

## Reviews for jovi-2024-burns-yellow

### Review #1

Completed: 26-07-2024 00:41

Recommendation: Revisions Required

### Conflict Declaration

I declare that I have no known conflicts of interest with the authors.

### Review

This paper introduces an interesting and provocative idea: the queer use of data visualization; then it illustrates the concept with the example of memes.

I find the description of the current view of what visualization is in the visualization community a bit narrow. Many people have discussed other ways that visualizations are used beyond the ‘normative’ ways that are presented (reasoning, collaboration, collaborative data analysis, communication).

This is an important point because this paper situates itself in opposition to those normative uses of visualization, but fails at defining exactly what this ‘normative’ view includes, or alternatively at acknowledging other ‘non-normative’ views. One very obvious example here is how visualization is used with an artistic intent. It does not fit into the described normative approaches, yet is very present in the visualization community - with the interdisciplinary IEEE VISAP event for example. Would the intersection of visualization+art be considered normative? or not? This is only one example, and there are many that come to mind - I cannot provide an exhaustive list but here are some works that are within my radar that I think describe visualization uses that would not easily be assimilated into the described ‘normative’ uses: work that looked at the politics of visualization [a], the role of subjectivity [b] and of reflection [c,d], autographic visualizations [e] and input visualizations [f] that are look beyond encoding, or education [g] - and there are surely many more such examples. In sum, the view that the visualization field has of how visualizations are used is broader than the narrow perspective presented in the paper. I acknowledge that this is still the ‘mainstream’ way of looking at visualization, but the paper must be more careful in its depiction.

Addressing this issue of framing seems very feasible and would not affect the rest of the paper. I actually suggest to focus the motivation on what is discussed in Section 2: it is

not too much about trying to define what is normative use or what is not; it is enough to establish that a visualization would have been created with an intended use (or intended uses) and that any use other than those intended would qualify as queer use of the visualization. Perhaps this was the intention in this paper, but that is not the way it comes through. It is more problematic when I read “we can think of data art as queer use since the visualizations produced by converting data into visual form are meant for aesthetic pleasure or enjoyment [8, 13] (neither of which conform to normative uses of visualizations).” At this point, this is an opinion, and one I do not agree with. Why would art not be a normative use of visualization?

Overall, this paper puts an idea out in the world, and describes rather superficially a specific example (memes) to illustrate the idea. Given the focus on depth (memes) rather than breadth (other non-normative uses) I was expecting a more thorough investigation of the topic of memes, perhaps an analysis of a corpus of memes from which themes and structure would have emerged. While I see value in the work and the direction taken, the contribution to knowledge in its current state is a bit shallow and would benefit from more substance.

- [a] <https://dl.acm.org/doi/abs/10.1145/2468356.2468739>
- [b] <https://benjamins.com/catalog/idj.23.1.07thu>
- [c] <https://dl.acm.org/doi/abs/10.1109/TVCG.2015.2467831>
- [d] <https://dl.acm.org/doi/10.1145/3173574.3173728>
- [e] <https://arxiv.org/abs/1907.05454>
- [f] <https://dl.acm.org/doi/10.1145/3613904.3642808>
- [g] <https://ieeexplore.ieee.org/abstract/document/10310184>

## Openness

There is no systematic data collection/analysis presented in this submission.

## Classification

Theory

## Recommendation

Major Revisions

## Revisions Requested

1. conduct a more thorough investigation of the chosen topic (memes) by collecting a representative corpus and conducting a proper analysis.
2. from that analysis, discuss/propose themes/axes/dimensions of the space of queer use of visualization with visualization memes.
3. consider reframing or toning down the claims around what is normative or not, as outlined in the review.

**Reviewer Name**

anonymous

**ORCID**

N/A

**Review #2**

Completed: 05-08-2024 06:03

Recommendation: Accept Submission

**Conflict Declaration**

I declare that I have no known conflicts of interest with the authors.

**Review**

This paper provides a framing for how to think about data visualizations through the lens of queer and feminist theory. Through this lens, the author comments on what is considered a “normative” use (the status quo) and what is a “queer” (more alternative) use of data visualizations. The case study of visualization memes enables the audience to think about the theory in concrete terms. Overall, this article is a joy to read. And the framing of queerness as an excellent mentality to think about what other uses and research the visualization community might engage in.

This is a commentary and is primarily very well written and presented. I will try my best to provide a queer review of the paper as well. In other words, I do not have any required revisions or anything of that sort. I want to offer an observation on the paper, which I find an interesting addition to the case study. I think it would be the author’s choice to include discussions on what I’m about to say:

Is there a difference between visualizations as artifacts and data visualizations? The paper’s title explicitly mentions “data visualizations,” and the introduction mostly overviews the existing seminal work on data visualizations. However, the case study mainly introduces memes that don’t have to do much with data. In other words, the visualizations on their own carry meaning and maybe a common understanding (socially accepted) of an intended use inspired by how these visualizations are used in more normative settings. The pie charts seem the best way for cases with an overwhelming majority and a minority for a concept. Here, we have a tool, visualizations that are good at communicating something (pardon my normative understanding of vis), and they are used, ironically, without any actual data. So is the queer use of visualizations in memes; to disregard the data part, use what vis is good at, or known to be good at, and send them out in the real world?

