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Influences Of Concepts And Structure Of Documentary Cinema On Documentary Practices In The Internet

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Abstract

This paper investigates the emergence of documentary practices on the Internet. It is potentially beneficial to researchers and practitioners in the emerging area of documentary Web work, and for museums or cultural institutions who utilize Web sites for exhibition programming and thematic presentations. The goal of the paper is to develop a methodological framework for analyzing Web documentaries based on current film theory, since to date, documentary practice has been rooted in filmmaking. A secondary goal is to describe the current state of Web documentaries as well as potential benefits and hurdles in its future development. A review of potentially relevant film theories assists in building a framework for analyzing documentary practices on the Internet. The framework proposed is based on Bill Nichol's theory of documentary film. The study includes analysis of five documentary Web sites ranging from independently to institutionally produced sites. Our aim is to contribute to further investigations of the relationship between documentary cinema and documentary practices on the Internet.

Keywords: documentary practices, thematic presentations, filmmaking, framework, documentary cinema, Web-documentary

1. Introduction

Defined by film theorists, documentary cinema is a genre of representing the historical world. In this genre, information in the form of images, sequences, sound, and speech are drawn from different places and linked to each other in order to express an argument or to reflect a certain perspective. The Internet can be a perfect medium for developing documentary practice due to its capacity to store and convey a vast amount of information and to hyperlink the information.

In this study we tried to create a framework to help us define documentary practices on the Internet. To do so, we looked at film theory as a starting model for our framework. The theory proposes key dimensions for analysis of film documentaries. These include subject, perspective, the role of speech, evidentiary editing, and voice. We modified the framework for our analysis to align it better with documentary practices on the Internet. While dimensions such as voice and perspective maintain their importance, we re-interpreted some of Nichol's terms to address Web-based issues such as information design, design logic, and interaction design. We also held the assumption that the strong language and tradition of documentary film may have influenced those who have chosen the new media for this practice. We wanted as well to define and explore these influences in order to utilize them in our own practice. We tried and tested our framework by analyzing five documentary Web sites. The results of this analysis provided us with information about the influence of concepts of documentary cinema on Web-documentaries; a clearer picture of the structure of the Web-documentaries on the Internet; and the limitations of our framework.

2. Overview

This study draws on theories of film and new media in order to develop an analysis framework for documentary practices on the Web. These include the writings of Bill Nichols and Lev Manovich.

The film theorist Bill Nichols proposes a framework for documentary film that analyzes film from four different perspectives: **institutions**, **practitioners**, **texts** (films and video) and **audience** (Nichols, 1991, p.22). In Nichols' view, the practitioners of documentary film shape and change our understanding of the concept of documentary. Through dialogue among themselves and "engagement with institutes, critics, subjects, and audience" the borders of documentary are defined and re-defined (Nichols, 1991, p26). Nevertheless, Nichols looks back to the traditions and repeated patterns in documentary films for its definition. He argues that most documentary films are engaged with representing the historical world and are constructed by "an informing logic" that "supports an underlying argument, assertion or claim about the historical world." Therefore a documentary film is more concerned about relating its content according to historical linkages than creating a sense of credibility and continuity of time and space through continuity editing. Compared to fiction film, in documentary film we may see more disparate shots which are organized not by the "narrative organized around a central character" but by the" rhetoric organized around a controlling logic or argument". Nichols suggests that instead of continuity editing we may call this prevalent form of editing in documentary films: "evidentiary editing" (Nichols, 1991, p. 26-35).

Finally, the expectations and assumptions of the audience define a documentary film. The audience share several expectations and assumptions about the genre. Among them are expectations of an indexical relationship between what they see in the film and reality in the historical world, an engagement with the historical world, and finally the offering of a perspective, knowledge or insight about the historical world (Nichols, 1991,p. 35-41). Nichols suggests that documentary film has absorbed the traditions of "cinema of attractions", narrative cinema and avant-garde cinema, in *showing*,*telling*, and *poetic forms*, and created a voice distinctive in itself (Nichols, 1991, p. 94).

Nichols describes voice in the context of documentary cinema as "how the logic, argument, or viewpoint of a film is conveyed to us."(1991, p. 26) He suggests that the filmmaker uses all the means at his disposal to speak his point of view. In cinema these means vary and range from decisions about capturing the shots, their content and visual appearance to decisions about sounds, music, speech, and voice-over. Decisions about editing and the nature of the documents with respect to the arrangement of events and the use of outside footage and documents are made during the process of filmmaking; and finally the mode of representation of the documentary (expository, poetic, observational, participatory, reflexive or performative) is established (Nichols 1991, p.42-60) .

