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Exploring Peruvian Culture through Multimedia Ethnography

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The projects discussed in this article, Nicario Jiménez's website on Folkvine.org and the PeruVine/PeruDigital/PeruQuechua project, explore new ways to tell stories using features of digital environments such as immersion and imitation. In this article we discuss how the design and navigation structure of these websites tries to present simultaneously the context for understanding stories as well as the experiential dimension of ethnography and ethnology (method and interpretation). The website projects, then, relate to ongoing debates about the literary nature of ethnographic productions as well as the distinctive characteristics of interactive environments.

Multimedia ethnography involves using digital media to present real-world cultures through environments and narrative techniques. Through the use of digital media, this approach seeks ways to present and, most important, to experience the culture. This form of ''ethnographic storytelling'' provides an arena for enacting the research process in a way that moves beyond text-based presentation. The two projects discussed in this article, Nicario Jiménez's website on Folkvine.org and the PeruVine/PeruDigital/PeruQuechua project, explore new ways to tell stories using features of digital environments such as immersion and imitation. In this article we discuss how the design and navigation structure of the websites attempts to present simultaneously the context for understanding stories as well as the experiential dimension of ethnography and ethnology

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INSIGHTS FROM HYPERTEXT THEORY IN THE HUMANITIES

In order to understand this area of work, it is helpful to place it within a larger body of work taking place in the humanities under the heading ''hypertext theory.'' As authors such as Bolter [2001] Landow [2006], Murray [1997], Murfin and Ray [2003] and Lienau [2004] point out, electronic text generally represents a distinct change in the relationships between and experiences of reader, author and text. Bolter's concept of the ''late age of print'' (an adaptation of Raymond Williams' concept of ''the late age of capitalism'') refers to ''a transformation of our social and cultural attitudes toward, and uses of, this familiar technology'' [Bolter 2001: 3]. In contrast to print culture's qualities of stability, authority, single voice and linearity, the culture of electronic text is one of flexibility, interactivity, reader as author, multiple (paths, voices) and spatiality. In the era of electronic communication, then, the features of impermanence, changeability and the creation and maintenance of a ''network of self-contained units'' can be explored in multiple ways by readers who are increasingly empowered to be author-like. The text (and increasingly multimedia elements) responds to user input, and allows for multivocality and differential juxtaposition of text, authors and messages to be explored in what may seem to visitors as a kind of pathway through virtual space.

Beyond the epochal transformation from print to electronic text outlined by Bolter, Murray [1997] usefully outlines the features of digital environments that lend electronic culture its aesthetics and psychological impact—features which we will see can be usefully exploited by anthropologists seeking to create digital cultural representations. Murray points out the four principal properties of digital environments: procedural, meaning ''its defining ability to execute a series of rules'' [*ibid*.: 71]; participatory, characterized by interactivity; spatial, meaning that it can ''represent navigable space'' [*ibid*.: 79]; and encyclopedic, referring to its capacity to store and retrieve large amounts of information. A true interactive environment is procedural and participatory. Murray also states that spatial and encyclopedic properties make up an immersive environment, which is ''explorable and extensive'' [*ibid*.: 71].

Hypertext storytelling differs from other storytelling forms, primarily in its non-linearity but also in terms of the capacity for offering the audience more freedom to choose different paths through the story. The immersive and interactive capacities of hypertext environments are used to reflect the narrative turn in the social sciences—the idea that it is most effective and honest to convey what it is really like to live as a member of a community or culture through the medium of experience (i.e., here's what it's like, step inside to see). This approach is a move away from what has been called a monographic style, in which one tries to cover as much information as possible. Rather, the point is to communicate the essence of the experience and not claim to represent the totality of what life for another person entails. To do this most effectively, we can learn from recent work in digital cultural heritage studies.

NEW MEDIA AND AUDIENCE ENGAGEMENT

New technological developments may prove particularly useful in conveying the insights of anthropologists and the people with whom we do research in a 21st-century context. Stroupe [2007] notes that the current generation—the so-called ''network culture''—may be particularly suited to grasping and developing the non-linear structure of hypertexts because of the ''conventions of hypertext-driven Web pages, dashed-off emails, or even the reverse-order chronicles of blogs'' [*idem*]. Digitally based heritage studies offer insights into how such work can be structured to reach a public and/or formal educational audience. Digital media offer the cultural heritage expert the opportunity to create spaces for dialogue that are increasingly seen as the main objective for practitioners in the field. The potential for hypertext to create multivocal spaces and interactions is well documented [e.g., Bolter 2001 and Landow 2006]. Calandra and Lee, for example, note that ''Unique characteristics of digital media can also aid in this approach to learning such as the flexibility of information access that hypermedia's nonlinear structure provides'' [2005: 325].

  Creating these multivocal and interactive spaces serves, on the one hand, the cause of historical and cultural accuracy in virtual re-creations of historical places and worlds. While historical accuracy, particularly in terms of content creation, is often privileged, it is useful to keep in mind that not all virtual heritage projects posit this as the litmus test for success. Some virtual heritage projects, such as ''The Magical World of Byzantine Costume,'' may instead not aim for accurate reconstruction but more an interactive, even ''magical,'' experience [Roussou 2002: 97]. Squire and Durga similarly examine the game of ''Civilization'' as a learning-object for students to go beyond the absorption of facts to the criticism of abstract concepts in which those facts are given an interpretive frame. They write: ''I argue that such simulation errors still present fruitful learning opportunities for students as they provide a tangible context for discussing otherwise abstract concepts... Teachers can leverage students' interest in critiquing and deconstructing of the game which typically occurs as a natural part of game practice...'' [2008: 6].

