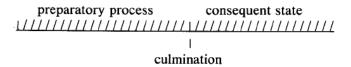
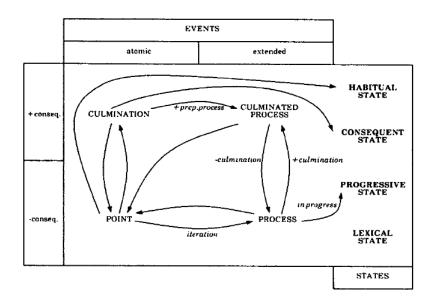
1.0 Event ontology



- (1) <u>Culmination</u> (+consq, atomic): recognize, spot, win the rice, arrive "an event which the speaker views as punctual or instantaneous, and as accompanied by a transition to a new state of the world"
- (2) <u>Consequent state</u>: "It does not necessarily include *all* events that are objectively and in fact consequences. It rather includes only those consequences that the speaker *views* as contingently related to other events that are under discussion, say by causing them or by permitting them to occur."
- (3) Point (-consq, atomic): hiccup, tap, wink, hit
 "an event (not necessarily an instantaneous one) that is viewed as an indivisible whole and whose consequences are not at issue in the discourse—which of course does not mean that de facto consequences do not exist"
- (4) <u>Process</u>: (-conseq, extended): *run, swim, walk, play the piano* "an event as extended in time but not characterised by any particular conclusion or culmination."
- (5) <u>Culminated process</u> (+conseq, extended): *build a house, write a letter, eat a sandwich* "extends in time but that *does* have a particular culmination associated with it at which a change of state takes place"
- (6) <u>Lexical states</u>: understand, love, know, resemble
- (7) "The details of this taxonomy and the criteria according to which utterances can be categorized are less important than the observation that each primitive entity of a given type, such as the culmination event of *Harry's reaching the top*, carries intimations of other associated events and states, such as the process by which the culmination was achieved and the consequent state that followed. What linguistic devices like tenses, aspects, and temporal/aspectual adverbials appear to do is to *transform* entities of one type into these other contingently related entities, or to turn them into composites with those related entities"



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2.0 Progressive

PROG denotes a function from a set of preparatory processes to a set of progressive states, which are ongoing at the reference time (Moens & Steedman 1988).

(8) Simple example:

The president was speaking in front of a large audience at noon.

(9) **Derivation #1:**

- a. [the president speak]PROCESS
- b. [[the president speak]PROCESS]POGRESSIVE_STATE

(by meaning of the progressive; no coercion)

Analogy with states #1: Has an episodic interpretation with the present tense

(10) The president is pulling his gun from its holster.

Analogy with the states #2: Narrative discourse

- (11) a. Josef turned around.
 - b. The man had a gun in his holster.
- (12) a. Josef turned around.
 - b. The man was pulling his gun from its holster.
- (13) a. Josef turned around.
 - b. The man pulled his gun from its holster.

(14) **Harder example:**

Harry was hiccupping (iterating interpretation)

(15) **<u>Derivation #2</u>**:

- a. [Harry hiccup]POINT
- b. [[Harry hiccup]POINT]PROCESS

(by "iteration"; coercion)

c. [[[Harry hiccup]POINT]PROCESS]POGRESSIVE_STATE

(by meaning of the progressive)

Exercise 1:

- (16) Roger was arriving.
 - How many interpretations does the analysis predict? Derive them!
 - Are the predictions in accordance with your intuitions.

(17) Imperfective paradox

"The fact that, according to the present theory, progressives coerce their input to be a process so that any associated culmination is stripped away and no longer contributes to truth conditions provides a resolution of the **imperfective paradox** (Dowty 1979), without appealing to theory-external constructs" (pg. 19)

(18) Landman 1992 (see also Dowty 1979)

- (17) asserts is that there was an ongoing event, which we judge very likely to turn into an event of the kind described by *Roger arrived*.
- It does not make sense to 'strip off' a culmination because the 'culmination' is a crucial component of the truth conditions of the progressive, even if it need not be realized in the actual world.

