Statistical Objects for Interactive Graphics: What can you do with which and how?

Antony Unwin¹

¹ Dept of Computer Oriented Statistics and Data Analysis, University of Augsburg, 86135 Augsburg, GERMANY. E-mail: unwin@math.uni-augsburg.de

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1 Abstract

Interactive statistical graphics have been around for many years and there are several excellent software packages offering a range of interactive features. Surprisingly, there is little theory lying behind this work and much of it remains ad hoc. One theoretical approach is to concentrate on the statistical objects in a display and consider how they can and should be interacted with. Defining what is or is not a statistical object is usually simple (a bar in a barchart is, the boundary of the bar is not). Determining possible interactions is not so simple (what can you do with the objects making up a boxplot?). These issues and the links between theory and practice in interactive graphics are discussed in this paper.

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