

This document outlines the changes made to the Perspective Charts paper, based on feedback received for our previous submission to EuroVis 2020. Full text of the reviews is included in Reviews.pdf.

Major changes:

- *Three out of four reviewers expressed concerns about the evaluation section of the paper.*

We have rewritten and expanded upon essentially every area of the evaluation section, from test environment to results reporting and discussion. Specific feedback received about the evaluation section includes:

- *The evaluation should be more clearly motivated - i.e., what are the hypotheses of the study*

We have expanded upon our motivations for the study and now more explicitly state the three hypotheses that we aimed to evaluate in our user study, at the beginning of Section 4. These hypotheses are used to better frame the study design and to comment on the results.

- *Results should be more clearly presented. Reviewers found the figure that displayed the results to be unclear and too broad, as it presented aggregate results of the evaluation.*

The results reporting is much more detailed in this version of the paper: Section 4.2 (Evaluation Results) is now broken down into subsections for results related to timing data, accuracy/error rate, and qualitative feedback related to the readability and novelty of the charts. We have added more figures, including one for timing data which was absent from the previous version. Accuracy results are now presented for each task block and broken down into the individual tasks, to provide a more granular view of the data. We also report exact p-values and effect size.

- *The paper should contain more in-depth discussion of evaluation results, and what those results suggest for our evaluation's hypothesis and for existing related work.*

We have added a Discussion section to the paper (Section 5). This section provides a much more in-depth interpretation of the results than what was present in the previous version, and is tied in with the hypotheses that we have now more clearly described. In this section we

also acknowledge areas where the results would suggest there were some limitations to our study, and comment on how our results contrast with results presented in previous works.

- *Multiple reviewers felt that the Circular Perspective Chart may not be a suitable design outside of artistic visualization applications, and should perhaps be included from the evaluation.*

Although we did not exclude the Circular Perspective Chart from the evaluation reporting, we have commented on this type of feedback received from participants in the Discussion section of the paper (Section 5). We also add expanded discussion of this chart's use as an artistic visualization type.

- *Two out of four reviewers commented on the structure of the Related Works section. Feedback indicated that it was not closely tied enough to our visualization designs, and that it was not thorough enough.*

We have made several changes to the Related Works section (Section 2) based on this feedback. Some citations, for example citations about visualization of datasets with a large number of entries, have been removed as they led to confusion about our goal of visualizing datasets with important variation at multiple scales. We have also expanded on existing works related to human perception and its applications in visualization.

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Minor changes:

- We have added figures showing radial and scale-stack bar charts, since they are used in our evaluation.
- One reviewer commented on the error rate being expressed as an absolute value; we have clarified in the paper that we did not observe a significant trend in directionality of error for any task type.