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Kamp et al.'s (2011) analysis of (13):

- (13) a. Josef turned around.
 - b. The man was pulling his gun from its holster.

```
\begin{array}{c} n \ j \ t_1 \ e_1 \ x \ t_2 \ s_2 \\ \\ Josef(j) \\ t_1 < n \\ e_1 \subseteq t_1 \\ e_1 : \text{``turn-around''}(j) \\ \\ t_1 \subseteq t_2 \\ \text{``the man''}(x) \\ \\ t_2 < n \\ \\ t_2 \subseteq s_2 \\ s_2 : PROG(\hat{\ }e_2 : \text{``pull-gun''}(x)) \\ \end{array}
```

A Klein-Based Approach

- (19) PROGRESSIVE: $\lambda P \lambda t \exists e[t \subseteq \tau(e) \land P(e)]$
 - Klein (1993) attemps to make Comrie's (1976) intuition that the imperfective aspect portrays a situation "from [the] inside" formally precise.
 - Applied to a telic description P, (20) would incorrectly predict that the event culminated

Key question

(20) What P-event part is related to the topical time t and what is this relation like such that we can account for the state-like behavior of the progressive?

Bary's (2009) Answer

(21) $\lambda P \lambda t \exists e[t \subseteq \tau(PART(e)) \land P(PART(e))]$

Food for thought

(22) Yesterday afternoon, John was building a tree house in my backyard.

Other worries for Moens & Steedman's analysis of the progressive

- (23) I'm really loving the play, I'm understanding you but I'm not believing you (Bach 1981: 77).
- (24) I am understanding more about quantum mechanics as each day goes by (Comrie 1976: 36; Zucchi 1998).
 - Perfective in Slavic: can take a lexical state and return a culmination
 - o For a good reference: Romanova, E. 2006. *Constructing Perfectivity in Russian*: University of Tromsø dissertation.

2.0 The Perfect

PERFECT denotes a function from a set of culmination to a set of consequent states, which are the reference time (Moens & Steedman 1988).

(25) Simple example:

Harry has now arrived.

(26) **<u>Derivation #4</u>**:

- a. [Harry arrive] CULMINATION
- b. [[Harry arrive]_{CULMINATION}]_{CONSEQUENT STATE}

(by meaning of the perfect; no coercion)

(27) Extension: pluperfect in discourse context:

- a. Every one began to clap.
- b. Harry had arrived.

(28) Coercion

- a. #Bill has ran (on the treadmill next to his sister).
- b. #The star has twinkled
- c. #Einstein has visited Princeton.
- d. Princeton has been visited by Einstein.

(29) Problems (Kamp et al 2013)

Today Fritz has submitted his paper

o True only if Fritz submitted his paper within the period of time denoted by the adverb today

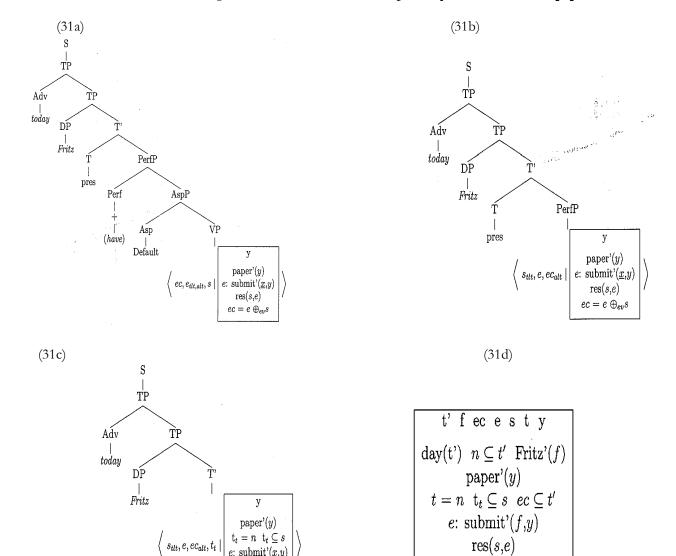
(30) Present Perfect Puzzle (Klein 1992)

- a. *Yesterday Fritz has submitted his paper.
- b. Gestern hat Fritz seine Arbeit eingereicht. Yesterday has Fritz his paper submitted

New line of research (Kamp et al 2013)

- o Tense and adverbs concern distinct temporal coordinates
- o Perfects across languages differ with respect to what event parts combine with tense and which combine with adverbs.
- o Revise Moens & Steedman's analysis for English present perfect and German "ordinary" present perfect with hab
- o Moens & Steedman's analysis works well for the German zustandsperfekt with sei-.

