Interactive Folding Fan Charts: Improving User Efficiency Through Seamless Fusion of Multiple Levels of Detail

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Jumping on the Fanned Wagon
Some Previous Fan Chart Work at FHT

2008: Interactive Fan Charts  
(Efficient Use of Space)  
Geoffrey Draper and Richard Riesenfeld

2013: Visualization / Search  
(Genealogy Holes)  
Daniel Zappala
Problem: Disorientation ➔ inefficiency
Problem: Disorientation → inefficiency

This isn't my chart anymore!
Problem: Disorientation → inefficiency

Same old problem!

howtomakeafamilytree.weebly.com/family-tree-software.html
Previous Work (Tree-Style Charts)

FHT 2001, 2002  (Sederberg, Saito, Finnigan)
OnePage Genealogy  (Sederberg, et al.)
Virtual Pedigree  (Cheatham, Wigington, Barrett)
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Lessons:
- Show it all!
- Pan-and-zoom
- Expand areas of current interest
- Smooth, animated interaction
- Find problems in the data
Folding Fan Charts

- Show many generations

- “Fold” / Expand (to show outer details)

- Pan / Zoom interface

- Thumbnail Overview
  (expanded portion highlighted on full chart)
Folding Fan Charts on Historic Journals Website

- Maps integration
  (show location of one ancestor, all ancestors, or time-lapse)

- Tools to highlight problems in tree data
  (loops, duplicates, bad event dates, etc.)
Leonidas Hamlin Kennard (1842-1926)  [KWCF-QGH]
- B: Mount Pleasant, Swan Township, Vinton, Ohio, United States (January 29, 1842)
- M: Farmington, Davis, Utah Territory, United States (January 29, 1869)
- D: Salt Lake City, S-Lk, UT (May 29, 1926)

No journals, videos, or other artifacts. Add

This person is in the LDS pioneer database. View

View person on FamilySearch
Results (informal)

- Faster, smoother interaction
- Easier to keep bearings
- Focus on useful / interesting information
- Tools make spotting problems trivial
- Overall, easier and more efficient
Conclusion

Combining multiple levels of detail (thumbnail overview + many generations + pan-zoom) improves user efficiency
Thank You
Thank You