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ABSTRACT
Some Extensions of Sequence of Tense
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In previous work (Higginbotham (2002) and in earlier, less formal, discussions) I proposed a system governing Sequence of Tense in English in complement and relative clauses. The system was intended to account for the differences between the rules governing these types of embeddings, and to deduce the properties of the English constructions purely formally; i.e., without reference to any autonomous semantic constraints, and apart from pragmatic effects. On the view pursued there, and extended in this discussion, Sequence of Tense is an *anaphoric* phenomenon, where the anaphorically related elements are implicit arguments in the head INFL's of subordinate and superordinate clauses. In the present work I extend the English data to include the Perfect and the Progressive, probing, and at the same time testing, the hypothesis that these auxiliary elements are purely aspectual in nature, the Perfect indicating Result or Resultant states in the sense of Parsons (1990), and the Progressive expressing a relation between events and properties of events, as in Landman (1992), or Higginbotham (1990) and (2004). I also consider some phenomena linked to the defective morphology of English modals (e.g., *ought*). The (rather formidable) full paradigm is as in (1)-(2) below, with embedded relative clause in (1), and complement clause in (2):

(1) John ±Past ±modal ±Perfect ±Progressive meet [a woman who ±Past ±modal ±Perfect ±Progressive be happy/walk]

(2) John ±Past ±modal ±Perfect±Progressive say [that Mary ±Past ±modal ±Perfect ±Progressive be happy/walk]

With this material (or such of it as is presentable in short compass) to hand, I turn briefly to some general skepticisms about anaphoric theories (e.g., von Stechow (1995)). These skepticisms completely misfire, I believe, though there are some points of interest. Finally, following Giorgi (2005), I offer a preliminary investigation of the strangeness of the deployment of indexical temporal adverbials that are syntactically unsuited to their host tenses, exemplified in English in such contrasts as that between (3) and (4):

(3) John will say tomorrow that Mary is happy that day.

(4) *John will say tomorrow that Mary is happy tomorrow.

The phenomenon illustrated by (3)-(4) is syntactic in nature. I will have some remarks on its generality, and the extent to which its explanation, together with the anaphoric theory, subsumes the "upper limit constraint" of Abusch (1997), and related work.

What of cross-linguistic prospects? It is difficult to draw general conclusions from an investigation of English, even as combined with a quick survey of other languages, because English morphosyntax lacks a number of distinctions, as between indicative and subjunctive for instance, and lacks also the imperfect and conditional tenses. I will suggest, however, that English Past collapses the imperfect and the true past, and that the present study holds out some hope that the building blocks in INFL and the aspectuals, having a simple semantics in themselves, combine blindly to produce the complex visible phenomena.

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