The Perfect(s)

1. Perfect Puzzles

(1) Frank finished the project on time.
(2) Frank has finished the project on time.
(3) Frank finished the project in 1998.
(4) #Frank has finished the project in 1998.
(5) #Frank visited Boston twice since the beginning of the project.
(6) Frank has visited Boston twice since the beginning of the project.

The standard reference on the perfect:

Excursus

(7) He has just graduated from college. “Perfect of Recent Past”
(8) I have lost my glasses. “Perfect of Result”
(9) Seit einer Stunde hat er die Jacke ausgezogen
since one hour has he the jacket off-taken
  “For an hour he has had his jacket (taken) off”


(10) Excursus: The History of the Perfect

  a. He has [his house painted]
  b. He has painted his house.

2. The E/U Distinction

(11) I have lived in Cambridge since last November.

(12) I have sold my TV since “The Weakest Link” came on.

3. Iatridou, Anagnostopoulou, & Izvorski: Main Points

(13) The Perfect introduces the “perfect time span”. The Left Boundary (LB) of this interval is determined by adverbials like since or for. The Right Boundary (RB) is set by tense.

[NB: Time moves from left to right!]

e.g. the present perfect in (11) introduces the perfect time span bounded by the speech time (contributed by the present tense) and last November (contributed by since last November).

(14) The availability of E/U readings depends on the (un)boundedness of the lower predicate.

4. Beginnings of a Compositional Analysis

(15) Intensional semantics with an interval as an evaluation parameter.

(16) Present tense is vacuous.

(17) $\llbracket \text{PAST} \rrbracket^t = \lambda p_{<s,t>} \cdot \exists t' \text{ before } t: p(t') = 1$

(18) $\llbracket \text{PERF} \rrbracket^t = \lambda p_{<s,t>} \cdot \exists t': \text{LB}(t,t') \& p(t') = 1$

(19) $\llbracket \text{since last November} \rrbracket^t = \lambda p_{<s,t>} \cdot \text{RB(last November}, t) \& p(t) = 1$
(20)

PRES

PERF

since last November

I live in Cambridge

(21) There is an interval t such that: (i) the Left Boundary of t is the speech time, (ii) the Right Boundary of t is last November, and (iii) I live in Cambridge at t.

(22) To live in Cambridge at an interval t means to live in Cambridge throughout that interval.

5. The Source of the E/U Distinction

(23) Option 1

Perhaps, E readings come about because there is an existential part-quantifier between the PERF head and the main predication.

(24) \[ \left[ \exists x \right] t = \lambda p_{x,s,t}. \exists t': t \supseteq t' \& p(t') = 1 \]

(25) There is an interval t such that: (i) the Left Boundary of t is the speech time, (ii) the Right Boundary of t is last November, and (iii) there is a subinterval t’ of t such that I sell my TV at t’.

(26) Where would this operator come from? Perhaps, it is the operator introduced by perfective aspect.
(27) There is an independent argument that we need such an operator. It was presented at the very end of 24.973 last semester, but did not make it into the lecture notes. [Stay tuned.]

(28) **Option 2**

Perhaps, *since* is more than a LB-predicate. Perhaps, *since* actually is an operator. And perhaps, there are two *since*’s: one that makes U-readings and one that makes E-readings.

IAI (p.200): “Adverbials that relate to intervals can have either a ‘durative’ or an ‘inclusive’ interpretation. … If the perfect-level adverbial is durative, the underlying predicate must hold of every subinterval of the perfect time span …; that is, the perfect time span must be ‘filled up’ with a homogeneous predicate. … This is how the U-perfect is derived. … If the perfect-level adverbial is inclusive, then the perfect sentence asserts that a particular eventuality is properly included in the perfect time span …. This is how the E-perfect is derived.”

(29) Mittwoch 1988 (p. 207): “*since* itself is ambiguous. *Since 7.00* can mean *from 7.00 till now* or *at some time between 7.00 and now*. … These two meanings are clearly distinguished in the Shorter Oxford English Dictionary.”


(30) Sam has been in Boston since Tuesday.

   a. E-reading: in Boston some time after Tuesday and before now.
   b. U-reading: in Boston since some time on Tuesday

(31) a. from Amsterdam to Warsaw
   b. between Amsterdam and Warsaw

(32) ![Diagram](PRES \rightarrow PERF \rightarrow \{ \text{since}^E \text{last November} \} \rightarrow I \text{ sell my TV} \rightarrow \text{since}^U)
(33) \[ \left[ \text{since } E \right]^t = \lambda x. \lambda p. \exists t' : \tau(x) < t' < t \land p(t') = 1 \]

(34) \[ \left[ \text{since } U \right]^t = \lambda x. \lambda p. \forall t' : \tau(x) \leq t' \leq t \land p(t') = 1 \]

(35) Since 1990, I have read “The Book of Sand” five times.

Is this an E-perfect or a U-perfect?

IAI appear to see it as an E-perfect.

6. Attachment Ambiguities etc.

(36) John has been in Boston for two weeks.

Attachment ambiguity with \textit{for two weeks}.

(37) U-perfect reading, \textit{for two weeks} at “perfect-level”

(38) There is an interval t such that: (i) the Left Boundary of t is the speech time, (ii) t is two weeks long, and (iii) John is in Boston at t.
(39) E-perfect reading, for two weeks at “eventuality-level”

\[
\begin{array}{c}
\text{PRES} \\
\text{PERF} \\
\exists x \\
\text{for two weeks} \\
\text{John} \\
\text{been in Boston}
\end{array}
\]

(40) There is an interval t such that: (i) the Left Boundary of t is the speech time, (ii) t has a subinterval t’ such that: (a) t’ is two weeks long, and (b) John is in Boston at t’.

(41) For two weeks, John has been in Boston.

(42) John has been in Boston for the last two weeks.

(43) John ate the cake for ten minutes.

(44) John ate the cake in ten minutes.

(45) \[ [\text{for}]^L = \lambda L. \lambda p. |t| = L & \forall t': t' \subseteq t & p(t') = 1 \]

### 7. More on Perfect Adverbials

Is there a tighter syntactic link between perfect adverbials and the perfect “head”?

What about the co-occurrence restrictions?

(46) Ich lebe seit letztem November in Cambridge.
    I live since last November in Cambridge

(47) Last Monday, Frank had been in Boston for ten days.

(48) !! Last Monday, Frank was in Boston for ten days.

(49) I met Frank last Monday. He had been in Boston since the ceremony.

(50) I met Frank last Monday. #He was in Boston since the ceremony.

(51) The time since the last reunion has been rough on Jack.