The purpose of this paper is to raise certain questions about the validity of some by now well established principles for the analysis of the phonological data in sociolinguistic studies. The data for the paper come from a study of the language of disadvantaged Israeli schoolchildren and, because of limitations of time and space, the records of sixteen respondents are analysed.

The paper concludes that the presentation of data in the form of graphs which show the mean and/or median percentages of the incidence of phonological variables may indeed be misleading. When the mean results of our study are graphed in the usual way, we seem to get clear class stratification of our variables, but when standard deviations are calculated the results are far less clear cut. Similarly, phonological variation as a function of register, or contextual style, may be graphed quite neatly. Yet standard deviation again makes the findings far more difficult to analyse.

It is argued here that sociolinguistic studies must present more than the mean and/or median percentages; they must also include data on standard deviation as well. The results might not be as neat that way, but our analyses should tell us more of what we want to know about language.