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HOW TO STOP TALKING TO TORTOISES

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Lewis Carroll in his splendid paper [1] describes the conversation which Achilles had with the Tortoise when he finally caught it, a conversation as instructive as the footrace which preceded it. Briefly, the Tortoise would admit 'p', and '$(p \supset q)$', and '$((p \,\&\, (p \supset q)) \supset q)$' and so on, but would not concede 'q'. The aim of the present paper* is to provide Achilles with a reply with which to end this conversation. First, a development of C. L. Hamblin's theory of dialogue in [3] is described. This development is more explicit in its account of commitment, in the generation of locutions, and in the specification of immediate logical relations. Secondly, a dialectical system **DT** is defined within the theory. It is then argued that **DT** escapes a fatal defect in the modeling of argument common to all Hamblin's systems in [2] and [3]. Fourthly, it is shown that **DT** enables Achilles finally to call a halt to his conversation with the Tortoise. Finally, an extension of **DT** is made to enable field linguists to use Quinean techniques when investigating dialogues with Tortoises.

In considering dialogues, it is clear that we require the notions of a *participant* and a *locution.* The participants in dialogues may include not only people and tortoises, but fictional characters, organizations such as corporations and governments, and perhaps even machines; they form a set P. The locutions are grammatically complete utterances, types rather than tokens, forming a set L. Following Hamblin, I shall mean by a *locution act* a member of the set $P \times L$ of participant-locution pairs. By a *dialogue of length n*, I shall mean a member of the set $(P \times L)^n$ of sequences of n locution acts, and by a *dialogue* $d \in D$, a dialogue of length n for some n. Each member of a dialogue is of the form $\langle n, \langle p, l\rangle\rangle$, $n \in N$, $p \in P$, $l \in L$, but is identified with the triple $\langle n, p, l\rangle$. The set $E = N \times P \times L$ of such triples is

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