Visual Information Seeking: Tight Coupling of Dynamic Query Filters with Starfield Displays

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Visual information seeking (VIS) is distinguished from familiar query composition and information retrieval because of its emphasis on rapid filtering, progressive refinement or search parameters, continuous reformulation of goals, and visual scanning to identify results. VIS principles developed: dynamic query filters (query parameters rapidly adjust with sliders, buttons, maps, etc.), starfield displays (two-dimensional scatterplots to structure result sets), and tight coupling (interrelating query components to preserve display invariants and support progressive refinement and an emphasis on using search output to foster search input). A FilmFinder prototype using a movie database demonstrates these principles.

The Table Lens: Merging Graphical and Symbolic Representations in an Interactive Focus+Context Visualization for Tabular Information

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We present a new visualization, called the Table Lens, for visualizing and making sense of large tables. The visualization uses a focus+context (fisheye) technique that works effectively on tabular information because it allows display of crucial label information and multiple distal focus areas. In addition, a graphical mapping scheme for depicting table contents has been developed for the most widespread kind of tables, the case-by-variables table. The Table Lens fuses symbolic and graphical representations into a single coherent view that can be fluidly adjusted by the user. This fusion and interactivity enables an extremely rich and natural style of direct manipulation exploratory data analysis.