously was not at home.

(38) Maria was at home, but Eva was not at home again.

An analogous problem arises with *still*. Recall that *still* is a PPI and, in a sentence like (39), it only receives a wide scope reading.

(39) Eva is still not at home.

According to Ippolito's analysis, the presupposition of this sentence is (37a), and the assertion is as in (40).

- (40) a. $[_T \text{ Pres}] [[\text{still } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ Eva be at home }]]]]$
 $\in \text{dom}([\]^{c,g})$
 $\Leftrightarrow \exists t' < c_t \neg [[\text{Eva be at home}]^{c,g} (g(e_5)) \wedge t' \subseteq \text{time}(g(e_5))]$
 b. If so, $[\]^{c,g} [_T \text{ Pres}][[\text{still } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ Eva be at home }]]]]]^{c,g}$
 $\Leftrightarrow \neg [[\text{Eva be at home}]^{c,g} (g(e_5)) \wedge c_t \subseteq \text{time}(g(e_5))]$

This is doubly problematic: On the one hand, the presupposition is too weak, which is the same problem as in the case of *again*, and on the other hand, the assertion is too weak, too, for the same reason that the presupposition is too weak. That is, it will be true as soon as the covert eventuality variable refers to an eventuality that is not Eva's being at home.

There is, however, a possible way out here. Recently, Bernard & Champollion (2024) propose that negation is not interpreted as logical negation \neg , as we have been assuming, but as 'event

negation', \sim , which applies to an event predicate P and creates a negative event predicate $\sim P$. Informally, *Eva is not at home* will mean 'There is an eventuality of Eva being not at home', rather than 'There is no eventuality of Eva being at home'. Bernard & Champollion do not provide a denotation for \sim , but they posit the following meaning postulate.

- (41) For all event predicates P, $\sim P$ is instantiated iff P is not instantiated.

We speak of instantiation because, as Bernard & Champollion discuss, the meaning of \sim cannot be entirely extensional, for if it were, $\sim P$ and $\sim Q$ would be co-extensional whenever P and Q were co-extensional. Suppose, for example, that no one is a Sicilian samurai and no one is a Japanese pope. Then a verifier of *Andrea is not a Sicilian samurai* and *Taka is not a Japanese pope* would be identical, if \sim were defined extensionally. For this reason, Bernard & Champollion assume that there are actual and non-actual eventualities with respect a given evaluation world, and say that P is instantiated iff P is true of an actual eventuality. In the fragment we have been working with, we have temporal intensionality but no possible worlds intensionality, so let us assume that actual events are those that have non-trivial temporal extensions.

- (42) a. For all events, $\text{actual}(e)$ iff $\exists t[\text{time}(e)=t]$
 b. For all event predicates P, P is instantiated iff $\exists e[P(e) \wedge \text{actual}(e)]$

Using this, we can reanalyze the meaning of *still* as follows.

- (43) a. $[_T \text{ Pres }] [[\text{still } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF }] [_{\text{VP}} \text{ Eva be at home }]]]]$
 $\in \text{dom}([[]]^{c,g})$
 $\Leftrightarrow \exists t' < c_t \sim [\lambda e. [[\text{Eva be at home }]]^{c,g}(e) \wedge t' \subseteq \text{time}(e)](g(e_5)) \wedge \text{actual}(g(e_5))$
 b. If so, $[[[_T \text{ Pres }] [[\text{still } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF }] [_{\text{VP}} \text{ Eva be at home }]]]]]]^{c,g}$
 $\Leftrightarrow \sim [\lambda e. [[\text{Eva be at home }]]^{c,g}(e) \wedge c_t \subseteq \text{time}(e)](g(e_5)) \wedge \text{actual}(g(e_5))$

Note that it also has to be made sure that the predicate of Eva being at home wasn't instantiated between t' and c_t . This would follow from the simple and reasonable assumption that a negative eventuality predicate $\sim P$ is stative if P is stative.⁶ In the case of (39), then, there cannot be an eventuality of Eva being at home at any point during the temporal extension of $g(e_5)$.

Similarly, the analysis will work for *again* in negative sentences. Concretely, for the wide scope reading of *again* in *Eva is not at home again*, we will have the following meaning.