Deriving the truth conditions of Today Fritz has submitted his paper



- Heute hat Fritz seine Arbeit eingereicht (32)
 - ❖ The German perfect differs from the English perfect in:

 $e: \text{ submit'}(\underline{x}, y)$

res(s,e) $ec = e \oplus_{ev} s$

leaving 'alt' (the feature that relates to the adverb) at e (rather than shifting it to ec)

 $ec = e \oplus_{ev} s$

the 'tlt' (the feature that relates to the tense) is still shifted to s.

Exercise: Explain the Present Perfect Puzzle

- a. *Yesterday Fritz has submitted his paper.
- b. Gestern hat Fritz seine Arbeit eingereicht. Yesterday has Fritz his paper submitted

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Summary (Kamp et al 2013)

"What makes a linguistic construction into a perfect is that the operation, or one of the operations, that it triggers is the shift of the feature *tlt* from the referential argument of an event description to a result state of that referential argument"

Einstein Examples: English vs. German

- (33) a. #Einstein has visited Princeton.
 - b. Princeton has been visited by Einstein.
- (34) Einstein hat Princeton besucht.

Einstein has Princeton visit

"Einstein visited Princeton"

Parsons 1990

"It is important not to identify the **Resultant-state** of an event with its "target" state. If I throw a ball onto the roof, the target state of this event is the ball's being on the roof, a state that may or may not last for a long time. What I am calling the Resultant-state is different; it is the state of my having thrown the ball onto the roof, and it is a state that cannot cease holding at some later time."

Zustandsperfekt

(35) Heute ist die Arbeit eingereicht

(Literally: 'Today is the paper submitted.')

- The result state includes today.
- Some kind of current relevance of the submission can be detected
- Salient reading: Fritz submitted the paper before the beginning of today.
- (36) Das Geschirr ist gespühlt, die Katze ist gestreichelt, der Hund ist gefüttert, die Fenster sind verriegelt. Also gehen wir. "The dishes are done, the cat has been stroked, the dog has been fed, the windows have been bolted. So let's go."
- (37) Analysis (cf. Moens & Steedman's analysis of the English present perfect)
 - Shifts both *tlt* and *alt* to the result state
 - The result state is a target (not formal) result state

Exercise: Explain the oddness

(38) *Gestern ist die Arbeit eingereicht (Literally: 'Yesterday is the paper submitted.')

Summary

- English present perfect
 - O Shift *tlt* to target state
 - O Shift alt to ec (entire event nucleus, with target state)
- German 'ordinary' present perfect
 - O Shift *tlt* to formal result state
 - O Shift *alt* to *e* (event, without formal result state)
- German 'zustandsperfekt;
 - O Shift tlt to target state
 - O Shift alt to target state

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Rothstein's (2008) Worry

(39) Peter hat gerade gespült, als ich heimkam.

Peter has in-the-moment done-the-dishes when I home-came

'Peter was doing the dishes when I got home.'

• "As the eventuality denoted by such a present perfect is viewed as ongoing, there can be no perfect or resultant state meaning" (*ibid*, pg. 49)

Narrative discourse within an elaboration

- (40) At five o'clock, Harry walked in, sat down, and took off his boots.
- (41) At five o'clock, my car started and the rain stopped (Moens & Steedman 1988)
- (41) John built a house last year. First he got an architect to draw up a plan. Next he hired a contractor. At the end he was very pleased. (Bittner 2008, pg. 21).

Perfect progressive

(40) From this lodge I turned into the field opposite to Ingress Park, where Mr. Alderman Harmer has been building a splendid mansion: it is entirely of stone, and is in the Gothic style.

New line of research (Altshuler 2012, in prep.)

- Distinguishing which VP-event part is related to a time contributed by the tense and which is related to a time contributed by temporal locating adverbs
 - o Kamp et al. 2013 manuscript on the perfect
- Relating consequent states to model discourse relations
 - O Attempts to explain what we mean by a "progressive state"
 - o Explain why the perfect is "stative" (References)