

# National Gallery of the Spoken Word

Building upon the latest research and development of methods for digitally preserving sound and delivering it via the WWW, the NGSW will be designed to serve the diverse needs of high school teachers, college professors, students at all levels, government officials, journalists and engaged citizens worldwide. By bringing the spoken word across the Internet and into living rooms, classrooms, research laboratories, libraries and government offices, this project has the potential to create worldwide virtual communities through the transformative power of language, rhetoric and speech. Drawing from the rich collections of the Chicago Historical Society, Michigan State University's Vincent Voice Library, the MSU Museum, and Northwestern University, collections within the NGSW will include:

## News and Newsmakers

Drawing primarily on the holdings of MSU's Vincent Voice Library, this collection will include selections of speeches by Theodore Roosevelt, Eugene V. Debs, and Buffalo Bill Cody, as well as news broadcasts and special events from 1940 through the 1980s which are currently housed as part of the Historical Voices and Janak Collections at MSU.

## 20th Century Inventors and Scientists

From Thomas Edison's first cylinder recordings to John Glenn talking about exploring space, this collection will include recordings that are historically significant both because of their content and their speaker, as well as the technical achievements discussed. These holdings are currently located in the Vincent Voice Library at MSU.



## American Life

Using the oral interviews on which Studs Terkel based his books, and which are owned by the Chicago Historical Society, this collection will broadcast a broad range of American experience and stories that span social, political, and cultural life in the 20th Century.

## Chicago Neighborhoods

Owned by the Chicago Historical Society, this collection includes family genealogies and oral histories conducted in several Chicago neighborhoods by local high school students. These recordings provide a detailed account of urban life, and offer a full range of neighborhood accents for linguistic study.

## Folk Life and Lore

This collection is composed of taped interviews with a variety of American folk artists. Recorded stories of Native American quilters and Mexican American folk artists from across the Midwest are a special strength of the collection. These holdings are currently housed at the MSU Museum.

## History and Politics Out Loud

Voices of U.S. Presidents, secretaries of state and other government officials make up the vast majority of this collection, which is housed at Northwestern University.

## Supreme Court Decisions

U.S. Justices and a range of court cases can be heard in these recordings, providing a far greater range of experience to listeners than reading the transcripts alone. This collection is also provided by Northwestern University.

## World War II

Including a selection of broadcast news from the Ripps collection at the Vincent Voice Library at MSU, this collection includes broadcast news recorded from 1940 to 1945, from Pearl Harbor to the dropping of the atomic bombs.

## Michigan State University

**MATRIX: The Center for the Humane Arts, Letters and Social Sciences Online** is devoted to the application of new technologies in humanities and social science teaching and research.

**MSU Libraries** and the **Vincent Voice Library** house over 50,000 audio recordings from the dawn of recording to the present. MSU Libraries' **Digital Sources Center** is also involved in a range of digitization projects to facilitate research and teaching.

The **Speech Processing Laboratory** is the primary site for the fundamental speech-processing research undertaken in this project at MSU.

The **College of Education's Teacher Education** program is a nationally and internationally recognized as a leader in teacher education. The Department is committed to the improvement of schools through the preparation of teachers, the study of teaching and learning, and the study of teacher education.

MSU's **College of Arts and Letters** provides the foundation of education and an opportunity for in-depth study of many areas within the arts and humanities.

## Consulting Partners

The **Linguistic Data Consortium** is made up of universities, companies and government research laboratories. The Consortium creates, collects and distributes speech and text databases, lexicons, and other resources for research and development purposes.

The **Michigan Library Consortium** serves Michigan libraries of all types and sizes by providing quality products and services in a cost-effective manner in order to maximize the sharing of information across institutions.



The **Oral History Association** was established in 1966 and seeks to bring together all persons interested in oral history as a way of collecting human memories.

The **American Historical Association** is the largest historical society in the United States and serves as the umbrella organization for historians. In this role, the Association conducts an active scholarly and professional program for historians interested in every period and geographical area.

## Partner Institutions

The **Center for Spoken Language Understanding at the University of Colorado at Boulder** is nationally recognized as a leader in creating the next generation of conversational systems.



**H-Net: Humanities and Social Sciences OnLine** hosts one of the most extensive websites in the humanities and social sciences. Creation of online databases, exhibitions, photo archives, educational outreach programs, and research tools are an important part of H-Net's work.



The **Chicago Historical Society** is the nation's premier historical society. CHS is devoted to collecting, interpreting, and publically presenting the rich multicultural history of Chicago and Illinois, as well as selected areas of American history through exhibitions, programs, research collections, and publications.

**Oyez, Oyez, Oyez** is housed at **Northwestern University**. The Oyez project has become an authoritative resource for scholars, students, and professionals across a range of disciplines. The Oyez audio archive holds more than 500 hours of oral arguments and continues to expand its collections.

**United States History and Politics Out Loud** is an online teaching resource housed at Northwestern University. HPOL features the voices of U.S. Presidents, secretaries of state and other government officials.