- (44) a. $[_T \text{ Pres }] [[\text{again } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF }] [_{\text{VP}} \text{ Eva be at home }]]]]$
 $\in \text{dom}([[]]^{c,g})$
 $\Leftrightarrow \exists t' < c_t \sim [\lambda e. [[\text{Eva be at home }]]^{c,g}(e) \wedge t' \subseteq \text{time}(e)](g(e_5))$
 $\wedge \text{actual}(g(e_5))$
 b. If so, $[[[_T \text{ Pres }] [[\text{again } e_5] [\text{not } [_{\text{AspP}} \text{ IMPERF }] [_{\text{VP}} \text{ Eva be at home }]]]]]]^{c,g}$
 $\Leftrightarrow \exists e' [\sim [\lambda e. [[\text{Eva be at home }]]^{c,g}(e) \wedge c_t \subseteq \text{time}(e)](e') \wedge \text{actual}(e')]$

whose temporal extension includes the utterance time c_t , which is to say that Eva is not at home now.

Note at this point that this refinement is independent of the refinement we proposed for the discontinuity inference, and that *still* needs to be added here to properly account for the meaning of

⁶ At this point we should come back to the observation mentioned in passing in fn. 3: In English, a negated simple past sentence with an eventive VP (e.g. *??Maria still didn't eat*) sounds less acceptable than its negated perfect counterpart (e.g. *Maria still hasn't eaten*), unless it receives a concessive reading. This could be analyzed in the current theory by assuming that a negative eventuality predicate $\sim P$ in the simple past inherits the aspectual property of the original predicate P, while a negative eventuality predicate $\sim P$ in the perfect is a stative predicate.

again with durative predicates. Therefore, our earlier point still stands that the uniformity between *still* and *again* needs to be given up.

3.5 The problem of quantifiers

Let us now turn to the second problem for Ippolito's analysis, which is specifically for her analysis of *still*. Recall that the crucial idea is that its presupposition and assertion are about one and the same eventuality. There are, however, felicitous examples in which the presupposition and assertion of *still* are clearly about distinct eventualities. The problem is most acutely illustrated by quantifiers, so let us call this problem the problem of quantifiers.

Before discussing examples, let us first remark on what it means for eventualities to be identical. For our purposes it is sufficient to recognize one direction of the Leibnizian principle of the indiscernibility of identicals, which we believe is uncontroversial: If two eventualities, e and e' , are identical, then for all predicates of eventualities P , $P(e) \Leftrightarrow P(e')$. We say two eventualities are distinct if they are not identical, so, by contraposition, whenever there is a predicate of eventualities P such that $P(e)$ but not $P(e')$, or $P(e')$ but not $P(e)$, then e and e' are distinct.

Now consider the following example.

(45) There is still someone in the lab.

Someone gives rise to scope ambiguity with respect to *still* such that the presupposition and assertion can be about the same person, which is the wide scope reading, or about a potentially different person, which is the narrow scope reading. Whether or not this really should be understood in terms of scope ambiguity is actually immaterial for us, but it is important that what we have just characterized as the narrow scope reading of *someone* is an available reading of the sentence. In the following scenario, the presupposition of this reading is satisfied and its assertion is verified.

(46) *Context: Today Maria was in the lab at 9:00–12:10. Eva came to the lab at 12:05 and has been there since then. Eva has been alone in the lab since Maria left at 12:10. It's now 13:00.*
 a. There was someone in the lab in the morning. There is still someone in the lab.
 b. Maria was in the lab in the morning. There is still someone in the lab.

The problem that arises here is that the first eventuality of Maria's being in the lab is a distinct eventuality from Eva's being in the lab, because there is a predicate of eventualities that is true of e_1 but false of e_2 , namely, $\lambda e. \text{theme}(e) = \text{Maria}$, which in turn means that e_1 and e_2 are distinct.

This is a problem for Ippolito because, according to her analysis, the semantic representation of *There is still someone in the lab* will be as in (47).

(47) a. $[_T \text{ Pres}] [[\text{still } e_8] [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ someone be in the lab }]]]$
 $\in \text{dom}([\]^{c:g})$
 $\Leftrightarrow \exists t' < c_t [\]^{c:g} (\text{someone be in the lab}) \wedge t' \subseteq \text{time}(g(e_8))$
 $\Leftrightarrow \exists t' < c_t \exists x [\]^{c:g} (\text{be in the lab}) \wedge \text{theme}(g(e_8)) = x \wedge t' \subseteq \text{time}(g(e_8))$
 b. If so, $[\]^{c:g} [_T \text{ Pres}] [[\text{still } e_8] [_{\text{AspP}} \text{ IMPERF } [_{\text{VP}} \text{ someone be in the lab }]]]$
 $\Leftrightarrow [\]^{c:g} (\text{someone be in the lab}) \wedge c_t \subseteq \text{time}(g(e_8))$
 $\Leftrightarrow \exists x [\]^{c:g} (\text{be in the lab}) \wedge \text{theme}(g(e_8)) = x \wedge c_t \subseteq \text{time}(g(e_8))$