New media theorist Lev Manovich points to the dominance of database over narrative in the structure of new media artifacts. He draws our attention to a shift in the nature of these works from that of previous media; In most new media artifacts, a database of items and elements is tangibly present while the narrative which is usually formed by linking and associating these elements in a particular way is implicit. In Manovich's words, the database is "material" while' the narrative "which is the trajectory leading from one element to another" is "virtual". (2001, p. 229-232) In fact, in many new media works such as Web sites and CD-ROMs, a large proportion of the body of the work is made of a database. These databases can be comprised of various items in the form of texts, movies, and images. The audience can "perform various operations on the database: view, navigate, and search" through an interface (Manovich, 2001, p 219). Manovich argues this quality in new media works is in contrast with that of film.(2001, Chapter 1 and 5)

In the process of making the film, a larger database of images, texts and sequences is narrowed down to a smaller which can serve the narrative. The viewers of the film can explicitly see the narrative trajectory of the film. But they cannot reach beyond the film information and access the footage. In other words, they cannot reach into the database. Rather, they are limited to what has been presented by the filmmaker. On the other hand Manovich explains that the *modularity* and *variability* of new media objects allow them to be subject to changes in content and provide *random access* to the audience (Manovich, 2001, chapter 1), in contrast to film where the sequence and content of the material is fixed and solidified at the end of the process of editing.

3. Creating a Framework

In creating a framework we have drawn heavily on Nichols' theory of documentary films and the expectations of the audience of documentary practices. We have considered

four criteria for analyzing documentary practices on the internet: **subject**, **perspective and informing logic**, **role of speech,** and **design**. In analyzing the Websites according to this framework, we draw on Nichols' definition of voice and translate it to design, and view voice in Web documentaries as elements and modes of site architecture, visual design and interaction.

3.1 Subject

The subject of the documentary cinema is the historical world. Engagement with the reality of the historical world and the real people who live in it is the main element that distinguishes documentary cinema from fiction. While representing the historical world has been a tradition in documentary films, audiences also expect to see the historical world behind the lens of the camera; they seek an indexical relationship between what they see and what has been happening in front of the camera. What we mean by *indexical relationship* between the image and historical world is an authentic relationship between the outside reality and its recorded form on media such as film, photograph or tapes.

3.2 Informing Logic/perspective

Most theorists of documentary cinema refer to John Grierson's famous definition of documentary as "a creative treatment of actuality" (Nichols, 1991, p. 24). Nichols says, "we usually understand and acknowledge that a documentary is a creative treatment of actuality not a faithful transcription of it" (Nichols, 1991, p. 38). A tradition in documentary film is to organize its information around a logic, poetics, or rhetoric which supports a "perspective, claim or argument" about the historical world. On the other hand, the audience of documentary film expect the film to give "information, knowledge, insight and awareness" about the reality of the historical world (Nichols, 1991, p. 40).

3. 3 The role of speech

Speech in documentary is often used as a narrator voice that suggests an interpretation of the events shown, or a re-interpretation of the speech of the film's subjects. Other forms of speech in documentaries include the direct speech of the protagonists or interviewees. Of course, not all documentary films contain or incorporate speech, but those that do, use speech to convey their arguments.

3. 4 Design

The style of editing in documentary films follows an informing logic and is more engaged with providing historical links between events and images or, in Nichols' words, it rather follows an "evidentiary editing" than continuity editing (Nichols, 1991,p.30). In this type of editing, the editor and filmmaker are not concerned with organizing the shots in a way that give an impression of continuity of time and place; rather, they organize them in order to "present the impression of a single, convincing argument supported by a logic" (Nichols, 1991, p.30).

3.5 Voice

The voice of the documentary manifests the engagement of the filmmaker with the world around him and reflects his social, ethical or political stance. Nichols suggests that the documentary may address us in two ways: voice of commentary and voice of perspective (Nichols, 1991, chapter 3). In the first form, the audience is addressed directly and the film expresses its perspective explicitly. In the second form, the film's claim is conveyed to us implicitly, and the logic or rhetoric works on us in subtle layers. In this case, we try to infer the filmmaker's perspective.

