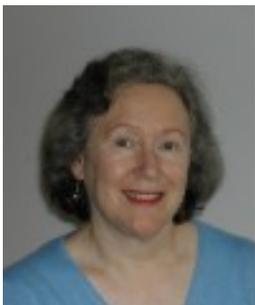
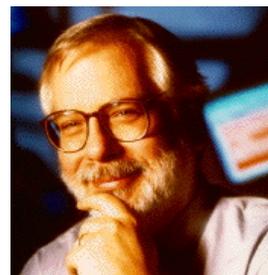


CNI Fall 1996 Task Force Meeting Summary Report

Bold ideas and new paradigms flowed through the corridors of the [Fall 1996 meeting](#) of the [Coalition for Networked Information \(CNI\)](#) held December 6 and 7 in San Francisco - from digital archives to Internet 2. Yet something was lacking. With the recent death of CNI's Executive Director Paul Evan Peters, the usually animated conference began with a slightly reserved tone. After CNI Steering Committee Chairman Richard West opened the meeting with the challenge to members to continue Peters' legacy of progress, however, the 337 attendees representing 187 institutions, began to resume the spirited pace characteristic of CNI meetings. As confirmed by new attendee Sally Sinn, who represented the USDA, ARS and the National Agricultural Library: "I've been encouraged to attend these meetings for years and I'm happy I did. It's a collegial and lively group." Sinn added, "I enjoyed being among so many colleagues who are dealing with so many issues from the same perspective."

During his opening remarks West explained that the meeting would be held as a tribute to **Paul Peters** and that CNI sponsors desired to continue CNI's forward progression. "ARL, CAUSE, and Educom agree to the importance and value of a shared agenda and a collaborative approach to addressing the issues of that shared agenda," said West. According to West, the three organizations expressed their



commitment through the appointment of **Joan Lippincott** as Interim Executive Director and the initiation of a process to recruit new leadership to continue CNI's progress. The three organizations will also create two commemorative tributes to Paul Evan Peters: an award in network information excellence and a scholarship fund. An uplifting memorial service was held the evening of December 6 in Peters' honor.

West then addressed the theme of the meeting, enterprise-wide information strategies, one of CNI's new initiatives. The initiative is at the intersection of two of the most powerful forces affecting

contemporary research and education: the first is the spectacular growth in the range, performance, and user population of networks like the Internet; and the second is the fundamental rethinking and radical redesign of institutional and organizational processes to achieve dramatic improvement in critical measures of performance such as cost and speed.

"CNI seeks to facilitate the efforts of research and education groups currently affected by these two forces and to work with these groups on enterprise-wide strategies in four key areas of networked information resource and service development: hardware and software infrastructure, budgets, policies and practices, and managing staff and facilities," explained West. "Efforts such as CNI's enterprise-wide information strategies initiative reflect the Coalition's responsive, agile, and dynamic presence in member's lives."

Opening keynote speaker

With more than fifteen years experience in marketing, market research, analysis and consulting in multiple industries, and focusing his efforts since 1984 on the personal computer and telecommunications markets, Gartner Group Senior Research Analyst Bruce Guptill shared his views on enterprise-wide information strategies with special attention to electronic commerce on the Internet.

Guptill examined the issues of: how firms could build business models for profitable Web commerce; what the management requirements for enterprises wishing to compete in Internet-based electronic market places would be, and what key Internet technologies would enable high volume, reliable Web commerce. Guptill explained that seventy-four percent of organizations are spending less than one million annually to have an electronic presence. Then he pointed out that an average Web site required 100 hours a week for such activities as customer support training and promotion. He stated that profitable participation in the electronic market place will require a complete understanding of all costs and underlying forces. Concluding by explaining the importance of Web commerce, Guptill declared: "The Web is the fax and phone of the nineties."

Project briefings and issue collaboratories

The first afternoon of CNI's Fall 1996 Task Force Meeting began with nine project briefings addressing various aspects of the networked information community including: digital collections, Internet archiving, enterprise-wide information strategies, collaboration and institutional change, Web publishing, Document Type Definitions, full text delivery on the Internet, electronic serials, and scientific Web information resources.