Ippolito's crucial assumption is that both dimensions of meaning are about the same eventuality, namely, the one that e_8 refers to. This means that the witness for the existentially quantified variable x in the presupposition in must be the same individual as the witness for the existentially quantified variable x in the assertion. Then, what is in (47) is truth-conditionally identical with what we described as the 'wide scope' reading of *someone* above, although scopally, *someone* is in the scope

of *still* in this representation. This analysis, therefore, only predicts these ‘wide scope’ truth-conditions.

Similar issues arise with other quantifiers as well.

(48) Every student still lives on campus.

This sentence exhibits scope ambiguity as well. The wide scope reading of *every student* says, roughly, ‘Every student is such that he or she still lives on campus’, presupposing that they all used to live on campus. Crucially, there is also a narrow scope reading as well, where the presupposition and assertion can be about different sets of students, as illustrated by the felicity of (49).

(49) When I was a student here 20 years ago, every student lived in one big dorm. Today, every student still lives on campus (but in several different buildings).

The problem here is analogous to the one we saw with an existential quantifier. The presupposition of *still* in (49) is about the eventuality of the students 20 years ago, including the speaker, living on campus, while its assertion is about the eventuality of the current students, presumably excluding the speaker, living on campus. Since the event participants are distinct, the two eventualities must be distinct.

More generally, there are two ways of creating the present problem for Ippolito. As we have just seen with a universal quantifier, having different domains of quantification for different temporal intervals causes an issue. This means that we could recreate the issue with definite descriptions that have different referents depending on the evaluation time.

(50) The prime minister of this country is still male.

This example is again scopally ambiguous: On the wide scope reading of the definite description *the prime minister*, the presupposition and the assertion are about the same individual, and the sentence sounds like this individual is expected to undergo gender transition and become female. Crucially, there is also a narrow scope reading of the definite description, where the presupposition and assertion can be about distinct individuals. This reading would make sense, even if it is supposed that there is no way to change one’s gender. It just means that no female has so far been appointed as prime minister in the country under discussion. Then, the presupposed prior eventuality and the asserted current eventuality are distinct eventualities.

In addition, with quantifiers like *someone*, it is not even necessary to have a temporal dependency with respect to the domain of quantification to create the problem, as we already saw above. Just to reinforce this point with another example, consider the following sentence, which contains a numerical quantifier.

(51) 10 years ago, the department had two institute professors who were both old men. Today, the department still has two institute professors, but they are both young women.

4. The continuity inference of *still*

Having presented the challenges for Ippolito’s uniform analysis of *still* and *again*, let us now discuss other theoretical possibilities. We claim that there is currently no adequate theory of aspectual *still*. What is particularly challenging for theories of *still* is its ‘continuity inference’. To see this, consider (35b), reproduced below. The continuity inference of this example is that Eva has not left her office since two days ago.

(35b) Two days ago, Eva was in her office. She is still in her office now.

Unsurprisingly, the second sentence of this example without *still* does not imply that she has been since two days ago.

(52) She is in her office now.

Because adding *still* introduces the continuity inference, one would be inclined to assume that the presupposition of *still* implies continuity somehow, presupposing that there was an eventuality of the same kind (i.e., Eva being in her office in this example) that temporally continues until the reference time (which is the utterance time in the case of the example at hand).

This is indeed what is often considered to be (part of) the presupposition of *still* (e.g., König 1977, Mittwoch 1993, Krifka 2000, Beck 2020). Essentially, all previous authors, except for Ippolito (2004, 2007), claim so. However, Ippolito gave convincing evidence that this is on the wrong track. Specifically, she pointed out that when placed in a projective context for presuppositions, *still* does not trigger a continuity inference.

(53) (Ippolito 2007: p. 6)
John died a year ago. If he were still alive now, he would be a hundred years old.

If the antecedent of this example presupposed that John is alive continuously up to the reference time (which is the utterance time, given *now*), the whole sentence should presuppose that, and it should contradict what the first sentence says, contrary to fact.

We would like to reinforce her observation with other projective contexts for presuppositions: In both examples in (54), the projected presupposition is generally merely existential and does not imply that the state holds up to the reference time.

(54) a. Is John still alive now?
b. John might still be alive now.

