Introducing the
Listening Assistant

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Overview

Languages faculty and staff at the University of Wisconsin-Madison have been working over the last three years with a local software development company, Clotho Advanced Media, to develop on an innovative authoring application for language teachers called the *Listening Assistant*. We are pleased to have reached a point where we are ready to share information about the tool with others and look forward to making it available to colleagues in the CALL and foreign language education communities in the near future.

The *Listening Assistant* was developed as part of an initiative at UW-Madison to promote innovation in the use of technology to transform teaching and learning practices called T4: Transforming Teaching Through Technology. Led by Professor Benjamin Rifkin in the Department of Slavic Languages and Literature, the T4 Foreign Languages Project was an expansive, collaborative 3-year CALL project focused on listening and viewing proficiency at the advanced level.

With the involvement of faculty and staff from across the languages, the project first developed a pedagogical framework for targeting advanced-level listening proficiency (based on the ACTFL Proficiency Guidelines). Then, with the support of IT staff from the Division of Information Technology and Learning Support Services, developed, implemented, and assessed pilot online lessons based on authentic video in three pilot languages: English as a second language, Russian, and Spanish. We then shifted focus to devote our full attention to the project's second major goal, to develop authoring tools that enable language teachers with little experience authoring multimedia to create similar web-based lessons and learning materials for students in their language at any proficiency level.

The idea for the *Listening Assistant* arose from the recognition of the difficulty that learners at the novice-advanced levels experience in processing and interpreting authentic input. In addition to providing "scaffolding" for students in the form of

lessons (consisting of tasks/learning activities that help students work their way through the material) we wanted to be able to provide detailed, in-depth help for students as they view the authentic video clip.

Our wish list for this help resource was long. We wanted for it to mimic the role of the teacher in the classroom in providing supplementary material (such as lists of key words or questions that help students focus their attention on the main idea or important details of the text) and in providing guidance (such as suggesting compensation strategies). We also were interested in trying to mimic the role of the speaker/interlocutor in a two-way listening situation who, when asked, can slow down, repeat, or paraphrase what he just said. Because we are working with a time-based medium (video), we wanted to provide help that could be associated to parts of a clip (i.e., not just to the clip as a whole), so that students could access help resources for just that part of the clip in which they are experiencing difficulty. We recognized that individual teachers would make different decisions about the kinds of help that would be most useful for their students (depending on factors such as the target language, the proficiency level of the student, the nature of the video text, and the teacher's instructional goals), and wanted a tool that would give teachers this kind of flexibility. Finally, we wanted to develop a truly multilingual tool that could be used by teachers and students of as many languages as possible. The Listening Assistant is all this and more.

The Listening Assistant consists of two main components, a player and an authoring tool:

1. The Listening Assistant player is embedded in any web page or a pop-up window and is what students use to view the video clip and access different help resources.
2. The Listening Assistant Author is a cross-platform (Macintosh and Windows) authoring application that enables language instructors to create a custom player for students in their courses.

The Listening Assistant player

An example of the Listening Assistant player is shown below in Figure 1. The player consists of a video playback and control area, and a help resource area. Students click on the links in the help resource area to open a window that gives them access to help for the part of the clip that they are currently viewing.

Using the authoring tool, language teachers can easily create similar players that provide students with the kind of help that they think is most appropriate or useful. Teachers can also decide whether they

want to guide students through the help material by organizing the help into "levels." By creating levels, teachers require students to first access whatever help is available in the first level before being given access to the help in the second one. The option of providing a "best path" for students when navigating through the help material was important to some faculty involved in this project who felt strongly about not "giving away" certain kinds of help, such as a translation. This feature of allowing students graduated access to different help resources was also intended to provide teachers a means for creating materials that can help students improve their listening proficiency, not just understand a given text.

The interface of the Listening Assistant—including the buttons and links—can be easily modified using the authoring tool. The entire interface can be entirely in the target language, if desired (including right-to-left as well as left-to-right languages).

