The FRANK Video Navigation Interface

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ABSTRACT We will demonstrate a tool which supports users in the navigation and searching of remote video archives. The tool features a tight coupling between navigation of the video and of the textual and image-based aids used to search and navigate through it.

KEYWORDS video navigation, media archives, distributed multimedia, multimedia synchronisation

1. BACKGROUND

Film researchers working in television studios or film archives spend a great deal of time in search of archival footage as part of the production process. Often descriptions of the footage, such as shotlists (ie textual descriptions of each sequence in some footage) and transcripts, are available and these can be used in the first stage of finding appropriate footage. When some potentially relevant footage has been identified, the tape can be retrieved and browsed to determine its usefulness. This is currently a very time-consuming process (Simpson-Young and Yap, 1995).

Now, with the availability of digital video technology and broadband networks, there is the opportunity of integrating the searching and browsing of textual or image-based representations of video with the navigation through the video itself. This integration allows more effective and more efficient searching and browsing mechanisms as well as providing the ability to perform such tasks over a network.

However, the availability of the multiple representations of the video material leads to a challenge with regard to the user interface. The challenge is to provide an interaction model that best facilitates the navigation through these different media while retaining the focus of the task as the discovery of appropriate footage from the video.

2. FRANK

FRANK (the Film Researcher's Archival Navigation Kit) is a prototype tool that has been created as part of the development of a distributed system for the searching and browsing of digital video over wide-area broadband networks. Although developed for use over networks between cities, there has been a lot of interest in FRANK for use across intranets and the system has undergone trials in this environment within the Australian Broadcasting Corporation (ABC) and other film and television archives and libraries.

The FRANK user interface consists of a web browser component and a video player component. The functionality of the two is tightly coupled to provide linking and synchronisation of video with a selected navigation aid (such as a transcript). The synchronisation model supports synchronisation from text to video (i.e so that as a user browses through a transcript, the video remains synchronised with the current location in the transcript) and from video to text (i.e so that as the video plays, the transcript display will be kept aligned). Other aspects of the synchronisation model are described in Simpson-Young and Yap (1996).

3. DEMONSTRATION OVERVIEW

Several interfaces have been evaluated in usability tests with professional film researchers and cataloguers within the ABC Television Archive. This presentation will involve a demonstration of the FRANK system and a discussion of which interaction mechanisms have been found to be appropriate for this type of application and which mechanisms have not been so successful.

4. ACKNOWLEDGMENTS

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5. REFERENCES

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