Beck (2020), however, expresses skepticism about Ippolito's argument. Arguing that the presupposition of *still* includes the continuity inference, Beck suggests that Ippolito's example in (53) involves local accommodation in the antecedent.⁷ A similar analytical possibility is applicable to (54) as well. Since there is no reason to deny the existence of local accommodation, we do not mean to deny the potential availability of these readings, but we would like to note that the intuitively perceived meanings do not correspond to these readings. In the case of (53), for example, the local accommodation reading would be without any presupposition, while Ippolito's analysis predicts an existential presupposition due to *still*. This difference is arguably not easy to test with this particular example, as the referent of a proper name is normally presupposed to have been alive, and the counterfactuality of the example suggests that he is actually dead now. We observe that in the case of (54), there is a strong tendency to perceive an existential presupposition, which is not predicted by the local accommodation analysis. More concretely:

(55) *Context: We don't know where Eva has lived. There is a small chance that she lived in Nova Gorica, and still does because she works there, but chances are she has always lived in the nearby Italian town of Gorizia because she's Italian. We'll ask Lanko because he should know.*

⁷ Beck (2020) at the same time gives a very convincing argument that the antecedent clause of the counterfactual conditional in (53) does entail the continuity inference that John has been alive up to now. It seems to us that she meant to imply that Ippolito's analysis does not explain this observation, but it can actually explain it by means of the ontological assumption that a single durative eventuality (such as John's being alive) holds throughout its temporal extension, which we highlight presently.

- a. Does Eva (#still) live in Nova Gorica now?
- b. Has Eva lived in Nova Gorica since she started working there?

We observe that the use of *still* in (55a) is strongly unacceptable, and it is reasonable to assume that this is due to the existential presupposition that Eva has lived in Nova Gorica before. Importantly, the local accommodation analysis would not explain it because the resulting meaning will be the same as (55b). The same point can be made with the examples (56) uttered in the same context.

- (56) *Context: same context as in (55)*
- a. Eva might (#still) live in Nova Gorica now.
 - b. Eva might have always lived in Nova Gorica.

To further reinforce Ippolito's point, we observe that the following example is normally read with a universally projected existential presupposition that every one of us has lived in Göttingen in the past, rather than a universally projected continuity presupposition that every one of us has been living in Göttingen until now.

- (57) Very few of us still live in Göttingen.

Note that local accommodation of the purported continuity presupposition below "very few of us" would result in a reading with no presupposition, 'Very few of us has ever lived in Göttingen and has always been until now', which is too weak overall. A similar remark applies to the example in (58).

- (58) Of Dan, Clemens, and Sascha, only Sascha still lives in Göttingen.

Most naturally, (58) is read with a universally projected existential presupposition that all three people have lived in Göttingen before. This example is particularly interesting because the continuity inference, that he has always been living in Göttingen, applies to Sascha, while for the other two people, the inference is only existential.

For these reasons, we think Ippolito's argument against encoding the continuity inference in the presupposition of *still* is convincing, which leads us to conclude that the continuity inference of examples like (35b) must be guaranteed by something else than the presupposition of *still* itself. Ippolito herself proposed an ingenious solution to this conundrum by requiring that the presupposition and assertion of *still* be about the same eventuality, with the crucial (but implicit) ontological assumption that the temporal extension of a single durative event is contiguous, which we believe is often assumed, at least tacitly. Specifically, according to Ippolito's analysis, the assertion of *still* says that the (durative) eventuality that the covert eventuality variable refers to holds at the reference time (call it t_r), and its presupposition says that the same eventuality holds at some time prior to the reference time (call it t_p). Although t_p could be far in the past relative to t_r , because the same durative eventuality holds at both of these times, it follows that the event happens everywhere between t_p and t_r . On the other hand, if the assertion is in a non-veridical context, there is no inference that the eventuality happens at the reference time, so we also lose the continuity inference, and only observe the existential presupposition that the durative eventuality happened at some time in the past.

This is very elegant, but as we discussed in the previous section, the crucial assumption of Ippolito's analysis that the presupposition and assertion be about the same eventuality simply cannot be upheld, as there are cases where the presupposition and assertion are clearly about distinct eventualities, e.g. (59).

- (59) When I was a student here 20 years ago, every student lived in one big dorm. Today, every student still lives on campus (but in several different buildings).

Notice, crucially, even in a case like this, we still observe a continuity inference. Specifically (59) implies that (at least) since 20 years ago, it has been a continuous tradition for every student to live on campus. We therefore conclude that Ippolito's solution to the issue is not general enough.

