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**Jialing Dai\*** (jdai@pacific.edu), Department of Mathematics, The University of Pacific, 3601 Pacific Ave, Stockton, CT 95211. *Examples of Misdisplaying Statistical Graphs in Presentations*. Preliminary report.

As the so-called Chinese proverb "A picture is worth a thousand words" says, statistical graphs are a powerful form of communication. Graphical display of data becomes more and more popular; and we see statistical graphs in newspapers, professional journals, and other media. Is a picture really worth a thousand words? Does it indeed represent the message it meant to communicate? In other words, does it show the message accurately, effectively, and clearly? The answer is: not always. In this talk, I will provide a series of examples of misusing and misdisplaying statistical graphs in presentations. Those examples are carefully chosen from newspapers, magazines, journals, and other sources. The examples represent several major types of substandard statistical graphs, such as: graphs with graphos, high lie factor, double Y-axis, change scale in mid-axis, and multidimensional variations. I will comment on the inappropriateness of each graph, how inaccurately the data is displayed, and how misleading the graphical display is. Suggestions of how to avoid graphical misrepresentation of data will be given. The talk will end with a rough guideline for more effective graphical presentations. (Received September 26, 2006)