# Dexter and The Evolving Documentary

*Glorianna Davenport*
The Media Laboratory
Massachusetts Institute of Technology
20 Ames Street E15-435
Cambridge, MA 02139 USA
+1-617-253-1607
gid@media.mit.edu

## ABSTRACT

The "Evolving Documentary" encapsulates a story concept and digital presentation methods for a class of media stories. This story form combines an extensible collection of media materials with content annotation. The form is particularly well suited to on-going stories - wars, political campaigns, urban change - as well as to biographical stories to which people other than the author might contribute. Dexter is a Java Interface tool which takes as input the name and descriptors of the content elements as well as the graphical elements of the interface, and generates a state sensitive interface map which the viewer can use to coherently navigate bits and pieces of content. The graphic design is based on the idea of relating state and spreading energy to a descriptive mechanism. The method maximizes the impression of continuity between content segments.

## KEYWORDS

World Wide Web, associational browsing, interface tool kit, evolving documentary

## INTRODUCTION: A HERETIC'S VIEW OF STORYTELLING

The documentary filmmaker gathers scenes based on associations and hunches. In linear media, these scenes are sequenced into "the best" order by a human editor. The editor is sensitive to issues of continuity and progression. In putting a presentation together, the human editor learns a lot; and, in general, the process of editing is stimulating and enjoyable. Can interactive cinematic stories be designed which invite the audience to share in a similar process?

In traditional filmmaking the editor steps up to the plate after the film is "in the can." Of course the real life story is not over, but the filming has ended; some story idea has been resolved. Can we develop a method and program which allows the story to keep growing?

Generally speaking, audiences only watch a documentary movie once. The editor has digested complexity into a neat package and the viewer has

received the message. What if the viewer could trace their own path through the material many times, and continue to gain an understanding of the story?

## JEROME B. WIESNER: A RANDOM WALK THROUGH THE 20TH CENTURY

In order to test our theory of the "evolving documentary," we developed a portrait of Jerome B. Wiesner. President emeritus of the Massachusetts Institute of Technology and Science Advisor to President Kennedy, Wiesner's life was intimately tied to the development and complex ironies of science and technology. Wiesner's life spanned the early days of the motor car, the radio, the advent of recorded sound, the discovery of radar, the realization of the nuclear bomb and the continuing threat of world devastation. By the late 1950's, Wiesner was becoming a leading spokesperson for nuclear disarmament and the test ban. Who was Jerome Wiesner and how did he impress his value system on those around him?

The Wiesner story, which is told on the World Wide Web, combines autobiographical materials, as well as a diverse collection of short stories by people who knew him well. The viewer navigates the story using a concept map and a dynamic list of contents. The interface seeks to constantly situate a particular story or document in the context of the whole. As opposed to a conventional chronological telling of history, the system suggests ways to move to related materials connected by person, theme or period of time.

Moving from material to material, the viewer is encouraged to consider how one material relates to another, and how each fits within a larger historical context. In this way, history is presented as a complex mosaic -- a system of interacting motivations, events and personalities.

## DEXTER: A JAVA-BASED INTERFACE TOOL

Given the wealth of content elements which make up an evolving documentary, the challenge becomes how to build a navigational interface which allows the viewer maximum freedom to select content while maintaining some continuity between elements. Browsing by association maintains conceptual continuity between segments which are otherwise quite different. Stories which focus on a character and stories which focus on a

theme suggest alternative methods of maintaining conceptual continuity.

This type of continuity can be maintained if a small number of keywords are assigned to every piece of content and if these same keywords are reflected back into a viewable interface. In order to create a general purpose system, a general purpose method of assigning keywords to each piece of content was established.

Dexter was written as part of Michael Murtaugh's master of science thesis in MIT's Media Arts and Sciences Program. Dexter takes as input a Database (Dexter) File which lists for each document or material in the story " (1) a partial URL (relative to the Java applet page) for the "web page" that contains the content, (2) the text caption that appears in the Materials Listing, and (3) a list of keywords that describe the material."

In addition, Dexter reads in four states for each graphic associated with the Concept map. Dexter configures the Concept Map page using the states - active, decision, suggestion, and inactive - based on the materials listing and keywords information in the Database (Dexter) File.

## CONCLUSION

The "Evolving Documentary" requires a general purpose interface to content. This interface should enable the viewer to coherently navigate the content based on a pool of key words. Dexter is a Java-based interface construction tool which can be used to create a state sensitive Content Map and a dynamic Materials Listing. Together these offer the viewer maximum feedback relative to their journey through the content.

## REFERENCES

1. Davenport, Glorianna and Michael Murtaugh, *ConText: Towards the Evolving Documentary,* in ACM Multimedia 95 (San Francisco, 1995), ACM Proceedings 0-89791-751-0/95/11.

2. Murtaugh, Michael Luke, *The Automatist Storytelling System: Putting the Editor's Knowledge in Software,* MSMT Thesis, Massachusetts Institute of Technology, 1996, 598-60.