RESEARCH SUMMARY

The following critique is for the paper: "White Rooms and Morphing Don't Mix: Setting and the Evaluation of Visualization Techniques" written by Derek Reilly and Kori Inkpen. The paper briefs about the study that the authors have conducted in order to illustrate how physical settings while performing the technique can also impact on the map visualization. Till now the studies have been conducted as to how the map visualization needs to be conducted, little studies have been done where they actually test the physical setting where study is conducted. The authors have carried out the study with a group of participants and then inferred from the result analysis how different settings can affect the recall and that the recall is sensitive to the setting.

GOOD EVALUATION

In particular what I liked about the paper is the idea behind the research study. While mostly the research using map-visualization is often concerned with impact of presentation on visual perception and understanding. But apart from basic visualization results, it is equally important to recognize the difficulty of speculating from basic results and the impact of circumstantial factors. The authors have conducted the study where they have considered two different settings for the map visualization. One in the busy room where people keep moving in the middle of the day and the other in white lab room where there is no disturbing elements. Their results from the study show that setting can have an impact on external validity of research findings.

Also, one thing that was good was that they used juxtaposing as visualization method and still it resulted in higher recall score in the lab setting.

CRITICAL EVALUATION

The thing that I did not find that appealing was the complexity of experiment they had made for their studies. They chose a complex visualization method, Map Morphing where map is created by different cartographers and again juxtaposing method for visualization of map was used.

Their study considers a geographic visualization technique of map morphing, where a user-controllable morph transition from one map projection to another portraying the same area. Our implementation provides a single degree-of freedom slider, which simultaneously controls alpha blending and shape morphing between the maps. The result is a smooth, continuous transition between maps with significant differences in presentation. This might be confusing to the users who were chosen for their study purpose.

Also, the study conducted does not indicate what diversity of people they had chosen, i.e., their age groups and their genders. It might be possible that older people might have smaller degree of recall than the others which could have affected their research study.

Again, as explained the test after the map visualization was difficult which might be a possibility that users could not recall some of the visuals and this had nothing to do with the physical setting where the experiment was conducted.

QUESTIONS

Following questions can be raised based on the paper about Morphing and physical setting experiment:

- What could have been the results if they had chosen participants of the same age group?

- Had they chosen some other visualization technique other than map morphing which was not as complex, how would the results differ?
- Other than juxtaposing what other thing they could have chosen to make it an easy test for the participants?
- If the recall test would have been easier, would it impact the study the same way as it did now?

CONCLUSION

Overall, I found they did a great finding in conducting the experiment that took into account the physical environment setting in order to determine the visualization technique. The only thing that I was concerned about was the complexity of the experiment. There might be many possibilities where participants did actually found the recall test difficult rather than physical setting affecting their participation. Otherwise, the experiment did enough justice to what the authors wanted to study in their research.