Temporal definiteness

Ruoying Zhao
University College London
ruoying.zhao.14@ucl.ac.uk

I propose a novel analysis of the present perfect and argue that if we adopt the familiarity theory of definiteness, we can analyze the simple past in English as a definite description for times presupposing an antecedent (either explicit or implicit), and the present perfect as an indefinite.

(1) Context: There is a giant spider$_i$ in the house. Everyone is scared.
Be careful! The giant spider$_i$/a giant spider$_{j/\#i}$ may be in this room!

(2) Context: Mary knows that John had a trip to Italy last month$_i$ and she's asking about it.
Did$_i$ you visit/Have you visited$_{j/\#i}$ Rome?

DRT-Style Formalization (cf.Grønn 2003): I follow Pancheva and von Stechow (2004) and assume that a complex operator [present perfect] is formed at T. To maintain compositionality, it must have the formula as in (5), which competes with the simple past, and is presuppositionally weaker because it doesn't presuppose an antecedent for t'. When referring to a time already in the context, the present perfect is ruled out by Maximize Presupposition. Hence, the present perfect is an indefinite in English (discourse new).

(3) ⟦past⟧ = λp[t' |p(t')] {t | t<n, ρ(t, t')}; ⟦present⟧ = λp.[n | p(n)] (n=now)

(4) ⟦perfect⟧ = λpλt [t'|p(t')] { | t'≤ t }, t' ≤ t iff there is no t'' ⊂ t' such that t'' > t

(5) ⟦present perfect⟧ = λp.[(n) t'| p(t')] { |t'≤ n} ({ } indicates presuppositions)

If past temporal adverbials provide the antecedent the speaker refers to, the Present Perfect Puzzle is derived directly. The current relevance readings of the present perfect can be derived from the discourse new property of the time it introduces. The present perfect and the simple past also pattern with (in)definite DPs in well-established phenomena, such as (presupposition) projection, donkey anaphora, bathroom anaphora, etc.

This analysis also derives the crosslinguistic variation of (in)definites in the nominal and temporal domains, as a result of the presence or absence of a definite competitor. In languages with no competition (the definite simple past is absent or in a different register), the present perfect has more felicitous uses and behaves as if it were ambiguous. This parallels with Heim's (2011) analysis of the variation of (in)definite DPs.

References: • Clark, 1975. *Bridging*.•Grønn. 2003. *The semantics and pragmatics of the Russian factual imperfective*.• Grønn & von Stechow, 2017. *The Perfect*.• Heim. 1983. *File change semantics and the familiarity theory of definiteness*. Heim. 1991. *Articles and definiteness*.• Heim. 2011. *Definiteness and indefiniteness*.• Klein.1992. *The present perfect puzzle*. • Kratzer.1998. *More structural analogies between pronouns and tenses*. • Pancheva & von Stechow. 2004. *On the present perfect puzzle*.• Partee. 1973. *Some structural analogies between tenses and pronouns in English*. •Percus. 2006. *Antipresuppositions*. Portner. 2011. *Perfect and progressive*.• Schlenker. 2012. *Maximize presupposition and Gricean reasoning*.