

# Integrating Text, Audio, Metadata, GIS, and Scholarly Criticism in a Holocaust Oral History Archive

## The Voices of The Holocaust Project

voices.iit.edu

Eben English Paul V. Galvin Library, Illinois Institute of Technology, Chicago, IL

GALVIN LIBRARY



### Collections in the Dark



There are numerous archives of Holocaust survivor testimony in existence today. However, **very few of these collections are available online, and even fewer use standards-based text-encoding and markup practices**, which limits the prospects for both effective online dissemination and long-term preservation. The metadata used to describe these interviews and their

participants in these collections often lacks sufficient detail, placing a significant burden on researchers searching for information on the experiences of a particular survivor demographic. In addition, scholars currently have no means to conduct research across disparate collections of survivor testimony maintained by different institutions.

Holocaust survivor interviews are not merely transcripts of recorded conversation accompanied by speaker annotations—they usually have an accompanying audio or video component as well. As Goldman et al note: **“a spoken message contains more than simply what was said and who said it.** The prosody -- timing, intonation, and stress -- of the speech signal offers a great deal of information about the emotional state of the speaker, ‘punctuation’ in the speech and disambiguation of the intended message.”<sup>1</sup> Unfortunately, the relationships between the textual and audiovisual manifestations of the interview event are often obscured in existing collections, meaning that this unspoken information is lost.

