Abstract

In this paper I will argue that the conventional bibliographic database is a rigid and limiting concept which has been overtaken by new forms of digital data and improvements in database technology and server capacity. Together these blur the distinctions between bibliographic resources and other data, and remove the need to build separate systems for each.

I argue that we should be moving instead towards Web 2.0-style databases which seamlessly integrate bibliographic data with other research data in a collaborative environment, allow communities of interest to build and share resources, and support easy sharing of data within or between research groups. They should allow non-technical users to extend the database schema on demand without recourse to programmers. They should support explicit recording and annotation of relationships between entities - the basic currency of scholarship, and a major weakness of all current bibliographic systems (and most purpose-built databases). They should allow discussions and annotations to develop around and between particular resources, using standard wiki and blog components. They should allow selected data to be easily published as live content in external web sites, while providing programmatic access to other systems through the exposure of standards-based web services.

These ideas have been implemented in Heurist (HeuristScholar.org), a production system in daily use which we have developed over the last two years. I will illustrate the approach I am advocating by showing how a single instance of Heurist has allowed small workgroups to collaboratively build projects as diverse as an annotated archaeological bibliography, web sites for my department and for a European research group, visualisation of a research network and an interactive map-based historical events browser.

About the speaker

I am Director of the Archaeological Computing Laboratory at the University of Sydney. My principal interests lie in the development of web databases and Web 2.0 applications, spatial and temporal contextualisation of information through the application of time-enabled mapping and map animation, and the development of digital literacy.

Since 1995 I have been developing TimeMap (www.timemap.net), a methodology and software
application which pioneered time-enabled web mapping. My current work focusses on the modelling of historical events within Heurist (HeuristScholar.org), and the development of linked interactive database-driven historical timeline visualisations and web maps for delivering historical information in educational contexts.