4. Sample Web Sites

Using the definitions above as a framework, five Web sites were chosen and analyzed. In order to adapt the criterion of *structure* to hypermedia works, we interpreted structure as the *design logic* of the sites and their story line(s). Within design logic, different aspects of design, such as interaction design, treatment of space and images, and information design, were briefly analyzed. As far as we could determine, the five sites have documentary practice as their main goal. All are engaged with the historical world, and all look at certain events from their own perspective. Some of these sites were supported by an editorial group, like Cultures on the Edge

(http://www.culturesontheedge.com), while some were built by individuals, like Korean War Project (http://www.koreanwar.org/index1.html) As with Cultures on the Edge, some provided a wide range of documentaries focused on a single theme, while others, like No Back Roads (http://www.nobackroads.com) and Kingdom of Kensington (http://www.torontonians.com), were single documentaries. Also, some documentaries, such as Woodward Squat (http://www.inter-mission.org/woodwards), were presented as Internet–based art projects, along with other on-line art projects. A few of the sites, such as Korean War project, also had a large database of documents and material, all related to the documentary topic. This database was expanding by accepting contributions from the visitors.

5. Analysis

For this paper, we focused on the analysis of the Web site Cultures on the Edge. It is highly representative of the key arguments in this paper. The analysis follows the structure of the framework outlined above.

5. 1 Analysis of the documentary magazine *Cultures on the Edge*

5.1.1 Subject

The subject of Cultures on the edge (http://www.culturesontheedge.com) is the cultures on the planet that are being diminished for geographical, political or economical reasons.

5.1.2 Role of Speech

Speech is present throughout the site and inside the documentaries in various forms: speech that addresses the audience of the site and explains the site and its mission; speech that comprises the body of the travelogues and articles; and speech that accompanies the photographs and is found within digital movies.

In most travelogues, the speech is first person in diary form describing the personal journey of the travelers. The speech comments on places, people and events. The travelogues may also contain short conversations with locals. In captions, the speech comes in different forms from commentary to poetic. In one instance, Steve McCurry's essay on South and South-ast Asia, the main speech is in the form of an interview with the photographer: it is presented in question and answer format through short movie clips. Overall, the text of the speech provides the audience with information about life within the indigenous cultures, the values and lifestyles of the people, and their struggles when they come in contact with larger and more technological cultures.

5.1.3 Informing logic and design

The informing logic of the site follows its mission as explained by its editors: providing a space where the voice of diminishing cultures can be heard and more global awareness about the concepts of cultures and diversity may be attained.

The site achieves this goal by providing in the two main sections*: Gallery* and *Learn*, a collection of travelogues, photo-essays, articles and interviews about diminishing cultures. We are provided with ongoing information about cultural events in a *News and Events* section. A discussion space about the cultural issues throughout the world appears in the section *Forums*. The site introduces its contributors and editors and its mission under a separate section, *About*. The editors express openness and a desire for direct contact with thes audience by encouraging their support and contributions.

The sequence of the links on the homepage and the configuration of the design elements on the homepage indicate that the *Gallery* section as the most important section of the site. The documents found within this section seem to be highlighted and given significant focus.(See fig1).
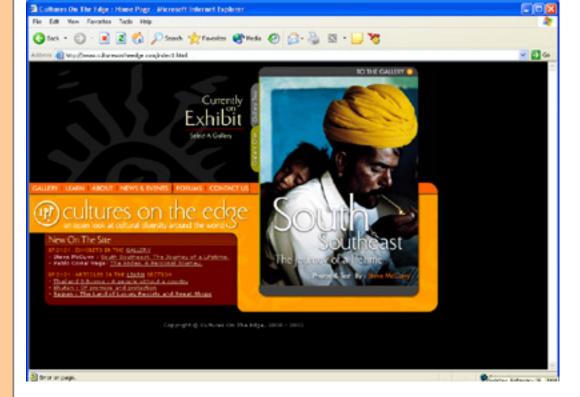
Figure 1. Home Page of Culture's on the Edge, (http://www.culturesontheedge.com)

The gallery contains two major exhibitions: Pablo Vega's travelogue on the Andes (http://www.culturesontheedge.com/gallery/exhibits/pablo_corral/index.html) and Steve McCurry's photo-essay on South and South-east Asia (http://www.culturesontheedge.com/gallery/exhibits/ steve_mccurry/index.html).

Each of these exhibitions opens in a separate window on top of the main *Gallery* window and introduces a region by presenting the documents contributed by selected photographers. These exhibitions introduce the photographers and make their visions and ideas available to the audience by presenting biographies, personal Web sites and video interviews of them.