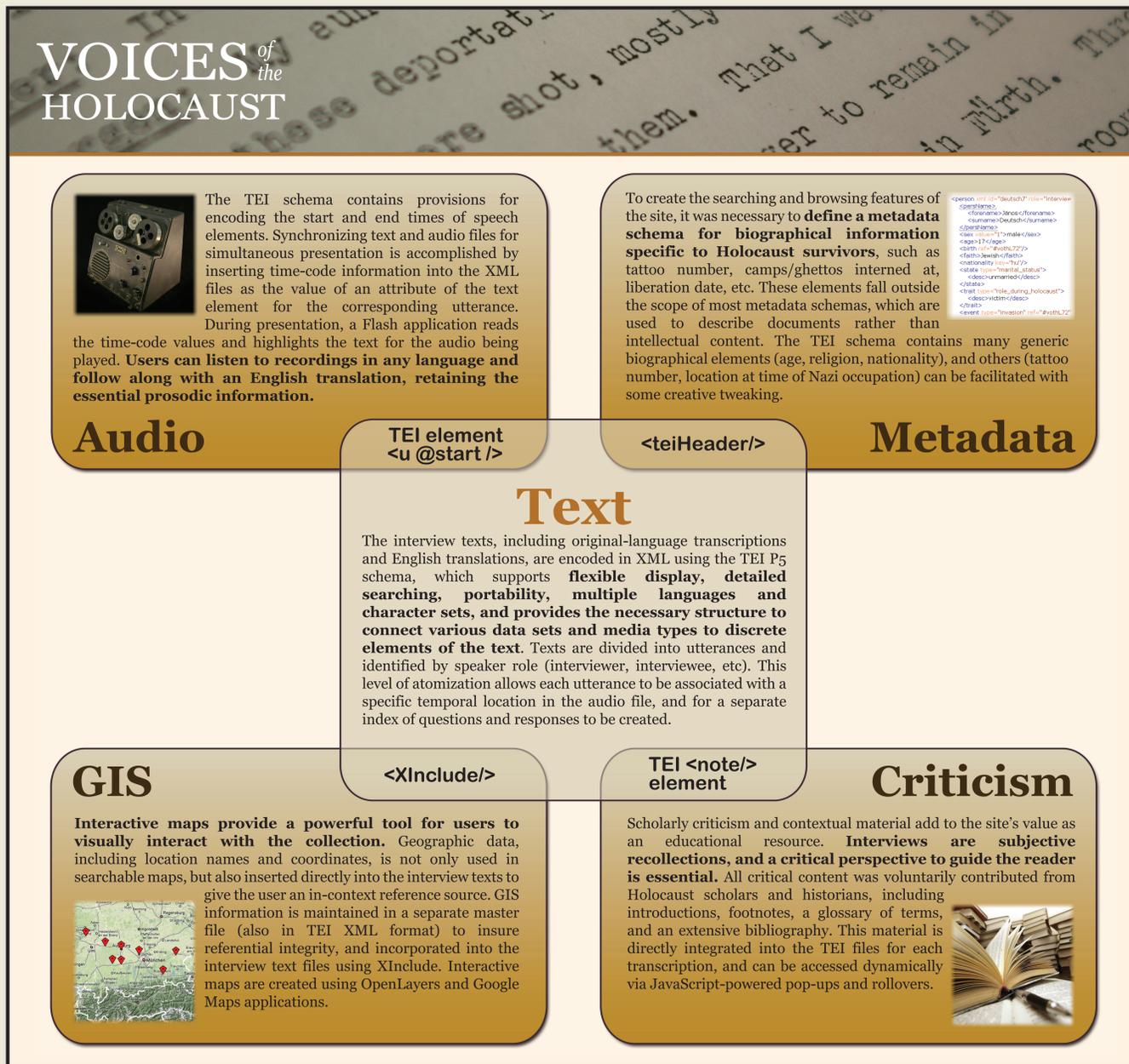
### Moving Into the Light

A new data model for Holocaust testimony collections based on established best practices is needed, one which:

- is tailored to Holocaust survivor testimony
- serves the needs of a wide variety of scholars (historians, linguists, social scientists, etc.)
- provides a sound framework for flexible, robust online presentation
- makes explicit the relationship between the text(s) and audiovisual manifestation(s)
- supports detailed descriptive, administrative, and structural metadata
- allows for the association of other types of content with the text (e.g. GIS, data sets)
- preserves the integrity of the text as a holistic unit
- supports multiple languages
- allows for synchronization of text data with an audio or video stream
- allows for the association of critical and contextual content (glossary, footnotes, commentary) with the transcription
- can be validated against an established schema with dependable support
- allows the data to be easily transformed, cross-walked, or migrated

In September 2009, the newly redesigned Voices of the Holocaust (<http://voices.iit.edu>) site was launched. At its core, the collection consists of text and audio for 118 interviews with Holocaust survivors. However, the site delivers much more than just static facsimile of the source documents—it includes a host of interactive features, making it a dynamic and engaging historical resource for scholars and students of all ages.

To overcome the limitations of typical collections and to address the need for a new data model, an XML-based data architecture was created based on the TEI P5 schema, which allows for the integration of many different types of content (transcriptions, audio, metadata, GIS, and scholarly criticism) into a unified presentation for the user. **The data model and linking mechanisms are shown in the chart below:**



### Site features include:

- original-language transcriptions and English translations of 118 interviews
- digitally remastered audio of the interviews with synchronized transcripts
- searching and browsing based on biographical, historical, and geographical facets of the interviews and interviewees' testimony
- interactive maps featuring concentration camps, ghettos, interview locations, interviewee birthplaces, and other relevant locations
- criticism and commentary from Holocaust scholars, including introductions, footnotes, and a glossary of terms, camps, and ghettos
- detailed technical notes on the project's development, including sample XML files and source code examples

### Project History

In July 1946, Dr. David P. Boder, a psychology professor from Illinois Institute of Technology, traveled to war-torn Europe to record the stories of Holocaust survivors in their own words and in their own voices. Over the next three months, he visited refugee camps, orphanages, and rehabilitation centers in France, Switzerland, Italy, and Germany, carrying with him a portable wire recording device and 200 spools of steel wire, upon which he was able to record over 120 interviews comprising over 100 hours of material in nine different languages. These wire spools, and the narratives they contain, represent the earliest known oral histories of the Holocaust.



Despite the groundbreaking nature of his work, Boder was largely unsuccessful in his efforts to publish these interviews. Before his death in 1961 though, he submitted a set of 70 interview transcripts to a select number of libraries and historical foundations across the U.S. (including IIT), though few volumes remain today.

The Voices of the Holocaust project was born in 1998 with the discovery of a set of these transcripts in the IIT University Archives. Since that time, the project's mission has been to digitize, restore, transcribe, and translate Dr. Boder's historic recordings so that they can be experienced online by a global audience of students, researchers, historians, and the general public.

### Conclusions & Future Directions

The data model developed for the Voices of the Holocaust collection is a significant step in meeting the research community's need for powerful searching, dynamic access, and long-term preservation of Holocaust survivor testimony, most of which is still hidden inside archives and unavailable online. The Voices site combines interview transcriptions with their accompanying recordings, integrates GIS and scholarly content to provide an enriched user experience, and offers robust searching and browsing functionality based on historical, biographical, and geographical metadata tailored to the subject area.

Now that a new data model has been established, it needs to be reviewed and revised by a community of scholars, archivists, librarians, and data curators, and put into practice by other projects and collections. In addition to making research more efficient, widespread adoption of this data model could lead to some very exciting opportunities, including:

- increased discoverability through search engines
- integration with other types of oral history collections
- cross-searching of multiple collections simultaneously
- development of automated linguistic or content analysis tools
- [insert your suggestion here!]

### References

1. Goldman, J. et al., “Accessing the Spoken Word,” *International Journal on Digital Libraries*, 5(4): 291.