## Adverb order with still

**Introduction.** What does adverb order teach us about the faculty of language? Cinque (1999) argues that adverb order across all languages is (i) uniform, (ii) linear, and (iii) not completely reducible to semantics. An example of (i–ii) is that in at least eight languages, an adverb meaning 'no longer' must be further away from the verb than an adverb meaning 'always'. Cinque therefore attributes adverb order to the syntactic component. In this view, adverb order is informative about the universal fine-grained structure of the clause.

(ii–iii) have been challenged by counterexamples to linearity which are licensed by semantics (Nilsen 2004, Ramchand & Svenonius 2014). We extend the challenge by focusing on adverb order wrt temporal *still* (henceforth *still*); we show that the order is not linear, and we attribute the order to the semantics of aspect. Specifically, we argue that adverb order wrt *still* is determined by an aspectual restriction (discussed below); other adverbs can in principle be ordered freely wrt *still*, and the appearance of an impossible order arises when a given adverb clashes with the aspectual restriction. We thus make a small but concrete contribution to the view that adverbs are basically unordered, and certain co-occurrences are ruled out by semantics.

**Initial data.** *Finally* is attested above *still* in (1), but the opposite order lacks the temporal reading (the concessive reading is available, paraphrased as *nonetheless*).

1. It's {finally still, #still finally} light out after 5:00 p.m. [link] (# = no temporal reading)

Cinque's clause structure is one where the projection hosting *finally* ( $Asp_{delayed}$ ) is external to the one hosting *still* ( $Asp_{continuative}$ ), i.e. *finally* is predicted to be excluded from under *still*. We however observe that *still finally* is acceptable in (2), contrary to the prediction (imagine a speaker who has a garden where the flowers are expected to bloom every year, which the speaker looks forward to, but they always take a bit too long to start blooming).

2. The flowers still finally bloom every year.

While (2) poses a challenge to Cinque's order, *still finally* is not always acceptable, e.g (1), and it seems to be licensed in (2) by the iteration contributed by *every year*. We therefore appeal to a component of meaning which is sensitive to iteration, namely aspect.

Analysis. We appeal to an aspectual restriction of *still* (Michaelis 1993) which we state as (3).

3. *Still* can only be used to express the continuation of continuable events.

We diagnose continuability for the purpose of (3) via compatibility with *for*-adverbials (Dowty 1979, Krifka 1998), as exemplified in (4).

4. a. John {walked towards, #reached} the summit for an hour.

b. John is still {walking towards, #reaching} the summit.

(3) accounts for the order of *still* wrt six other adverbs: *Usually*, *finally*, pre-verbal *again*, pre-verbal *often*, *already* and *no longer*, in a way which has conceptual and empirical advantages over Cinque's analysis (which excludes all of them from under *still*). We review each in turn.

**Conceptual.** A Cinquean account of (1) stipulates the rigidly-ordered  $Asp_{delayed} > Asp_{continuative}$ . By contrast, we account for (1) in a less stipulative way by appealing to (3) the independently motivated aspectual restriction of *still*. This restriction is violated by non-iterated *finally*, as corroborated by (5), where it is incompatible with a *for*-adverial.

5. For a decade, the flowers (#finally) bloomed.

We likewise give a less stipulative account of (6a) *again* and (6b) *already* being able to precede *still*, but the opposite order lacks the temporal reading, as marked via # in (6).

6. a. After an hour, [the beads] were {again still, #still again} in the bottom of the cup. (COCA)

b. We're {already still, #still already} picking up from Hurricane Sandy. (COCA) As with (5) non-iterated *finally*, (7) shows that *again* and *already* are incompatible with *for*-adverbials. In present terms, these adverbs create non-continuable events which cannot be arguments of *still* or *for*-adverbials. Crucially, there is no need to appeal to clausal projections.

7. a. For an hour, the beads were (#again) in the bottom of the cup.

b. For a week, we were (#already) picking up from Hurricane Sandy.

**Empirical.** Cinque incorrectly rules out *still finally* in (2). By contrast, we leave open the possibility of this order, as long as the aspectual restriction of *still* is satisfied. We thus admit (2) via the observation that iteration licenses accomplishments (Krifka 1998), e.g. (8)—iterated *finally* is compatible with a continuable event, which can be the argument of *still*.

8. For a year, John reached the summit #(every month).

Finishing with the last three adverbs, part of Cinque's (1999) order is that *usually*, pre-verbal *often* and *no longer* are above *still*. This is challenged by the opposite order in (9).

- 9. a. Theresa had always been a light sleeper, and when Dr. Jones entered her room, she awoke and blinked. " Daddy, " she yawned. She was **still usually** happy to see him. (COCA)
  - b. Friedlander routinely put in 60 hours a week or more, [then he changed his job]. These days he **still often** puts in long hours, but instead of the bottom line, he's focused on [other things]. (COCA)
  - c. Should her bestie Brandi Maxiell even bother joining her or are her services **still no longer** needed? (iWeb)

Whereas Cinque incorrectly rules out (9), they are admitted here by (10) the adverbs being compatible with *for*-adverbials—these adverbs are compatible with continuable events, which can be arguments of *still* and *for*-adverbials.

- 10. a. For many years the 'Free Box' was **usually** a mess. [link]
  - b. For nine years, she **often** sewed for her nieces. [link]
  - c. Things seemed perfect, for two years they **no longer** lived in poverty. [link]

**Conclusion.** (1–2) show that the order of *still* and *finally* is not rigid, and (9, 11) show that *still* is freely-ordered wrt *usually*, *often* and *no longer*.

- 11. a. They all knew she'd **usually still** be at the mills around one. (COCA)
  - b. He [...] was often still at work for hours after Hardy decamped for the golf course. (COCA)
  - c. Someone who has been previously vaccinated may **no longer still** be protected against the disease. (iWeb)

Along with additional counterexamples to adverb linearity (Nilsen 2004, Ramchand & Svenonius 2014), the present counterexamples challenge Cinque's empirical picture of a universal linear order. Additionally, the orders wrt *still* which are contrary to Cinque's order are admitted by the aspectual restriction of *still* in (3). We thus join Nilsen and Ramchand & Svenonius in providing conceptual and empirical arguments for an account where adverb order is restricted by meaning, and the syntactic component imposes no further restriction. Thus, instead of a linear order which is not completely reducible to semantics, the order is non-linear and reducible to semantics, as far as the preceding adverbs are concerned.

Cinque, G. 1999. Adverbs and functional heads: A cross-linguistic perspective. • Dowty, D. 1979. Word meaning and Montague grammar: The semantics of verbs and times in generative semantics and in Montague's PTQ. • Krifka, M. 1998. The origins of telicity. In Events and grammar. • Michaelis, L. A. 1993. 'Continuity' within three scalar models: The polysemy of adverbial still. Journal of semantics. • Nilsen, Ø. 2004. Domains for adverbs. Lingua. • Ramchand, G. & P. Scenonius. 2014. Deriving the functional hierarchy. Language sciences.