A Qualitative Evaluation and Taxonomy of Bar Chart Annotations

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Summary:

When sharing visualizations, annotations provide valuable insights into the data by focusing attention on important visual elements. As a result, annotations have become an essential part of visualizations, primarily when externalizing data or engaging in collaborative analysis. Therefore, it is crucial to understand how people annotate visualizations. This study investigates how visualization students annotate bar charts when asked to answer high-level questions about the data in the charts. The resulting annotations were coded and summarized into a taxonomy with several interesting findings. For example, we notice that several annotation types were broadly applied, while others were just used in special cases. In addition, we found ensembles of annotations were required to sufficiently annotate some tasks. Our findings provide an early framework for contextualizing the usage of annotations, further providing guidance for best practice uses.

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