References

Abowd, G., and Beale, R., (1991). Users, Systems and Interfaces: A Unifying Framework for Interaction. *People and Computers VI, Proceedings of the HCI'91 conference,* editors Diaper D., and Hammond N., p.73–87.

Ahlberg, C., Williamson, C. and Shneiderman, B., (1992). Dynamic queries for information exploration: An implementation and evaluation. *Proceedings of CHI'92 Human Factors in Computing Systems*, ACM, Monterey, CA, p. 619-626.

Ahlberg, C., Shneiderman, B., (1994). The Alphaslider: A Compact and Rapid Selector. *Proceedings of CHI'94 Human Factors in Computing Systems*, ACM, p. 365-371.

Becker, A., and Cleveland, W. S., (1987). Brushing Scatterplots. *Technometrics,* vol. 29, no. 2, p. 127-142.

Bederson, B.B., and Hollan, J.D., (1994). PAD++: A zooming graphical interface for exploring alternate interface physics. *UIST '94*, *Proceedings of the ACM Symposium on User Interface Software and Technology*, ACM, p. 17-27.

Bertin, J., (1983). *Semiology of Graphics*, The University of Wisconsin Press, London, England.

Bertin, J., (1981). *Graphics and Graphic Information Processing*, Walter de Gruyter, Berlin, New York.

Bier, E. A., Stone, M.C., Baudel, T., Buxton, W., and Fishkin, K., (1994). A Taxonomy of See-Through Tools, *Proceedings of CHI'94 Human Factors in Computing Systems*, ACM, Boston, MA, p. 358-364.

Brodlie, K. W., Gallop, J. R., Grant, A. J., Haswell, J., Hewitt, W. T., Larkin, S., Lilley, C. C., Morphet, H., Townend, A., Wood, J., Wright, H. (1991). Evaluation of Visualization Software, *AGOCG Technical Report 9*.

Card, S.K., Mackinlay, J., Shneiderman, (1999). *Readings in Information Visualization: Using Vision to Think*, Card, S.K., Mackinlay, J., Shneiderman (Eds), Morgan Kaufman Publishers Inc., San Francisco.

Card, S.K., Mackinlay, J., (1997). The Structure of the Information Visualization Design Space, *Proceedings of the Symposium on Information Visualization,* IEEE, Phoenix, AZ, pp. 92-99.

Card, S.K., Mackinlay, J., Robertson, G., (1990). The Design Space of Input Devices, *Proceedings of CHI'90 Human Factors in Computing Systems*, ACM, p. 117-124

Card, S.K., Moran, T.P., and Newell A., (1983). *The Psychology of Human-Computer Interaction,* Lawrence Erlbaum Associates, Hillsdale, New Jersey.

Casner, S.M., (1991). A Task-Analytic Approach to the Automated Design of Graphic Presentations, *Transactions on Graphics*, ACM, Vol. 10, No. 2, p. 111-151.

Cavanaugh, J.P., (1972). Relation between the intermediate memory span and the memory search rate, *Psychological Review,* Vol 79, p. 525-530.

Chernoff, H., (1973). The Use of Faces to Represent Points in k-Dimensional Space Graphically, *Journal of the American Statistical Association*, p. 361-368.

Chuah, M., Eick, S.G., (1998a). Information Rich Glyphs for Software Management Data, *IEEE Computer Graphics and Applications*, IEEE, p. 24-29.

Chuah, M., Roth, S.F., (1998b). Dynamic Aggregation with Circular Visual Designs, *Proceedings of the Symposium on Information Visualization*, IEEE, North Carolina, p. 35-43.

Chuah, M., Roth, S.F., (1996). On the Semantics of Interactive Visualizations, *Proceedings of the Symposium on Information Visualization*, IEEE, San Francisco, CA, p. 29-36.

Chuah, M., Roth, S.F., Mattis, J., Kolojejchick, J., and Juarez, O., (1995). SageBook: Searching data graphics by content, *Proceedings of CHI'95 Human Factors in Computing Systems,* Denver, CO, p. 338-345.

Chuah, M.C., Roth, S.F., Mattis,J., and Kolojejchick, J., (1994). SDM: Selective Dynamic Manipulation of Visualizations, *UIST'95 Proceedings of the ACM Symposium on User Interface Software and Technology*, ACM, Pittsburgh, PA, p. 61-70.

Eick, S. G., Steffen, J. L., Sumner, E., (1992). Seesoft – A Tool for Visualizing Line Oriented Software Statistics, *IEEE Transactions on Software Engineering,* Vol 18, IEEE, p. 957-968.