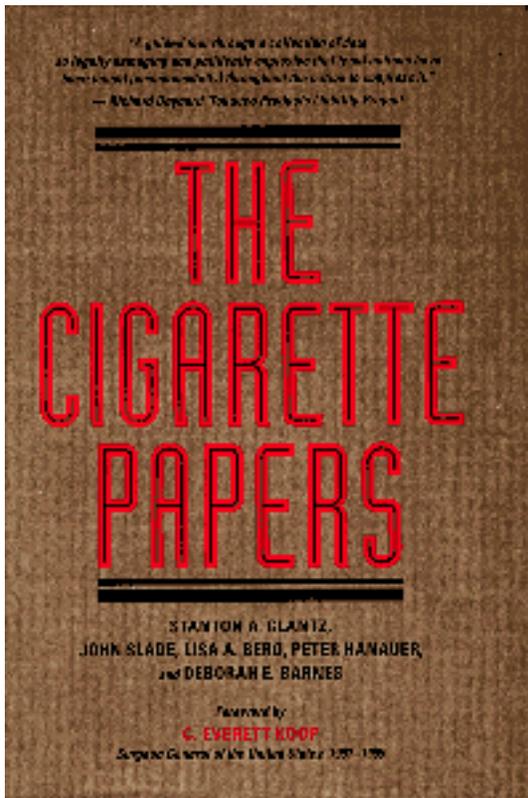
"There were so many fascinating projects. CNI is truly a forum where you can hear critical information," said attendee Peter Hirtle, Manager, Digital Access Coalition, Cornell University.

Among the many project briefings of interest was *Archiving the Internet* hosted by **Brewster Kahle**, President of the Internet Archive. In a dynamic and lively presentation, Kahle discussed the current state of the Internet Archive, an entity that gathers, stores and allows access to all public information on the Internet. Kahle explained the problems of Internet publishing including what he termed the World Wide Wait, in reference to the speed of the Internet. "The digital area of late has not gone as far in maturity as it should," stated Kahle. The discussion sparked dozens of questions such as one by Steve Cisler, who represented Apple Computer. Cisler inquired into the legal and social issues involved in the project. Kahle then discussed the dilemmas of privacy and copyright and licensing.



Kahle also described groups who will find the Net especially significant including scholars and historians. "Historians are now studying the web sites of the Clinton and Dole camps. The web sites have become to these scholars what other political memorabilia like bumper stickers used to be," said Kahle.

In an equally probing project briefing entitled *New Models in World Wide Publishing*, Karen Butter, Deputy Director, Library & Center for



Knowledge Management at the University of California, San Francisco, delved into her organization's experiments with Web publishing. The two projects discussed in the session originated while creating an archival collection for tobacco control, explained Butter. The discussion of Web publishing of an electronic version of the book *The Cigarette Papers*, which was published by the University of California Press, proved especially fascinating to attendees after University of California Press representative Sandra Whisler joined in the discussion. Whisler, the Assistant Director for Electronic Publishing, added a valuable dimension to the session, according to attendee Todd Kelley, Librarian for

Information Technology Initiatives, Johns Hopkins University. "Karen gave us just enough information to get the discussion going and having Sandra here, a representative from a university press, made it an ideal dialogue," said Kelley.

The project briefing also relayed information about other similar projects including MIT's findings that online publishing of printed books did not hurt book sales. "These kind of experiments need to be freely discussed and I'm glad CNI is doing it," said attendee David Bearman, representing the Archives & Museum Informatics in Pittsburgh.

Another significant project briefing brought together three distinct projects under the umbrella of the National Initiative for a Networked Cultural Heritage (NINCH). The Consortium for Computer Interchange of Museum Information, the Text Encoding Initiative and the Encoded Archival Description are three critical Document Type Definitions used by different elements of the cultural community in encoding digital material. The speakers were CIMI's director, John Perkins, the EAD's

originator, Daniel Pitti, of the University of California, Berkeley, Library, and Allen Renear, an early developer of the TEI, now directing Brown University's Computing and Information Services.

NINCH director David Green remarked that "This project briefing enabled by the CNI Task Force was as important for bringing these groups together at the same time and place, as it was for the audience to understand the importance of the DTDs to be considering harmonization. A critical first step in bringing these DTDs in closer convergence, this briefing demonstrated how NINCH intends to convene and help integrate digital projects in the cultural community."

