Journal of Memory and Language **41,** 416–426 (1999)
Article ID jmla.1999.2650, available online at http://www.idealibrary.com on IDEAL®

How to Deal with "The Language-as-Fixed-Effect Fallacy": Common Misconceptions and Alternative Solutions

Jeroen G. W. Raaijmakers

University of Amsterdam, Amsterdam, The Netherlands

and

Joseph M. C. Schrijnemakers and Frans Gremmen

University of Nijmegen, Nijmegen, The Netherlands

Although Clark's (1973) critique of statis```õ` TJ T* [(have)-308(not)-308(been)-308(understood)-308(very)-308

that the items are sampled from a larger population of items. The major problem with this so-called "language-as-fixed-effect fallacy" is

randomly or pseudorandomly leads to sampling variance that must be taken into account. Oth-

$minF_{\beta}$ as well as the bias in F_1. For example, Smith (1976) and Wike and Church (1976) criticized the use of F_{β} (and

significant might in fact be significant). How-

correct value of $F9$. As we mentioned before,

are random factors (Group is random since it corresponds to an interaction between a fixed and a random effect). That is, it is assumed that the lists are based on a random sample of words from a larger population of words. Table 9 gives the expected mean-squares for this design under these assumptions. Note that the interaction term Treatment 3 List (within) does not exist for the case $p = 2$ (this interaction is then completely confounded with the Group main effect).

As can be seen from Table 9, in order to test the treatment effect, the treatment mean-square should be tested against the Treatment 3 List

tion. This partitioning of the Groups 3 Treat-