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1994 Human-Computer Interaction Laboratory Video Reports

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Abstract

80 minute video demonstrations of the past year's research

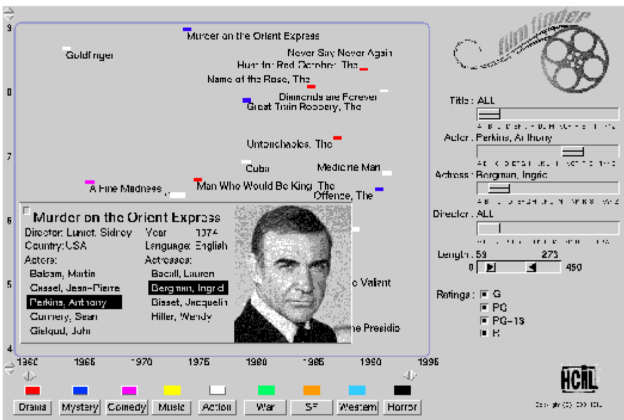
Topics are:

•**Introduction and table of contents** - *Ben Shneiderman,* [3:18]
•**Visual information seeking using the FilmFinder** - *Christopher Ahlberg, Ben Shneiderman,* [6:12]
•**Organization overviews and role management-Inspiration for future desktop environments** - *Catherine Plaisant, Ben Shneiderman,* [9:39]
•**Visual decision-making: using treemaps for the analytic hierarchy process -** *Toshiyuki Asahi, Ben Shneiderman, David Turo,* [8:34]
•**Visual information management for satellite network configuration-***Catherine Plaisant, Harsha Kumar, Marko Teittinen, Ben Shneiderman,* [8:49]
•**Graphical macros: a technique for customizing any application using pixel-pattern matching-***Richard Potter,* [9:49]
•**Education by engagement and construction: can distance learning be better than face to face?-** *Ben Shneiderman,* [15:00]
•**Dynamic queries demos: revised HomeFinder and text version plus health statistics atlas-***Ben Shneiderman,* [9:40]
Dynamic Queries are user controlled displays of visual or textual information. Ben Shneiderman presents the HomeFinder (developed by Chris Williamson), followed by the text version (Vinit Jain) and the Health Statistics Atlas (Catherine Plaisant and Vinit Jain).
•**CHI '94 slide and video show-** [9:12]

Open House '94 Video

•Introduction and table of contents-*Ben Shneiderman,* [3:18]
An introduction to the Human-Computer Interaction Laboratory, mentioning TreeViz-PC, a treemap directory maintenance tool running in Windows.

•Visual information seeking using the FilmFinder
Christopher Ahlberg, Ben Shneiderman, [6:12]
FilmFinder allows users to explore a large film database. By applying the dynamic queries approach to filtering information, a continuous starfield display of the films, and tight coupling among the components of the display, the FilmFinder environment encourages incremental and exploratory search.



•Organization overviews and role management-Inspiration for future desktop environments
Catherine Plaisant, Ben Shneiderman, [9:39]
In our exploration of future work environments for the World Bank we propose two concepts. Organization overviews provide a consistent support to present the results of a variety of manual or semi-automated searches. This view can be adapted or expanded for each class of users to finally map the multiple personal roles an individual has in an organization. After command line interfaces, graphical point and click interfaces, and the current "docu-centric" designs, the natural direction is towards a role-centered approach where we believe the emphasis is on the management of those multiple roles. Each role involves coordination with groups of people and accomplishment of tasks within a schedule.

•Visual decision-making: using treemaps for the analytic hierarchy process-*Toshiyuki Asahi, Ben Shneiderman, David Turo,* [8:34]
The analytic hierarchy process, a decision-making method based upon division of problem spaces into hierarchies, is visualized through the use of treemaps, which pack large amounts of hierarchical information into small screen spaces. The problem of construction site selection is considered in this video. Apart from its traditional use for problem/information space visualization, the Treemap also serves as a potent visual tool for "what if" type analysis.

•Visual information management for satellite network configuration-*Catherine Plaisant, Harsha Kumar, Marko Teittinen, Ben Shneiderman,* [8:49]
Our prototype network configuration management system illustrates the benefits of compact overviews of the network and the tasks. General purpose tools are available to visualize and query the network, access detail information and gather elements relevant to the task. The Treemap combined with dynamic queries proved well-suited to deal with the multiple containment hierarchies in networks. The TreeBrowser uses the more conventional node-link visualization of trees, and tightly coupled overviews linked to detailed views.

•Graphical macros: a technique for customizing any application using pixel-pattern matching-*Richard Potter,* [9:49]
Triggers is a Graphical Macro system that allows users to customize and add functionality to applications. Graphical Macros work by simulating the actions of the user and introduce the novel technique of scanning the pixel representations of the graphical user interface. The Graphical Macro technique allows Triggers to customize any application. Example customizations are shown for spreadsheet, drawing, word processing, and file management applications.

•Education by engagement and construction: can distance learning be better than face to face?-
Ben Shneiderman, [15:00]
An emerging theory of "education by engagement and construction" is described, in which students work in teams to create ambitious projects with results that are presented to someone other than the professor. The video shows how a distance learning Graduate Computer Science Seminar titled "Virtual Reality, Telepresence and Beyond" was con-ducted according to this theory. The intense interactions by satellite TV and electronic mail may have created a greater sense of interaction and intimacy among the students than many face-to-face courses.

•Dynamic queries demos: revised HomeFinder and text version plus health statistics atlas-*Ben Shneiderman,* [9:40]
Because of the great interest in Dynamic Queries we are making these video demos available for instructional and training purposes. We appreciate the cooperation of the University of Maryland Instructional Television, which produced the original 5-hour User Interface Strategies '94 program.
Dynamic Queries are user controlled displays of visual or textual information. Ben Shneiderman presents the HomeFinder (developed by Chris Williamson), followed by the text version (Vinit Jain) and the Health Statistics Atlas (Catherine Plaisant and Vinit Jain).

•CHI '94 slide and video show- [9:12]

Ordering Information

Tape and price requests may be sent to:

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Video Year ☐1991 ☐1992 ☐1993 ☐1994 ☐1995