

A field linguist's guide to making great audio and video recordings

Overview

Over the last several decades, there has been a dramatic increase in the technologies available for language documentation. This is largely a positive development—our records of an endangered language are no longer limited to ink on paper but can now include audio and video recordings of rich interactions among speakers. However, these advances in technology have not generally been accompanied by advances in training in the use of these new tools. For example, a linguist going out into the field may have budgeted for sophisticated audio recording equipment but have no idea why they should choose a WAV recorder over a MiniDisc recorder. Or, they may have taken a video recorder with them only to discover they have no idea what kind of lighting they need to ensure their recordings will be valuable in the future.

Furthermore, there are general problems faced by all documentary linguists that won't be addressed by any technical manual. Perhaps the most pressing of these is developing a way in the field to keep track of “bookkeeping” information—or *metadata*—for the recordings they make. Without accurate metadata, it will be very difficult for the recordings to be properly archived. Even worse, if it is not clear who contributed to making a recording, it will not be known who has the rights to use it, thus creating a danger that, even if a recording is properly archived and usable in 100 years, it may lie in a sort of legal limbo where an archivist simply doesn't know who should have access to it.

Another problem faced by all field linguists is deciding what they should record in the first place. Should all interactions be recorded using video, including word list elicitation? Are some genres or topics considered more valuable than others? As linguists, we are trained in eliciting different grammatical structures. However, we tend to know little about what kinds of content may be useful to researchers in other disciplines, like anthropology, history, or even botany—not to mention what sorts of recordings will be most valued by speaker communities.

And the work doesn't end with just making the recordings. In most cases, the documentary linguist will also want to transcribe and annotate them. There is a fair assortment of software tools available for these tasks, but most of them have steep learning curves. Transcription and annotation are highly labor intensive under the best of circumstances; few linguists have time to waste exploring tools that may not fit their requirements.

The purpose of this tutorial is to cover a range issues in audio and video recording from the perspective of the documentary linguist. Keeping the needs of the field linguist in mind, the presentations will be careful not to give advice in a one-size-fits-all way but rather to give recommendations which focus on the strengths and weaknesses of different recording techniques and technologies with respect to different field situations.

Word count: 485

Invited participants and short abstracts

Chilin Shih, *University of Illinois, Urbana-Champaign, cls@uiuc.edu*

A phonetician's guide to audio formats

A modern-day field linguist has to make many choices to prepare for a recording session: Which equipment can I afford? Which recording format and which sampling rate should I use? There are no definitive answers to these questions. It is a difficult balancing act where the goal is to get the best possible recording quality within one's budgetary and physical constraints.

The objective of this tutorial is to make some of these options transparent to help the linguist make informed choices. Chilin Shih will make a side-by-side comparison of common recording formats, such as MP3 and WAV, and demonstrate the change of speech quality under different sampling rates. She will also analyze some common recording problems, such as clipping and low signal-to-noise ratio.

Speech recording is a complex task, and the overall performance of a recording system is determined by the weakest link among its various components. Understanding each of the components and how they fit together can help you solve recording problems creatively and ensure you get high recording quality, with a large or small budget, in the lab or in the field.

Sven Grawunder, *MPI for Evolutionary Anthropology, grawunder@eva.mpg.de*

How to make good audio recordings in the field

Based on his own experience conducting extensive phonetic and linguistic field work in Siberia, and on that of other field workers, Sven Grawunder will discuss various strategies for increasing the analyzability and intelligibility of field recordings.

His talk will discuss such questions as: How should one decide about recording equipment depending on the research goals (e.g. documentation of an endangered language vs. some specific thematic linguistic target), the field situation (e.g. temperature ranges, geographic zone), or the recording situation (inside a hut or in front of a tent)? How can one influence the recording situation to get the best results possible? What can one do when there are barking dogs, roaring motorcycles and rushing water in the background? Is there a tolerable level of background noise? Should I always try to record in stereo? Wouldn't a good old tape recorder or my USB-MP3-stick do if I'm just interested in the analysis of pitch?

None of these questions has a definitive answer. However, the discussion will help the field linguist make more informed choices when recording in the field.

