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Maps as visualization systems

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ABSTRACT

The technology of mapping has changed radically not only with the advent of greater computing power, but equally important, the advent of the Web. Maps are no longer static items, limited to print-on- paper. Now they are dynamic displays of geospatial and temporal information, assemblies of complex layers of data and image capable of representing all four dimensions simultaneously. With the introduction of free, Web based applications such as 3-D Google Earth, every man, woman, and child can use the globe as armature for cultural, educational, or personal information. Search engines are increasing using maps and location filtered search results that encourage us to think geographically in our quest for information. Just as the revolution of the printing press resulted in the use of text as the preeminent method of communication, so these trends in mapping will revolutionize the way maps are used by us and challenge the printed page as the dominant way to convey information – maps will become armatures for much of the information of our culture.

Novel as these uses may seem, traditional map-making offers crucial insights into the ways these new maps will affect our lives. When Lewis and Clark explored the American Northwest 200 years ago, their paper map of the journey was a "location-based technology" that in one glance revealed as much or more than hundreds of pages of their written journal. Their map changed forever that part of the word – politically, culturally, and economically — by allowing new ways of seeing, of knowing, of imagining. The same kind of impact will occur from the location-based technologies now emerging on the Web: by displaying data spatially, people will become their own explorers and mappers.

Drawing on his personal collection of over 150,000 historical maps as well as his work with geographic information systems and image database display systems, David Rumsey will show how information of all kinds has been mapped and will be mapped in the future, including his most recent work on the use of historic maps in three-dimensional spaces such as Google Earth.