The player can be embedded in any HTML page and delivered over the Internet or on CD/DVD. It must be viewed with Internet Explorer (5.2 or greater) on Macintosh OS X.x, or with a version 6.0 of Internet Explorer or Netscape on Macintosh OS 9.x or on Windows 2000/NT or XP. The Flash 6 browser plug-in is also required.
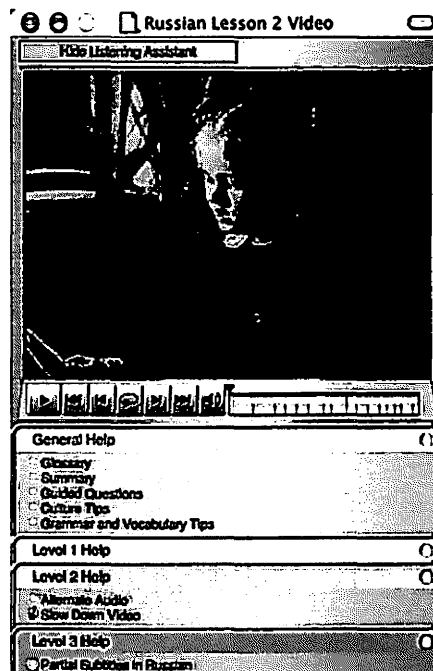
Figure 1

Help features	Description
Alternate audio	A second audio track of native speakers reading the script from the primary video clip at a slower rate, and with more clearly articulated word boundaries. The alternate audio clips are produced outside of the Listening Assistant. This feature was intended to mimic an interlocutor repeating or slowing down.
Culture tips	Tips that give students important background information or to explain unfamiliar concepts.
Glossary	A word look-up with definitions in the target language or English.
Grammar and vocabulary tips	Tips on unfamiliar grammatical constructions, vocabulary items, discourse features, etc.
Guided questions	Questions to help learners focus on certain aspects of the clip. In the target language or English.
Key words	Key words from the section, with glosses in the target language or English.
Repeat section	A playback control for students to view a section as often as desired.
Rephrase	A paraphrase of the section in the target language.
Slow-down video	Students watch and listen to a slower version of the primary video clip. The slower audio track is produced outside of the Listening Assistant; the authoring tool automatically syncs up the video track with the slowed-down audio.
Subtitles	Running subtitles in the target language or English. These can be full subtitles, or just key words.
Summary	A summary of the section in the target language or English.
Transcript	A written transcript of the section in the target language.
Translation	A written translation of the section in English.

Table 1

The Listening Assistant Author

The Listening Assistant Author is a multilingual application based on the Unicode text encoding standard that enables language teachers to create custom Listening Assistant players. Using the authoring tool, teachers can:

- Parse a video clip into time-based sections or sub-sections
- Input or import help content in the target language or English, as appropriate
- Select from a variety of different kinds of help (see below), and associate the help with these sections, or with the clip as a whole
- Require learners to access certain kinds of help before others (for example, listen to an alternate audio track or view the section at a slower rate being given access a written transcript or translation)

The kinds of help that teachers can choose from are described in Table 1 on the previous page.

The above list of helpful features is not exhaustive—teachers can use the tool to create their own help resources for their students by simply calling the feature something else.

The Listening Assistant Author was developed for the Macintosh (OS X.2.6) and Windows (2000 / XP) platforms. It requires video files in an SWF format; audio files must be MP3. For certain features to work, Windows users must install the standalone Flash 6 player (bundled with the authoring tool). ◆

If you are interested in finding out more about the Listening Assistant, please contact:

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Dianna Murphy holds a Ph.D. in Slavic Linguistics from Ohio State University and has taught Russian language at all levels. A manager for programs for instructional innovation in the Division of Technology at UW-Madison, Dr. Murphy's interests include the pedagogically sound application of new and emerging technologies to the teaching and learning of foreign languages.