In addition, it should be pointed out that it is not enough to guarantee continuity (only) in the assertion, as under Ippolito's analysis, because when the continuity inference is not satisfied, the sentence sounds like its presupposition is not satisfied, rather than being plainly false. To see this concretely, suppose that Katie lived in Germany during her MA, and moved to Spain for 3 years for her PhD. Having finished her PhD recently, she came back to Germany last month. In this context, there seems to be a difference in judgment between the second sentence of (60a) and the second sentence of (60b): The latter is plainly false, while the former is more infelicitous (and true at the same time) than just false.

- (60) a. Katie moved to Germany for her MA. She still lives there.
b. Katie moved to Germany for her MA. She has lived there since then.

We take this observation as evidence that the continuity inference should be part of the presupposition.

At the same time, the truth-conditions of the examples involving presupposition projection in (53)–(54) suggest that the continuity inference has to be asserted as well (as Beck 2020 previously pointed out; see fn. 7). Thus, to summarize the discussion of this section, we need an analysis of *still* where the presupposition it triggers does not entail the continuity inference, while the assertion does. The main theoretical puzzle consists in the observation that when the presupposition projects, as in (53)–(54), we only observe a weak presupposition about some (particular) time prior to the reference time, while when there is no presupposition projection as in (60a), the presupposition seems to be strengthened to entail the continuity inference. No existing theory of *still* captures this pattern, and, furthermore, there is no other known presuppositional phenomena that behave like this.

5. Concluding remarks

The observations about *ancora* we started out with suggest that a uniform analysis of its 'still'- and 'again'-uses would be desirable. In the current literature, Ippolito (2004, 2007) offers a theory that comes very close to attaining this goal, but as our critical examination of it revealed, it is wanting in several respects. The most significant problem is that its analysis of *still* is not general enough, as it stands on the assumption that the presupposition and assertion of *still* are about the same eventuality, which can only be maintained in simple, non-quantificational examples. At the same time, there is currently no other theory of *still* that succeeds in correctly accounting for its continuity inference. Our tentative conclusion is that an adequate theory of *still* should involve an assertion that entails the continuity inference, but the presupposition should not always, and only sometimes, entail it.

In light of this conclusion, we should now come back to the question of how to achieve a uniform analysis of the 'still'- and 'again'-uses of *ancora* in Italian. As mentioned in our discussion of Ippolito's analysis, the meaning of *again* has to entail discontinuity that the past eventuality that the presupposition is about has come to an end before the reference time, and there is a period between the past time and the reference time where an eventuality of the same kind does not happen. As we pointed out, Ippolito's original analysis of *again* misses this, but it could be amended by encoding a perfectivity presupposition in the meaning of *again*. However, this can only be done on pain of giving up on a uniform analysis of *still* and *again*, as *still* evidently does not imply a discontinuity inference. Notice, importantly, that the same consideration applies to any theory that aims at analyzing *still* and *again*, as well as the 'still' and 'again'-uses of *ancora*, uniformly. In the case of *again*, it can be shown that the discontinuity inference is always there, with or without presupposition projection. For instance, all of the examples below presuppose that Eva has left New York.

- (61) a. Eva is in New York again.
b. If Eva were in New York again, then we would be happy.
c. Is Eva in New York again?
d. Eva might be in New York again.

Recall that *still* seems to give rise to an assertion that entails continuity. Given the omnipresence of the perfectivity presupposition, it is not clear if the assertion of *again* should also entail discontinuity. However, regardless of this question, it is clear that the assertive contribution of *again* needs to be different from that of *still*, as the latter entails continuity. These considerations point to the conclusion that we are still far from attaining a uniform analysis of *still* and *again* in English.

Lastly, it should be mentioned that the exactly same considerations carry over to the ‘still’- and ‘again’-uses of *ancora* in Italian, leading to the conclusion that the ‘again’-use of *ancora* presupposes discontinuity (and might or might not also assert it), while the ‘still’-use of *ancora* asserts continuity and only presupposes continuity in non-projective contexts, but in order to save space, we omit the data here.