**InvoTek, Inc.** will consult with the speech laboratories at MSU and the University of Colorado to insure that interfaces to the NGSW are friendly to persons with disabilities.

From Thomas Edison's first cylinder recordings, to the voices of Babe Ruth and Florence Nightingale, and Studs Terkel's timeless interviews, the National Gallery of the Spoken Word (NGSW) will become the first large-scale repository of its kind. Funded under the National Science Foundation's National Digital Libraries Initiative Phase 2 program, this project will be created over five years. During this time, the NGSW will develop a significant, fully searchable, online database of spoken word collections. These collections will cover a wide variety of interests and topics and serve a range of research and teaching purposes.

The primary goals of the NGSW project include:

1. Digitizing a large collection of voice resources that will be easily used and widely accessible to a broad public and scholarly audience via the World Wide Web;
2. Applying and developing a range of state-of-the-art search tools to facilitate the widest possible use of the collections;
3. Pioneering best practices in speech digitization, online delivery of sound resources, and creation of voice "watermarking" to protect intellectual property rights;
4. Building public exhibits, teaching and learning tools for both K-12 and post-secondary classrooms and a wide public audience.

Beginning September 1, 1999 and ending August 31, 2000, Year One of the project will focus on planning and establishment of best practices and standards. A central aim of the project partners and partnership institutions is to situate these digitization efforts within the national dialogue on sound digitization. In addition to ongoing consultation among the partners, the NGSW project team will continue to participate in both the NINCH Best Practices in Humanities Digitization Project and the American Library Association Best Practices Conference. Project partners also aim to expand the scope of their discussions and best practices research. Teams at the project sites will also begin construction of the search engine, identify the full range of technical demands on the engine and begin laboratory development of the transform encryption coding. Architecture for the delivery system will also be designed and a prototype implemented.

Michigan State University Libraries and the digitization sites at Chicago Historical Society and Northwestern University will also be developing the metadata tagging scheme and will resolve key digitization issues over this first year of the project. The sites will also digitize the first 1500 items for inclusion in the NGSW.

Public exhibits and educational tools form an important part of this project. During the first year, the NGSW project partners will consult with several partnership school systems and begin development of university and K-12 educational curriculum interfaces and public exhibit interfaces. Because evaluation and research are key components of this initiative, a system of user tracking and online suggestions, feedback and evaluation will also be designed and implemented from the very beginning of the project. Ongoing evaluation by team members to explore the interdisciplinary collaborative process of this project will also be implemented in this first year.

Successive years will build on this critical foundation until the gallery is truly a national endeavor. A best practices conference will be held in 2000-2001. Findings from this conference will be collected and published to make them available to a broad scholarly audience. Training sessions for teachers, further digitization, and construction of exhibit galleries will continue throughout the 5 years and beyond. Quality-enhancement "plug-ins" for the user interface will ultimately be constructed and added, as well as interfaces for users with vision disabilities. Continued refinement and development of the search engine is also central throughout the project. By September 2004, the NGSW will have grown to include eight galleries, a wide range of teaching materials and resources, and over 15,000 individual items from the spoken word materials housed at Northwestern, Chicago Historical Society and Michigan State University's Vincent Voice Library. Project partners will also expand the number of institutional partners to make the project fully national and complete evaluations of engineering challenges, the digitization process, educational application and cross-disciplinary partnerships.

**Mark Kornbluh, Lead Principle Investigator**

Director of **MATRIX**, Executive Director, **H-Net**, and Associate Professor of History, **Michigan State University**

The impact of new technologies on higher education remains one of Dr. Mark Kornbluh's primary research interests. In addition to awards for excellence in teaching, he has administrated a large number of national grants to develop online materials for research and teaching from the National Endowment for the Humanities, United States Information Agency, and Michigan Department of Education. At present, Dr. Kornbluh is Executive Director of H-Net: Humanities and Social Sciences OnLine, Director of MATRIX: The Center for Humane Arts, Letters and Social Sciences Online at Michigan State University, and associate professor of history at MSU.

Dr. Kornbluh has also authored a book on voter participation in the early 20<sup>th</sup> century, *Why America Stopped Voting: The Decline of Participatory Democracy and the Emergence of Modern Electoral Politics, 1880-1918* (New York University Press, 1999), in addition to co-authoring a CD-ROM for use in the college history survey, and numerous conference presentations and articles.

**Jerry Goldman**

Department of Political Science, **Northwestern University**

American politics, law and politics and multimedia applications for research rank among Dr. Jerry Goldman's primary interests. Dr. Goldman has conducted experiments in appellate procedure, human subjects review, and criminal sentencing. His latest work exploits information technology to conduct multimedia experiments via the Internet.

Dr. Goldman heads the *Oyez, Oyez, Oyez* project, a multimedia relational database accessible via the World Wide Web, and the *History and Politics Out Loud* site. He is the recipient of the 1997 Educom Medal for his contributions to computing and political science.

**Douglas Greenberg**

President, **Chicago Historical Society**

Dr. Douglas Greenberg has served as President and Director of the Chicago Historical

Society since 1993, and has a previously served as Vice President and Acting President of the American Council of Learned Societies. He has also authored numerous articles related to humanities computing, information technologies, and digital libraries and preservation.