Issue collaboratories, an exciting new small group program element that provided an opportunity for a highly interactive, focused, sustained exchange about current issues, followed the project briefings. Four issues comprised the sessions: campus copyright and other intellectual property policies; support and training of faculty on the Web; selection, funding, provision, operation and support of distributed information resources and services; and managing access to technological resources in high demand and rationing scholarly materials such as publications.



One of the most heavily attended issue collaboratory session was the program focusing on copyright and intellectual property policies, which was moderated by David F. Bishop, University Librarian, Northwestern University and **Susan Foster**, Vice-President of Information Technologies, the University of Delaware. The program initiated a lively exchange regarding such issues as: the extent universities should be involved in shaping public policies to capture the values of academic institutions; launching a CNI effort to influence accreditation agencies; the need for and against electronic reserves; universities' willingness to control access in meaningful ways; the difficulty in coming up with standard licenses; the advantages and disadvantages of electronic interlibrary loan; and database extraction rights issues.

There was a general consensus that CNI should continue exploring alternative economic models between libraries and publishers with regard to copyright and intellectual property. Additionally, many participants argued for the ability to control and use materials after site licenses were acquired. Other participants reached a consensus that

CNI should help develop a plan to make the market work for all communities.

Keynotes by Heterick and Mockapetris

The second morning of the CNI conference began with an address by Educom President Robert Heterick and @Home Director of Engineering Paul Mockapetris. Heterick spoke of the future of the Internet from the higher education perspective and Mockapetris discussed his company's architectural concepts and delivery strategy.

Heterick described the current state of networking, which followed the privatization of the NSFNet. In the sudden transition, telecommunications companies and hardware suppliers were not ready to support users, but they are now moving expeditiously to solve problems. Heterick stated that solutions in networking will be found in cable, wireless, and satellite as well as in telephony.

Some of the desirable characteristics of new Internet services are:

- capability to retain local packets locally
- back-up for mission critical functions
- higher bandwidth and better than "best effort" service for advanced applications
- performance metrics provided by vendors
- benefits of high bandwidth networking in our homes

Heterick noted that higher education needs to make sure it makes a difference and does not get trampled as one of the consumers in the networking market.

Heterick then described some of the developments in discussions on Internet 2. Gigapops would be shared in geographical regions to provide high bandwidth for desktop to desktop applications for collaboration and multimedia. He suggested that technology transfer will drive the development of Internet 2. Regarding information applications on the network, Heterick stated that we should not extrapolate Industrial Age policies into the current networked scene. Commercial transactions will dominate the network and the doctrines of first sale and fair use will not survive in the new environment.

Mockapetris explained his company's goal of providing high quality, high performance Internet services to millions of homes via cable television pipes. His company's design involves users leaving their systems on all of the time so that intelligent agents can do their work of gathering appropriate information for their customers. They anticipate only 10% of their customers will actively use their systems at a particular time of day. He noted that the telecommunications companies can not compete with this type of technical strategy.

@Home's strategy makes use of:

- caching and data replication
- proactive network management
- added value at every level of the network

Both presentations provided an illuminating glimpse into possibilities for the future of networking.

Final Project Briefings

Two sets of project briefings followed the keynote addresses. The first set of project briefings examined the following issues: Z39.50 access to Web searching; assessing the academic networked environment; strategic planning and organization for enterprise-wide information systems; a Getty-RLG database initiative; a unified information access system; the JSTOR electronic journal library; the Internet future of rare books, access to and services for federal information in the networked environment in the United States and Australia; on demand publishing in the humanities.

Gordon Smith and Evan Reader, of the California State University Office of the Chancellor, and Deborah Masters of the San Francisco State University hosted the project briefing, *Unified Information Access System: A Project of the California State University*. Reader explained that the initiative is a system-wide project of the California State University designed to create a single, easy to use, integrated, and coherent computer-based user interface which provides access to the print resources in CSU and other libraries. "Major commercial providers of automated library services regard the CSU UIAS project as the most advanced of its type, potentially serving as a model for other libraries seeking to integrate information resources," explained Masters.

Presently, a request for proposals process is underway to identify a vendor to partner with the CSU in developing the UIAS.

