Spatial VR: Navigating large data sets in virtual reality

You could also focus on a single interaction technique, e. g. for scrolling, zooming, rearranging, ...

ABSTRACT

What is the state of the world?
We need to navigate large data sets every day. Text, node-link diagrams, images, ...

What is the problem?
Linear scrolling is the typical solution. Can be time-consuming and cumbersome.

What are current solutions?
Mid-air full-body gestures (e. g. work by Underkoffler), not good for productive work (Gorilla arm syndrome). Others? What about ZUIs?

Why are they not sufficient for solving the problem?
Data is always presented on a 2D surface (i. e. display). Not very efficient for data with more dimensions.

What is your solution?
VR?

Some more detailed description of the solution.
How does it work?

Why is this solution better? How do you show this?
Evaluation?

Contributions
What are the main contributions from this work?

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NOTES & IDEAS
- Some references [1, 2, 3]
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REFERENCES

1. Andreas Fender, Jörg Müller, and David Lindlbauer. 2015. Creature Teacher: A Performance-Based Animation System for Creating Cyclic Movements. In *Proceedings of the 3rd ACM Symposium on Spatial User Interaction (SUI '15)*. ACM, New York, NY, USA, 113–122. DOI: http://dx.doi.org/10.1145/2788940.2788944

2. Ivan Poupyrev, Mark Billinghurst, Suzanne Weghorst, and Tadao Ichikawa. 1996. The Go-go Interaction Technique: Non-linear Mapping for Direct Manipulation in VR. In *Proceedings of the 9th Annual ACM Symposium on User Interface Software and Technology (UIST '96)*. ACM, New York, NY, USA, 79–80. DOI: http://dx.doi.org/10.1145/237091.237102

3. Shumin Zhai, William Buxton, and Paul Milgram. 1994. The &Ldquo;Silk Cursor&Rdquo;: Investigating Transparency for 3D Target Acquisition. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '94)*. ACM, New York, NY, USA, 459–464. DOI: http://dx.doi.org/10.1145/191666.191822