To me, the answer is yes. And I am pretty amused by this thought, Especially for visualization researchers. Because getting rid of the data part, and thinking about visualizations

as artifacts with social meaning, ones that convey a specific type of relationship and can be deployed in the world in a fun and queer way, is an interesting, queer, and amusing idea.

While I was reading the paper, I was in this mindset that “ok, this paper is conflicting visualizations and data visualizations, and that’s probably what queer use is.” I was thinking that to do research on data visualizations, we have to remain normative and think about data normatively. The open questions section got me to think otherwise. Seeing these three examples had me understand that that’s the point of the “queer” lens being used to think about visualizations. It’s interesting to get rid of the data and just use vis for the meanings they convey on their own. It’s interesting to think of vis as a tool to generate data, and it’s interesting to think of vis as a means to play.

So... ummm. Thanks for this interesting read. I think the community would benefit from reading the paper as well.

### **Openness**

This is a commentary. And a lens to think about visualization in alternative queer ways. Is it easy to use this for future research? I think so. I think the idea is of this paper is to inspire. I bet many people can advance conversations on this specific concept of queer use of visualizations, others might be inspired to think more openly, and some might do neither of these.

### **Classification**

Commentary

### **Classification**

Theory

### **Recommendation**

Accept

### **Revisions Requested**

I have no requested changes.

### **Reviewer Name**

Alireza Karduni

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## **Review #3**

Completed: 15-07-2024 15:16

Recommendation: Revisions Required

### **Conflict Declaration**

I declare that I have no known conflicts of interest with the authors.

### **Review**

This paper examines the use of data visualization through the lens of Queer theory, emphasizing the “informative” use of visualization as memes. Through case studies, the author demonstrates how visualizations are used in non-task-oriented contexts and discusses potential directions to extend this scope.

I recommend accepting this paper for publication in JoVI. The paper addresses essential issues regarding how visualizations have been traditionally used and defined within textbooks and understood by the majority of the community. Applying Queer theory is both timely and appropriate for this topic, as it encourages an open-minded approach and welcomes innovation.

However, one area requires further clarification. Visualizations fundamentally serve to communicate various concepts for different purposes. What does the term “visualizations for play” mean in this context? Specifically, what does “appear in places of play” imply? The example of visualizations being used to communicate a game’s state (e.g., health bars in video games) still falls within the “normative use” for communication.

A recent paper on Visualizations for data collection:

Nathalie Bressa, Jordan Louis, Wesley Willett, and Samuel Huron. 2024. Input Visualization: Collecting and Modifying Data with Visual Representations. In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI ’24). Association for Computing Machinery, New York, NY, USA, Article 499, 1–18. <https://doi.org/10.1145/3613904.3642808>

### **Openness**

N/A

### **Classification**

Commentary

### **Recommendation**

Minor Revisions

## Revisions Requested

Clarify the definition of “visualizations for play”, how are visualizations used in this scenario different from the other “normative” use?

## Reviewer Name

Zezhong Wang

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## Metareview

Completed: 2024-08-11

Recommendation: Minor Revision

## Conflict Declaration

I declare that I have no known conflicts of interest with the authors.

## Review

This article introduces the queer use of visualization and focuses on a case study of visualization memes. Based on the topic, I assigned previous reviewers from Info+ and new reviewers who have interests in alternative uses of visualizations.

After reviewing the paper, the opinions of our reviewers can be summarized as follows:

Strengths:

- This paper is a well-written and presented (R2, AE)
- It offers “an interesting, queer, and amusing idea” with “an open-minded approach” (R1, R2, R3, AE)

## Revisions Requested

Weaknesses/Revisions:

1. The current framing doesn’t clearly define “normative” and “non-normative” uses (R1, R2, R3, AE) or the threshold between them. Refining the introduction and Section 2 (R2, AE) could address this.

R1 inquired about the artistic usage, R2 brought up “get rid of data,” and R3 questioned about the term “visualizations for play.” The author(s) should revise the framing to reflect these individual reviews.

2. The current case study on memes is somewhat shallow (R1, AE), and the reviewer suggested a more thorough investigation and discussion (R1).

Based on all three reviews, the AE thinks this paper might be best categorized as a commentary, and therefore additional research isn't fully necessary. However, the AE agrees that the two directions suggested by R1 are promising, and in the current article, the meme case study reads like the only example of queer use. The author(s) should slightly adjust their framing to make it clear this is just one example, and if possible, include a discussion of the broader space. Carefully addressing the first point would also help in resolving this second point.

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