A second project briefing of interest was *On Demand Publishing in the Humanities* led by Phil Sykes of the Liverpool John Moores University. The goal of the project is to devise an inexpensive method of networking electronic texts, which can be copied simply and easily by other institutions. Many attendees questioned Sykes about the copyright and licensing issues related to the project. "We've come up with a model licensing and copyright agreement that works with the project and a fair number of publishers have found it acceptable," explained Sykes. Sykes' model is comprised of the following conditions: networking electronic texts is only possible when users are using a computer physically located at the university; only users with university passwords are allowed to participate; only users with specific passwords for materials are allowed to participate; and disks are encoded for easy tracing when a user prints or copies the materials.

Another unique project briefing was *Access to and Services for Federal Information in the Networked Environment in the United States and Australia*. The project briefing was hosted by Joan Cheverie of Georgetown University and Visiting Program Officer at CNI, and Renato Iannella of DSTC Pty Ltd. of Australia. The session updated attendees on CNI's white paper, *Access to and Services for Federal Information in the Networked Environment*. The paper will guide higher education institutions and others in the development of strategies for providing access to federal information by their constituencies using the powerful and rapidly expanding global information infrastructure.

The Australian perspective was also enlightening to attendees. "The technical strategies faced in developing a whole-of-government information access architecture are immense, include scalability, security and authentication, distributed indexing techniques, and future migration strategies," explained Iannella.

The second set of project briefings delved into: the national digital library of theses and dissertations, meta-content format; the Internet2 Project; building electronic journal collections; the Resource Organization and Discovery in Subject-based service (ROADS) project; a flagship electronic journal in chemistry; a digital library in a virtual enterprise; the Alzheimer Research Forum; Western Kentucky University's enterprise approach to campus networking; and Ohio

University's user-centered approach to Enterprise-wide Information strategies.

"It was standing room only. There were so many people interested in getting on board and getting more information on the Internet 2 project," remarked Andrew Magpantay of the American Library Association, in reference to the Internet 2 project briefing. The goal of the Internet2 project is to bring focus, energy and resources to the development of a new family of advanced applications to meet emerging requirements in research, teaching and learning by addressing major challenges of the next generation of university networks. The briefing, hosted by William Graves, Associate Provost, Information Technology, University of North Carolina at Chapel Hill and M. Stuart Lynn, Associate Vice President, Information Resources and Communications, University of California, Office of the President, explained the progress of the initiative and dealt specifically with how the research and education community is being organized to articulate and build Internet 2 applications.

Another project briefing of interest was *Building Electronic Journal Collections: Implementing Elsevier Electronic Subscriptions*. The briefing was hosted by Laurie Stackpole and Roderick D. Atkinson of the Naval Research Laboratory, Karen Hunter of Elsevier Science Inc. and Peter Clinton of the University of Toronto. Hunter explained that Elsevier Electronic Subscriptions is an electronic version of traditional research journals that provides subscribing libraries with journal page images, OCR-generated text, and SGML-tagged bibliographic header information. Currently, Elsevier is working with 20 libraries in testing this model for electronic subscriptions. "I found the session informative," said Sean O'Doherty of Ovid Technologies, Inc. "Its useful to have a session where a company makes a presentation concerning current status."

Final keynote



Combining politics with technology was the theme of MIT Professor **Sherry Turkle's** closing presentation, *Leadership and Citizenship in a Culture of Simulation*. In her opening remarks, Turkle commented that when she recently heard Paul Peters speak, he wove together those themes and that her choice of a theme was in his honor. Turkle explained

to attendees her view that computing is moving from being a culture of calculation to a culture of simulation. "Many students can't measure, criticize or judge what they are doing when playing simulation games," stated Turkle. The charismatic speaker gave the example of one student's belief that raising taxes always lead to riots. She commented that occasionally young student are "taking things at interface value."

"Its a provocative way of looking at things," stated Marie Hansen of the Johns Hopkins University Press. "Its our responsibility to think about what computers are doing to us."

Turkle left attendees pondering the questions: "Are we using computer technology because we have lost the political will to adequately fund education rather than because it teaches us?" Turkle warned that basics such as physics would now be seen as "Physics, The Movie" in the "post-logo" generation. She encouraged the audience to help students develop "readership skills" suitable for the culture of stimulation.

Louise Ann Fisch, Coordinator of Communications

[Handouts for many of the project briefings](#) can be found at <http://www.cni.org/>. For further information contact Joan K. Lippincott at joan@cni.org.