Pablo Vega's travelogue

(http://www.culturesontheedge.com/gallery/exhibits/pablo_corral/index.html) uses a range of formats for presentation. This multimedia piece is comprised of Vega's diary-form travelogue in text as the main axis, with an interactive map and images of the area. The multimedia are accompanied by streaming music of the Andes region. Vega's text is divided into chapters and is laid side by side with an interactive map of South America along the Andes. The documentary invites the audience to become engaged in interacting with the map and therefore identify with Vega's travel along the Andes. Vega's intimate text provides insight and information about the social, political and geographical features of each place he has visited.

The documentary provides a visual view of the Andes through four or five embedded photographs of the region. The images do not exactly illustrate Vega's text; rather they provide an additional view of the topic. They pique the audience's curiosity and invite them to go back and forth between the images and Vega's text in order to interpret them accordingly. The audience also has the option to zoom in on the images by clicking on them. This opens a window with a larger version of the image accompanied by Vega's poetic caption.

The *Learn* section, which appears to be only second in importance to the *Gallery* section, contains more travelogues and some articles on different cultural issues. The site categorizes documentaries in this section according to the intensity and urgency of the issues they represent. Those documentaries which reflect more pressing human issues are categorized in a section named *hot topic* and come first in the order of links in the *Learn* section. Most travelogues and articles here are in a similar format and are spread in two windows. The main part of each article or travelogue is comprised of text. The few images that are embedded within the text act as gateways to a parallel representation that opens in a small colorful window on top of the main window. This new window provides an interactive slideshow or photo-essay that closely or indirectly relates to the travelogue or article. (See fig2).
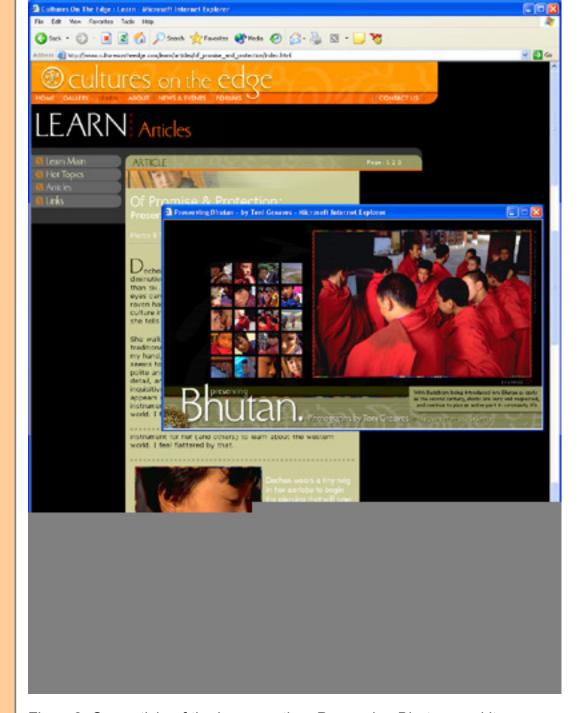
Figure2. One article of the learn section; Preserving Bhutan, and its accompanying photo-essay in JavaScript window.
(http://www.culturesontheedge.com/learn/articles/of_promise_and_protection/index.html)

The slide shows and photo-essays allow the audience to view the content in any given order, as is found in **Preserving Bhutan**
(http://www.culturesontheedge.com/learn/articles/
of_promise_and_protection/index.html)and **Hell is close for Yanomami Indians**
(http://www.culturesontheedge.com/learn/hot_topics/summer_2000/yanomami_01.html).
The audience may also follow a sequential journey like that in **A People Without a Country** (http://www.culturesontheedge.com/learn/hot_topics/spring_2001/index.html).

Figures 3 and 4: two views of the javascript window for ' A People Without a Country' (http://www.culturesontheedge.com/learn/hot_topics/spring_2001/index.html)

In this photo-essay, the photographs have been categorized and divided according to the refugee camps of the Karen People which the photographer visited in Thailand. The camps are numbered by the order he visited them. Once the audience enters the section belonging to each camp, they can see images of the people who live in that camp. The photographer's caption tells a short narrative about the life of each of the people who are shown in the images.