Dr. Greenberg has been active in a wide range of community-based activities and outreach while at the Chicago Historical Society. In particular, he has spearheaded a project called "History Explorers" in the Chicago public school system and has a personal mentoring relationship with the administration, faculty and students of the Paul Cuffee School on Chicago's south side.

**Michael Seadle**

Digital Services and Copyright Librarian, **Michigan State University**

Dr. Michael Seadle has authored 30 articles, chapters and books on a range of subjects including German history, computing management, and digitization. He has a PhD in history from the University of Chicago, a library degree from the University of Michigan, and a decade of experience as a computer professional. At present, he is editor of the peer-reviewed academic journal *Library Hi Tech*.

**Joyce Grant**

College of Education, **Michigan State University**

Dr. Joyce Grant is an associate professor of teacher education. Her primary research interests are in school change, particularly management and organization, curricula and pedagogy. Among her wide range of professional experience, Dr. Grant has a long-standing commitment to the Detroit and Boston Metropolitan area school systems.

**John R. (Jack) Deller, Jr.**

Department of Electrical Engineering, **Michigan State University**

John R. (Jack) Deller, Jr. is an IEEE Fellow and Professor of Electrical and Computer Engineering at Michigan State University where he directs the Speech Processing Laboratory. He holds the Ph.D. (Biomedical Engineering, 1979), M.S. (Electrical and Computer Engineering, 1976), and M.S. (Biomedical Engineering, 1975) degrees from the University of Michigan and the B.S. (Electrical Engineering, *Summa Cum Laude*, 1974) from the Ohio State University. His research interests include statistical signal processing with applications to speech and biomedicine. His work has been published in respected journals and conferences, and he has co-authored three textbooks and contributed chapters to several research books. His tutorial paper "Tom, Dick, and Mary Discover the DFT" was awarded the IEEE Signal Processing Magazine Best Paper Award in 1998. Deller received the IEEE Signal Processing Society's 1997 Meritorious Service Award for his six-year service as Editor-in-Chief of *Signal Processing Magazine*, and currently serves as Associate Editor of the *IEEE Transactions on Speech and Audio Processing*. He and his wife Joan have recently returned from China with their newly-adopted daughter, Antonia Jiang. He enjoys fatherhood, personal computers, Michigan summers, and is active in church-related efforts to improve the lives of the urban poor.

**John Hansen**

Center for Spoken Language Understanding, **University of Colorado at Boulder**

Dr. John Hansen directs the Robust Speech Processing Laboratory and is associate professor in the Departments of Speech, Language, & Hearing Sciences, and Electrical & Computer Engineering at the University of Colorado Boulder. Dr. Hansen's research interests span the areas of digital speech processing, analysis and modeling of speech and speaker traits, speech pathology and voice assessment, speech enhancement and feature estimation in noise, robust speech recognition with current emphasis on robust recognition and training methods for topic spotting in accent, noise, stress, and Lombard effect, and speech feature enhancement in hands-free environments for human-computer interaction.

Dr. Hansen is the author/coauthor of more than 100 journal and conference papers in the field of speech processing, and is coauthor of the textbook *Discrete-Time Processing of Speech Signals*, (Prentice-Hall, 1993). He was the recipient of a Whitaker Foundation Biomedical Research Award in 1993, a National Science Foundation's Research Initiation Award in 1990, and has been named a Lilly Foundation Teaching Fellow for "Contributions to the Advancement of Engineering Education." He is a Senior Member of IEEE, and has served as Technical Advisor to U.S. Delegate for NATO (IST/TG-01: Research Study Group on Speech Processing, 1996-1998).

**Steven Cohen, External Evaluation**

**Tufts University**

Dr. Steven Cohen holds a Ph.D. in Education Psychology from Tufts University. His primary interests are in assessing learning outcomes for media and Technology. Dr. Cohen has conducted assessment consulting on a wide range of programs and institutions including FIPSE (United States Department of Education), Michigan State and Northwestern University's NEH-funded "Historical Voices," Northwestern University's Oyez project, Seton Hall University's internally funded instructional technology, and acted as team facilitator for a district wide assessment of public perception for Tewksbury Public Schools.

Dr. Cohen has also authored and co-authored a range of books and articles related to internet technologies and educational assessment.

# *The National Gallery of the Spoken Word*

*[www.ngsw.org](http://www.ngsw.org)*

The National Gallery of the Spoken Word (NGSW) will create a significant, fully searchable, online database of spoken word collections that span the 20th century — the first large-scale repository of its kind. The NGSW will provide storage for these digital holdings and public exhibit “space” for the most evocative collections. From Thomas Edison’s first cylinder recordings, to the voices of Babe Ruth and Florence Nightingale, and Studs Terkel’s timeless interviews, the collections of the NGSW will cover a variety of interests and topics. The NGSW is designed as an expansive repository of aural resources. Over time, it will grow to include many more collections from partnering institutions across the country.