K. David Harrison, *Swarthmore College, dharris2@swarthmore.edu*

How to make good video recordings

The use of the video camera in linguistic field work makes it possible to capture a level of documentary detail and clarity not previously possible. It is also fraught with problems. Video changes the entire dynamic of the recording session, influencing linguists, bystanders, and native speaker participants in sometimes unpredictable ways.

But in cultures where filming is possible, and especially for endangered languages, video will soon be regarded as best practice for both documentation and archiving. This session will explore video techniques that have been tested in variety of field conditions, social settings and elicitation tasks.

Hans Boas, *University of Texas, Austin, hcb@mail.utexas.edu*

Transcribing and annotating audio and video

This tutorial deals with different ways of making transcriptions and annotations for audio and video recordings, including discussion of transcription and annotations tools and standards currently being used by the documentary linguistics community. Discussing different tools such as Transcriber and ELAN, Hans Boas will show how different types of graphical user interfaces enable documentary linguists to segment long duration audio and video recordings, transcribe them, and label speech turns, topic changes and acoustic conditions. The main part of the tutorial focuses on the different uses of ELAN, a freely available annotation tool developed by the Max-Planck Institute for Psycholinguistics. Among other things, there will be demonstration of how to open files, define annotation tiers, and transcribe data using this software. There will also be discussion of how other programs can utilize the XML-compatible file format used by ELAN.

Eleanor Nevins, *San Diego State University, nevins@mail.sdsu.edu*

Understanding and eliciting discourse genres

In this tutorial, Eleanor Nevins draws attention to the importance of local understandings and uses of linguistic field recordings. She argues that text collections, or recordings of extended discourse, are especially important for research on endangered languages because of their hybrid nature. That is, they serve dual functions as both linguistic data and as meaningful performances that can be recirculated within the local speech community to support language maintenance. Drawing on examples from her fieldwork with the White Mountain Apache in Eastern Arizona, she suggests that field linguists employ basic ethnographic methods in order to understand the meanings and intended uses of their text elicitation within the local speech community. She points out that text elicitation is an inherently hybrid form of discourse production: what to the linguist serves as an example of a language data, to their consultants it is often bound up with the production of various forms of identity. She presents examples that illustrate how complex the latter process can be and suggests that linguists not limit themselves to recording traditional discourse genres such as stories and song, but also target emergent forms such as radio broadcasts, sermons, etc. in order to create a range of materials of maximum relevance to members of the local community in their ongoing articulation of social identities.

Heidi Johnson, *University of Texas, Austin*, hjohnson@mail.utexas.edu

Corpus management for field linguists

The most technically perfect recording of the most brilliant work of verbal art will be of no value to anyone if it is labelled “t011499a” and accidentally moved into the wrong folder or stranded on a medium for which there are no longer any readers or players. In this talk, Heidi Johnson will present a set of guidelines for corpus management that will help language documenters create an orderly, archive-ready corpus of multimedia materials. Following archival guidelines has the desirable side-effect of ensuring that your resources are useful to you—texts can be paired with recordings, word lists spanning many media can be properly sequenced, and works of verbal art can be properly credited to their creators - even years after the field work was done.

The talk will give a brief introduction to the essential elements of a well-managed corpus: documentation of informed consent, labelling, digital formats, and metadata. The guidelines presented are generally accepted by members of the Digital Endangered Languages and Musics Archive Network (DELAMAN) and are compliant with both the Open Language Archives Community (OLAC) and the International Standards for Language Engineering Metadata Initiative (IMDI).

Timetable

We aim for the tutorial to be three hours in length. A timetable (using 12:00 as a starting point for convenience) is given below. The slots given include time for both presentation and discussion. In addition, in the days after the tutorial, the speakers will hold office hours to consult with interested individuals.

12:00–12:30	Chilin Shih	<i>A phonetician’s guide to audio formats</i>
12:30–1:00	Sven Grawunder	<i>How to make good audio recordings in the field</i>
1:00–1:30	David Harrison	<i>How to make good video recordings</i>
1:30–2:00	Hans Boas	<i>Transcribing and annotating audio and video</i>
2:00–2:30	Eleanor Nevins	<i>Understanding and eliciting discourse genres</i>
2:30–3:00	Heidi Johnson	<i>Corpus management for field linguists</i>

Tutorial Organizers

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