Feiner, S., and Beshers, C., (1990). Worlds within worlds: Metaphors for exploring n-dimensional virtual worlds, *UIST'90 Proceedings of the ACM Symposium on User Interface Software and Technology*, ACM, p. 76-83.

Foley, J.D., vanDam, A., Feiner, S.K., and Hughes, J.F., (1990). *Computer Graphics: Principles and Practice,* Addison Wesley Publishing Company.

Furnas, G.W., (1991). Generalized fisheye views. *Proceedings of CHI `91 Human Factors in Computing Systems*, ACM, p. 16-23.

Goldstein, J., Roth, S.F., Kolojejchick, J., and Mattis, J., (1994). A framework for knowledge-based interactive data exploration, *Journal of Visual Languages and Computing*, p. 339-363.

Ellson, J., Gansner, E., Koutsofios, E., Mocenigo, J., North, S., Woodhull, G., Dobkin, D., Alexiev, V., GraphViz, http://www.research.att.com/sw/tools/graphviz/.

Green, M., Visual search, visual stream, and visual architectures, *Perception and Psychophysics,* in press.

Hollands, J.G., Carey, T.T., Matthews, M.L., and McCann, C.A., (1989). Presenting a Graphical Network: A Comparison of Performance Using Fisheye and Scrolling Views, *Designing and Using Human-Computer Interfaces and Knowledge Based Systems,* Elsevier Science B.V., Amsterdam, p. 313-320.

Jacob, R., (1986). A Specification Language for Direct Manipulation User Interfaces, *Transactions on Graphics,* Vol. 5, No. 4, ACM, p. 283-317.

John B.E., (1988). *Contributions to engineering models of human-computer interaction.* Doctoral dissertation, Carnegie Mellon University.

John, B.E. & Newell, A., (1989). Cumulating the science of HCI: From S-R compatibility to transcription typing. *Proceedings of CHI'89 Human Factors in Computing Systems,* Austin, Texas, ACM, p 109-114.

John, B., (1990). Extensions of GOMS analyses to expert performance requiring perception of dynamic visual and auditory information. *Proceedings of CHI'90 Human Factors in Computing Systems*, Seattle, WA, ACM, p. 107-115.

John, B.E., & Newell, A., (1990). Toward an engineering model of stimulus response compatibility, *Stimulus-response compatibility: An integrated approach*, R.W. Gilmore & T.G. Reeve (Eds), New York:North-Holland, p. 107-115.

Kerpedjiev, S., Carenini, G., Roth, S. F., Moore, J. D., (1997). AutoBrief: a multimedia presentation system for assisting data analysis, *Computer Standards and Interfaces*, Volume 18, p. 583-593.

Lamping, J., Rao, R., Pirolli, P., (1995). A focus+context technique based on hyperbolic geometry for visualizing large hierarchies. *Proceedings of CHI '95 Human Factors in Computing Systems,* ACM, p. 401-408.

Leung, Y.K., (1989). Human-Computer Interface Techniques for Map Based Diagrams, *Designing and Using Human-Computer Interfaces and Knowledge-Based Systems*, Elsevier Science B.v., Amsterdam, p. 361-368.

Leung, Y.K., and Apperley, M. D., (1994). A review and Taxonomy of Distortion-Orientation Presentation Techniques, *Transactions of Computer-Human Interaction*, ACM, Vol. 1, No. 2, p. 126-160.

Livingstone, Margaret S., (1988). Art, Illusion and the Visual System, *Scientific American*, Vol. 256, pp. 78-85.

Lohse, G.L., (1993). A Cognitive Model for Understanding Graphical Perception, *Human Computer Interaction,* Vol 8, p. 353-388.

Lohse, G. L., Biolsi, K., Walker, N., and Reuter, H.H., (1994). A Classification of Visual Representations, *Communications of the ACM*, Vol. 37, No. 12, p. 36-49.

Mackinlay, J.D., Card, S.K., Robertson, G.G., (1991). The Perspective Wall: Detail and Cotext Smoothly Integrated. *Proceedings of CHI'91 Human Factors in Computing Systems*, ACM, New York, 173-180.

Mackinlay, J.D., Card, S.K., Robertson, G.G., (1990). A Semantic Analysis of the Design Space of Input Devices, *Human Computer Interaction,* Vol. 5, Lawrence Erlbaum Associates, Inc., 145-190.

Mackinlay, J.D., (1986a). *Automatic Design of Graphical Presentations,* Ph.D. Thesis, Stanford University.

