

LETTER TO THE EDITOR

In his review in *Computational Linguistics* (15,1) of Manaster-Ramer 1987, Barron Brainerd states that Definition 9 of my contribution to this volume is circular, thereby rendering the definiendum ill-defined. I believe this criticism to be without foundation. The crucial part of the definition in question is as follows:

$[p_i]$ denotes the set of all and only those strings Z for which it is the case that for any property p_j distinct from p_i , $Z \in |p_j| \cap [p_i]$ iff there is a dependency chain containing p_i and p_j .

I suspect that the appearance of circularity is due to the presence of the definiendum in the body of the definition, but this need not be pernicious (it is not, for example, in a properly formulated recursive definition); nor, I submit, is it in the present case. From parts of the theory developed earlier in the paper it follows that every ungrammatical string possesses multiple etiological properties if there is

more than one such property given the rules of the language; suppose then that for some e.p. p_i possessed by a string Z there is a dependency chain consisting of p_i and every e.p. $p_j \neq p_i$ such that $Z \in |p_i p_j|$. According to the definition, $Z \in |p_j| \cap [p_i]$ whence $Z \in [p_i]$; by contrast, if there is no such chain, then Z is not in $|p_j| \cap [p_i]$; further, since $|p_i p_j| \subseteq |p_j|$ (by Definitions 7 and 8), Z is in $|p_j|$ and hence not in $[p_i]$. Thus, $[p_i]$ is well-defined after all.

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REFERENCE

Manaster-Ramer, A. 1987. *Mathematics of Language*. Benjamins, Amsterdam.