EDITORIAL INTRODUCTION

The purpose of this collection is to document several important new trends in tense logic. Perhaps the most noteworthy developments since Prior's seminal works ([1]) have been — on the technical side — the treatment of temporal indexicals ([2]) in connection with so-called «many-dimensional» semantics and — as far as applications are concerned — the analysis of temporal locutions in ordinary language on the basis of tense logical semantics.

The first of these developments is sketched in some detail in van Benthem's paper. He compares several systems of many-dimensional tense logics and points out some relations these systems bear to standard quantification theory. Gabbay's paper contains a new system of two-dimensional logic as well as an axiomatization of it.

The remaining three papers deal with applications of tense logic to problems in philosophy and to the semantics of natural language. Cocchiarella's paper resorts to tense logical concepts only marginally in his treatment of sortal nouns, whereas McArthur uses tense logic in his try at one of the oldest problems in tense logic, namely, fatalism and the question of timeless truth. Bennett's paper provides a very useful overview of some of the semantic issues dealt with in recent attempts to describe the logic of tense and aspect in English. It is in this area that we may expect some very interesting new developments in the near future.

Among the many areas not discussed in this volume, we should at least mention the two following ones, as they also constitute essential extensions of Priorian tense logic: tense logic based on intervals and combined systems of tense and

---

[1] Cf. for instance A. Prior *Past, Present, Future*, 1967.
[2] The basic references here are H. Kamp «Formal Properties of 'Now'», *Theoria*, 1971 and F. Vlach «*Now*» and «*Then*», Diss. UCLA, 1973.

modal logics. Both of these are presently being developed and will play a major role in applications of tense logic to a wide variety of philosophical and linguistic problems ([3]).

December 1977   L. Åqvist
                                                          F. Guenthner

---

([3]) Interval semantics have been expounded in different ways by M.J. Cresswell «Interval Semantics and Logical Words», in C. Rohrer (ed.) *On the Logical Analysis of Tense and Aspect*, Tübingen 1977 and L. Åqvist and F. Guenthner «Fundamentals of a Theory of Verb Aspect and Events Within the Setting of Improved Tense Logic», in F. Guenthner and C. Rohrer (eds.) *Studies in Formal Semantics*, Amsterdam, in press.