Each photo-essay engages the audience with the culture it represents, but in a different way. In Preserving Bhutan (http://www.culturesontheedge.com/learn/articles /of_promise_and_protection /index.html) (fig2), the photographer chose a small Bhutanese girl named Dechen as her subject and companion. She explains the culture, people and struggles of the area by traveling along with Dechen and engaging the audience through her life, surroundings and future. The photo-essay provides the audience with a selection of images which can be chosen randomly. After clicking on each image, the viewers can see a larger view of that image along with a caption which describes the image in context of Dechen's life.

The images within the photo-essays and slide-shows throughout the site open a window to the landscapes, life-styles, personalities and visual culture of each region. They allow the audience to explore patterns and colors of fabrics and objects, the design of the tools and clothes, and the architecture of the places people dwell. Angela Fisher and Carol Beckwith's photographs of Africa (http://www.culturesontheedge.com/gallery/archives/ceremonies/photos/index.html) focus on different ceremonies in different parts of Africa. Peter Magubane's photographs (http://www.culturesontheedge.com/gallery/archives/peter_magubane/index.html) of the

Ndebele, Ntwana, Xhosa and Zulu tribes of South Africa try to capture the cultural identity and the meaningful costumes of these vanishing tribes. And Stephen Ferry's photojournal of Potosi region (http://www.culturesontheedge.com/gallery/archives/potosi/index.html) takes the audience to the streets, outskirts, houses and mines of the Potosi region during a period of 18 days, between August 19 and September 8, 1998.

5.1.4 Voice in 'cultures on the edge'

The "voice" of the on-line documentary site can be heard through the range of material it includes, the range of the voices it reflects, and the visual style of the overall site that extends within the contributed documentaries as well.

The site is designed as an international showcase or study center on diminishing cultures. It presents documentaries from all over the world and accepts contributions from both developed and under-developed countries. Each of the documentaries looks with a different eye at the issue of indigenous cultures and their ways. Some like Pablo Vega's travelogue on the Andes, (http://www.culturesontheedge.com/gallery/exhibits/ pablo_corral/ index.html) and Stephen Ferry's photo-journal on Potosi region (http://www.culturesontheedge.com/gallery/archives/potosi/index.html), invite the audience into the geographic location and culture of the region the photographers belong to and offer an intimate experience and view of an insider. Some other documentaries like Preserving Bhutan(http://www.culturesontheedge.com/learn/articles /of_promise_and_protection /index.html) attempt to create the same experience of intimacy and arouse the audience's concern about a culture by drawing viewers close to one of the people of a certain culture and building a friendship with that individual. Phil Borges photo-essay on Kenya and Ethiopia (http://www.culturesontheedge.com/gallery/archives/phil_borges/index.html) looks at diminishing cultures from a larger scale; he stages the indigenous people in surrealistic compositions in order to create a romantic, mythic vision of the diminishing tribes of the world.

The intimate insider look does not prevail in all of the documentaries in Cultures on the edge. Some documentaries back the audience off and look at the indigenous cultures from a distance, focusing more on recording anthropological facts or visual exotic delights. For example, Steve McCurry's photo-essays on South and South-east Asia (http://www.culturesontheedge.com/gallery /exhibits/steve_mccurry/index.html) provide a pleasurable showcase of exotic colors and patterns seen in the region without much record of the cultural, economic ,political and religious tensions in that area. Carol Beckwith and Angela Fisher's photo-essay on Africa (http://www.culturesontheedge.com/gallery/archives/ ceremonies/photos/index.html) present the audience with anthropological views of rites and rituals of people of different part of Africa through colorful and attractive compositions, and Peter Magubane's photographs (http://www. culturesontheedge.com/gallery/ archives/peter_magubane/index.html) record the cultural identity of vanishing tribes of Africa by capturing their costumes.

If we infer the voice of the site from the information design and the name attributed to its spaces, we should say the site tends to *exhibit* facts and visions about the indigenous cultures and *teach* the audience about the life of the people in indigenous cultures, their issues and struggles. Using the concept of gallery and exhibition space for organizing and housing facts and images about the indigenous cultures; and treating them as objects to look at, or preserve, may be somewhat contradictory to the mission of the site: to provide a non-hierarchical outlook into the life of indigenous cultures. Yet the contributions in the site are mainly by people who have traveled into indigenous cultures; and it seems the concept of taking the audience on similar travels prevails in designing the structure of the site. Most documentaries, and especially photo-essays, open in new windows on top of the main browser window of the site and allow the audience to go back and forth between the text within the main browser and the images and content within the window. Interactive maps create the feeling of traveling along with the author; and most photo-essays deliberately allow the audience to roam in a visual data-space.

