



RECOVERING VOICES

Seminar Series in
Endangered Languages and
Indigenous Knowledge

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Imaging Voices: Optical Scanning Applied to Recorded Sound Preservation and Access

Sound was first recorded and reproduced by Thomas Edison in 1877. Until about 1950 most recordings were made on mechanical media such as wax, shellac, lacquer, and aluminum. Some contain material of interest to linguists and ethnographers, whose predecessors were among the first to adopt sound recording as a research tool. The records may be in obsolete formats, are sometimes damaged, decaying, or are considered too delicate to play.

The playback of mechanical sound carriers has been an inherently invasive process. Recently, a series of techniques, based upon non-contact optical metrology and image processing, have been applied to create, analyze, and play back high resolution digital surface profiles of these materials.

This approach has been tested on many historical recordings including a variety of ethnographic collections. The method, and current results, including pilot studies, and measurements of some of the earliest known sound recordings, are the focus of this talk.



Recovering Voices is a collaborative initiative of National Museum of Natural History,
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