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References

Beck, Sigrid. 2020. Readings of scalar particles: *noch/still*. *Linguistics and Philosophy*, 43: 1-67. doi: [10.1007/s10988-018-09256-1](https://doi.org/10.1007/s10988-018-09256-1)

Bernard, Timothée & Lucas, Champollion. 2024. Negative events and compositional semantics. *Journal of Semantics*. doi: [10.1093/jos/ffad018](https://doi.org/10.1093/jos/ffad018)

Greenberg, Yael. 2009. Presupposition accommodation and informativity considerations with aspectual *still*. *Journal of Semantics*, 26: 49-86. doi: [10.1093/jos/ffn009](https://doi.org/10.1093/jos/ffn009)

Greenberg, Yael. 2012. Event-based additivity in English and Modern Hebrew. In P. C. Hofherr & B. Laca (eds), *Verbal plurality and distributivity*, 127-158. Berlin: De Gruyter. doi: [10.1515/9783110293500.127](https://doi.org/10.1515/9783110293500.127)

Heim, Irene. 1990. Presupposition projection. In R. van der Sandt (ed), *Reader for the Nijmegen workshop on presupposition, lexical meaning, and discourse process*. Nijmegen: University of Nijmegen.

Homer, Vincent. 2021. Domains of polarity items. *Journal of Semantics*, 38: 1-48. doi: [10.1093/jos/ffaa006](https://doi.org/10.1093/jos/ffaa006)

Ippolito, Michela. 2004. An analysis of *still*. In R. B. Young (ed.), *Proceedings of SALT 14*, 127-144. Ithaca, NY: Cornell University. doi: [10.3765/salt.v14i0.2900](https://doi.org/10.3765/salt.v14i0.2900)

Ippolito, Michela. 2007. On the meaning of some focus-sensitive particles. *Natural Language Semantics*, 15: 1-34. doi: [10.1007/s11050-007-9004-0](https://doi.org/10.1007/s11050-007-9004-0)

- König, Ekkehard. 1977. Temporal and non-temporal uses of ‘noch’ and ‘schon’ in German. *Linguistics and Philosophy*, 1: 173-198. doi: [10.1007/BF00351102](https://doi.org/10.1007/BF00351102)
- Kripke, Saul. 2009. Presupposition and anaphora: Remarks on the formulation of the projection problem. *Linguistic Inquiry*, 40: 367-386. [10.1162/ling.2009.40.3.367](https://doi.org/10.1162/ling.2009.40.3.367)
- Krifka, Manfred. 2000. Alternatives for aspectual particles: Semantics of *still* and *already*. In L. J. Conathan, J. Good, D. Kavitskaya, A. B. Wulf & A. C. L. Yu (eds.), *Proceedings of the twenty-sixth annual meeting of the Berkeley Linguistics Society: General session and parasession on Aspect*, 401-412. doi: [10.3765/bls.v26i1.1125](https://doi.org/10.3765/bls.v26i1.1125)
- Löbner, Sebastian. 1989. German *schon* – *erst* – *noch*: an integrated analysis. *Linguistics and Philosophy*, 12: 167-212. doi: [10.1007/BF00627659](https://doi.org/10.1007/BF00627659)
- Nicolae, Andreea. 2017. A new perspective on the shielding property of positive polarity. In D. Burgdorf, J. Collard, Si. Maspong & B. Stefánsdóttir (eds), *Proceedings of SALT 27*, 266-281. doi: [10.3765/salt.v27i0.4156](https://doi.org/10.3765/salt.v27i0.4156)
- Michaelis, Laura A. 1993. ‘Continuity’ within three scalar models: The polysemy of adverbial *still*. *Journal of Semantics*, 10; 193-237. doi: [10.1093/jos/10.3.193](https://doi.org/10.1093/jos/10.3.193)
- Mittwoch, Anita. 1993. The relationship between *schon/already* and *noch/still*: A reply to Löbner. *Natural Language Semantics*, 2: 71-82. doi: [10.1007/BF01255432](https://doi.org/10.1007/BF01255432)
- Soames, Scott. 1989. Presupposition. In D. Gabbay & F. Guenther (eds), *Handbook of Philosophical Logic*, Volume IV, 553-616. Dordrecht: Reidel. doi: [10.1007/978-94-009-1171-0_9](https://doi.org/10.1007/978-94-009-1171-0_9)
- Szabolcsi, Anna. 2004. Positive polarity – negative polarity. *Natural Language and Linguistic Theory*, 22: 409–452. doi: [10.1023/B:NALA.0000015791.00288.43](https://doi.org/10.1023/B:NALA.0000015791.00288.43)
- Tellings, Jos. 2017. *Still* as an additive particle in conditionals. In D. Burgdorf, J. Collard, Si. Maspong & B. Stefánsdóttir (eds), *Proceedings of SALT 27*, 1-21. doi: [10.3765/salt.v27i0.4117](https://doi.org/10.3765/salt.v27i0.4117)