The look of the site itself does not portray a particular social or political bent. The general feel of the site is formal, yet exotic and attractive. Highly saturated colors and repeating patterns reminiscent of the traditional arts and handicrafts of early cultures on

the top or bottom of browser windows invite the audience to a pleasurable and aesthetic visit and create a friendly warm atmosphere.

6. Results

The results of the study are described as similarities and differences between documentary film and Internet-based documentary.

6.1 Characteristics Shared with Documentary Film

Web sites that clearly introduce themselves as Web documentaries, along with other sites such as documentary magazines that are involved with documentary practice, share certain characteristics with documentary film. The following are some of these shared characteristics:

- Documentary practice on the Internet intends to reflect the historical world.
- Some of the elements of documentary practice on the Internet have indexical relation with the real world.
- Documentary hypertext is built around an informing logic and provides historical and informative links to events and elements.
- Documentary practice in the internet utilizes a body of text in the form of commentary or interview. As in films, this speech can share conventions with diaries, essays, and also incorporate rhetoric devices and rules.
- Documentary hypertext can use modes of representation to convey their perspective
- The voice of documentary hypertext is built from the treatment of each of the consisting elements as well as their arrangement.
- The practice of creating a documentary hypertext can be an individual practice or be supported by organizations that are known as supporters of documentary practices (such as the National Film Board of Canada).

6.2 Specific Characteristics of Web Documentaries

Web documentaries have characteristics that are **specific** to them and are **not** shared with documentary films.

Web-documentaries are hypermediated.

They demand the audience's participation and interaction.. Different events and documents are **not** re-presented to the audience in a coherently perceived three-dimensional world on a screen that is representative of the historical world; rather, they are laid out in different windows and layers in which two-dimensional and three-dimensional views are presented.

The audience of a documentary film is the spectator of a sequence of images that follow each other without his control in a coherent space/time reality. Web-documentaries use a model of exhibition, magazine, or map to organize their data in a perceived digital space and invite the audience to move through this data space and explore the documents. As a result, equivalents to temporal or continuity editing are almost absent in Web documentaries. The audience proceeds through the material and retrieves information through participation in the digital space and through getting physically and cognitively engaged interacting with the interface.

In most Web-documentaries, the main narrative is written in text and is laid out as the main layer of data. This type of speech, either in form of first person narration or interviews, has the role of communicating information in most Web-documentaries. The material of the speech is usually organized in chapters or sections so it can be browsable and studied separately.

Media is secondary material.

Images, movies and sounds are usually given a secondary role, mainly used to illustrate the text within the speech. These secondary materials are laid out within the text and are hypermediated or organized in linked sequences, such as albums or photo-essays. They can be accessed through links provided beside the text or images laid out inside the text. These albums and photo-essays are sometimes accompanied with captions and often provide the audience with *exploratoriums* and small side-trips to the main text.

These either engage the audience with closer details of the subject matter and illustrate the text, or provide additional perspective to the subject. Additional documents may also be compiled in databases that the audience can access through internal search engines.

Many Web-documentaries also attempt to expand their perspective and coverage by providing links to other Websites that contain material related to their subject.

Web-documentaries are clusters of information.

The Web-documentary may be presented in a collection of similar documentaries or be individually presented as part of a site involved with documentation of material according to an informing logic. In this case, the overall database of the site may not have a particular plot but rather may be made up of piles of information, catalogues and chains of events which are all related to the area which the site covers.

Web-documentaries may have multiple authors and contributors.

Web-documentaries may have more than one author/creator and can be an ongoing process of documentation. In some Web documentaries, the documentary process is supervised either by individuals or organizations. With others, documents are provided by "external" sources such as photographers, journalists, and individuals brought in to build a documentary. The documentaries may be re-structured by the authors at anytime. The database can be expanded at any time by either the author or by contributions accepted from the audience in the form of images, interviews, links etc .

Web documentaries can have forums.

Discussion forums add to the quality of the Web documentaries and account for aspects of their voice. The forums provide the audience of the site with a space to review documents and share interpretations. This discussion may go further than the specific topic documented on the site and therefore add new branches to the mainstream of the idea within the documentary. Depending on whether these forums invite open discussion or narrow the discussion toward views that may support the perspective of the documentary, they can account for the voice of the site, augmenting the perspective or suggestion of the documentary maker(s).