Mackinlay, J.D., (1986b). Automating the design of graphical presentations of relational information, *Transactions on Graphics*, ACM, Vol. 5, No. 2, pp. 110-141.

Myers, B.A., (1991). Using AI Techniques to Create User Interfaces by Example, *Intelligent User Interfaces*, Sullivan, J.W. (Ed), Reading, MA: Addison-Wesley/ACM Press, p. 385-401.

Olson, J.R., & Olson, G.M., (1990). The growth of cognitive modeling in human-computer interaction since GOMS*, Human-Computer Interaction,* Vol 5, p. 221-265.

Plaisant, C., Milash, B., Rose, A., Widoff, S., and Shneiderman, B., (1996). LifeLines: Visualizing Personal Histories, *Proceedings of CHI'96 Human Factors in Computing Systems*, ACM, Vancouver, BC, Canada, p.221-227.

Rao, R., Card, S.K., (1994). The table lens: Merging graphical and symbolic representations in an interactive focus+context visualization for tabular information, *Proceedings of CHI '94 Human Factors in Computing Systems,* ACM, p. 318-322.

Robertson, G., Mackinlay J.D., Card, S.K., (1991). Cone Trees: Animated 3D Visualizations of Hierarchical Information. *Proceedings of CHI '91 Human Factors in Computing Systems,* ACM, p. 189-194.

Roth, S., Lucas, P., Senm, J., Gomberg, C.C., Burks, M.B., Stroffolino, P.J., Kolojejchick, J.A., (1996). Visage: A user interface environment for exploring information, *Proceedings of the Symposium on Information Visualization,* IEEE.

Roth, S.F., Kolojejchick J., Mattis J., Goldstein J., (1994). Interactive Graphic Design Using Automatic Presentation Knowledge, *Proceedings of CHI'94 Human Factors in Computing Systems,* ACM, Boston, p. 112-117.

Roth, S.F., Mattis, J.A., (1990). Data Characterization for Intelligent Graphics Presentation, *Proceedings of CHI'90 Human Factors in Computing Systems,* ACM, Seattle, WA, p. 193-200.

Sarkar, M., Snibbe, S.S. (1993). Stretching the rubber sheet: A metaphor for viewing large layouts on small screens. *UIST '93 Proceedings of the ACM Symposium on User Interface Software and Technology,* p. 81-91.

Senay, H., Ignatius, E., (1994). A Knowledge Based System for Visualization Design, *IEEE Computer Graphics and Applications*, p. 36-47.

Siskind, J.M., Screaming Yellow Zonkers, http://www.csd.abdn.ac.uk/~swhite/zonkers.html

Spoerri, A., (1993). InfoCrystal: A Visual Tool for Information Retrieval, *Proceedings of IEEE Visualization'93 Conference,* Los Alamitos, CA., p.150-157.

Springmeyer, R.R., (1992). *Designing for Scientific Data Analysis: From Practice to Prototype*, Ph.D. Thesis, Lawrence Livermore National Laboratory.

Teghtsoonian, J., (1965). The judgement of size, *American Journal of Psychology*, p. 392-402.

Treisman, A., Schmidt, H., (1982). Illusory Conjunctions in the Perception of Objects, *Cognitive Psychology,* Vol 14, p. 107-141.

Treisman, A., (1988). Features and Objects: The Fourteenth Bartlett Memorial Lecture, *The Quarterly Journal of Experimental Psychology*, Lawrence Erlbaum Associates Ltd, The Distribution Center, Blackrose Road, Letchworth Herts SG6 IHN, U.K., p. 201-237.

Tufte, E. R., (1983). *The Visual Display of Quantitative Information,* Graphic Press, Cheshire, CT.

Tukey, J.W., (1977). *Exploratory Data Analysis*, Addison-Wesley Publication Co.

Tweedie, L., (1997). Characterizing Interactive Externalizations, *Proceedings of CHI'97 Conference on Human Factors in Computing Systems*, Atlanta, p. 375-382.

Tweedie, L., Spence, R., Williams, D., Bhogal, R., (1994). The Attribute Explorer, *Conference Companion of CHI'94 Conference on Human Factors in Computing Systems,* p. 435-436.

Welford, A.T., (1973). Attention, strategy, and reaction time: A tentative metric, *Attention and performance IV,* S.Kornblum (Ed.), New York: Academic, p 37-54.

Wills, G., (1996). 524,288 Ways to Say “This is Interesting”, *Proceedings of the Symposium on Information Visualization,* IEEE.