Web documentaries' use visual design, information architecture, and interaction as voice.

The voice of the site and Web-documentary is a factor of the categories of data presented, the range and depth of the information in each, and the arrangement of these clusters of information. Also, the architecture of the hypertext and the way the audience is moved through the data space account for viewers' experience of conceiving the story or the organization of information in their minds. As well, the way the subject is treated in the visual re-presentations such as movie-clips, VRs and photographs and the overall visual design of the site (colors, patterns, areas) - all contribute to the voice of the documentary.

Web-documentaries can broadcast their material in real-time.

Web-documentaries may use digital cameras and Web-cams to distribute their material in real-time. The broadcast may be part of the documentary or constitute the entire documentary.

7. Conclusion

Although film documentary does not rely on continuity editing to create a spatial or temporal continuity between shots of the film, it still invites its audience to participate in a three-dimensional storyworld which represents the historical world visually. Web-documentaries,however, do not attempt to represent the three-dimensionality of the historical world; instead, they create a perceived three-dimensional data-space where the audience can move between the documents deliberately. Most Web documentaries up to now have tried to contain the main narrative or logic of the documentary through written text; other media such as images and movies are tied to the body of text though hyperlinks. These hyperlinks provide the audience with additional narrative trajectories to explore and may enhance understanding of the text that lies in the body of the work as its main axis.

While some Web documentaries have shown efforts at utilizing the experience of navigating the data space for the narration and for managing hierarchies of knowledge (using metaphors such as interactive maps and sequential photo-essays), there is much more room for exploring this in creating Web-documentaries.

Overall, the framework we have derived from documentary cinema shows that the traditions of documentary film are present in Web-documentary too; although Web documentaries seem to fulfill audience expectations, such as engagement with the historical world, it is hard to say that they have absorbed these concepts under the influence of the traditions seen in cinema.

Regarding perspective and organizing logic, our framework, based on Nichols' theory, may need some modifications to be applicable to many other forms of documentary practices on the Internet (such as those seen on scientific sites and museums sites, allowing the audience to explore specific objects, historic eras or scientific phenomena.) This is the direction for our future work in this area. We would like to continue to apply and refine the current framework with the aim of evolving it into a tool for analyzing Web documentaries.

8. References

Beckwith, C. & A. Fisher. *African Ceremonies*. Cultures on the edge - documentary site. Consulted January 26, 2004.
http://www.culturesontheedge.com/gallery/archives/ceremonies/photos/index.html

Borges, P. *Kenya and Ethiopia,* Cultures on the edge - documentary site. Consulted January 26, 2004.
http://www.culturesontheedge.com/gallery/archives/phil_borges/index.html

Ferry, S. *I am Rich Potosi.* Cultures on the edge - documentary site. Consulted January 26, 2004. http://www.culturesontheedge.com/gallery/archives/potosi/index.html

Greaves, T .*Of Promise & Protection: Preserving Bhutan*. Cultures on the edge-documentary site. Consulted January 26, 2004.
http://www.culturesontheedge.com/learn/articles/of_promise_and_protection/index.html

Levy, J. & R. Haviv. *"Hell is Close" For the Yanomami Indians of Brazil.* Cultures on the edge - documentary site. Consulted January 26, 2004.
http://www.culturesontheedge.com/learn/hot_topics/summer_2000/yanomami_01.html

Magubane, P. *Vanishing Tribes of South Africa.* Cultures on the edge - documentary site. Consulted January 26, 2004.
http://www.culturesontheedge.com/gallery/archives/peter_magubane/mission.html

Manovich L. (2001) *The Language of New Media.* 2nd ed. The MIT Press: Cambridge, Massachusetts; London, England.

McCurry, S. *South and South East*. Cultures on the edge - documentary site. Consulted January 26,
2004.http://www.culturesontheedge.com/gallery/exhibits/steve_mccurry/index.html

McEwen, B. *A People Without a Country*. Cultures on the edge - documentary site. Consulted January 26,
2004.http://www.culturesontheedge.com/learn/hot_topics/spring_2001/index.html

Nichols, Bill. (1991) *Introduction to Documentary.* 2nd *ed.* Bloomington, Indiana: Indiana University Press.

Vega, P.C. *The Andes*. Cultures on the edge - documentary site. Consulted January 26, 2004. http://www.culturesontheedge.com/gallery/exhibits/pablo_corral/index.html