  In addition to creating dialogic spaces, digital media also offer the cultural heritage expert the opportunity to enact the very place-based cultural and historical consciousness so important to conveying culture and history to the public. Attachment to place is rendered through memories and associations we have with certain places [Glassberg 1996: 19], and digital media help the cultural expert embed memories in places in an imitative fashion that can engage the public emotionally as well as intellectually. In anthropological parlance, culture has become increasingly understood as a narrative.

CULTURE AS NARRATIVE AND THE EXPRESSIVE POTENTIAL OF MULTIMEDIA

Cultural anthropology today has to a certain extent become increasingly understood as a form of narrative as much as it is a scientific endeavor. The website projects discussed in this article attempt to go beyond presentation of both primary (data) and secondary (scholarly) texts to exploit the visual and interactive

potential of hypertext in order to imitate the ethnographic process and re-create aspects of cultural experiences. In a sense, principles of ethnographic narrative proposed by Geertz [1988] and Clifford [1988], and analyzed by Van Maanen [1988], are adapted for digital environments.

In this regard, Sarah Pink's work [e.g., 2003] explores the issue of ''sensory ethnography.'' In her article ''Representing the Sensory Home: Ethnographic Experience and Anthropological Hypermedia,'' she writes:

Ethnographic video, film, and writing offer valuable but different ways of representing ethnographic knowledge. Hypermedia suggests new ways of configuring and interlinking this knowledge in the same text. It is an emergent medium that is finding its own place in ethnographic representation. Through the example of the sensory home, I have argued that, to make hypermedia meaningful in terms of existing anthropological and ethnographic discourse and styles of representation, such work needs to be responsive to the texts that are relevant to its theoretical and ethnographic ambitions. This means producing a new visual anthropology that is not just for other visual anthropologists, but that is embedded in the agendas and practices of anthropological themes, subdisciplines, and ethnographic regions. [2003: 60]

In a similar vein, Roderick Coover's work *Cultures in Webs* [Coover and Castaing-Taylor 2003], is a CD-ROM that illustrates the use of digital media to enact cultural analysis. Through this work he demonstrates how hypermedia can present ethnographic materials that would otherwise be difficult to display in traditional formats, and thus potentially reveal more information and insights than would be possible through textual presentation and analysis alone.

Underberg [2006, 2010; Underberg and Congdon 2007], influenced by Pink's writing and recent experimentations in digital media representation, has written on the potential of hypertext for experimenting with ethnographic reflexivity, and reflectivity. As she explains, the idea is to not only offer descriptions of people and places but also a design that provides a tour-like experience, in which a visitor can experience the culture in an exploratory way. In the East Mims Oral History Project Website and Folkvine.org (a collaborative project between faculty and students across several departments at the University of Central Florida), for example, principles of ethnographic storytelling outlined by Mitchell and Charmaz [1998] for literary works were adapted for digital media projects [Underberg 2006]. Non-linearity and interactivity become key features of hypermedia that structure its design logic for culturally oriented Web design [Lanham 1995; Titon 1995]. For example, in representing the artist Lilly Carrasquillo's Puerto Rican identity online, the challenge was to identify key cultural ideas that should inform the design and content of the site. The work of García Canclini [1995] and Jorge Duany [2000] on diaspora and hybrid cultures, in particular Duany's metaphor of ''*la nacion en vaivén*'' or ''the nation on the move'' to characterize the hybrid and fluid identities of contemporary Puerto Ricans, provided an inspiration for structuring a hypertext environment that wove themes of hybridity and memory into the splash page and overall navigation of the site [Underberg 2010].

With this brief background in digital media theory, heritage studies and visual anthropology in mind, we can turn to two case studies that combine new media

with anthropological interpretation. In the remainder of this article we present two such projects, Nicario Jiménez's website on Folkvine.org and PeruVine/ PeruDigital/PeruQuechua, in order to open up the interpretive process and production experience.

PERUVIAN FOLKLORE: EXPERIMENTS IN ETHNOGRAPHIC REPRESENTATION

While cyberspace has long been presented as something of a ''culture-free'' zone (with roots in cyberpunk literature such as William Gibson's 1984 *Neuromancer*), more recent work argues for a need to attend to the way in which communities may embed their identities in digital culture (such as websites, computer games, or mobile devices). Much of the mythology of cyberspace concerns its status as ''culture-neutral'' or beyond any human culture. This conception of cyberspace is concerned with the global and abstract, rather than the local and concrete. It also is informed by studies of text-based digital environments like MUDs (multi-user domains) that were popular in the early days of the Internet. These were environments in which identity was expressed through text-based descriptions, and so much was made of the potential for playing with one's presentation of self (such as gender-switching, or engaging in fantasy-based character development and performance); for example, Sherry Turkle's work on identity and specifically gender play figures in such classic cyberculture texts as *Life on the Screen: Identity in the Age of the Internet* [1995]. Much of her work has been described as optimistic or utopic, attending more to the potential for gender and identity-play made possible by primarily text-based computer technologies (such as MUDs) rather than to the constraints that social structures and roles place on the freedom of the individual to ''invent the self'' willfully and freely.

Susana Paasonen [2002] has usefully criticized Turkle's work, focusing on more ''everyday'' uses of the Internet that do not necessarily involve creating parallel identities, gender-swapping, or other related ''inventions of the self.'' Paasonen writes that this ''everyday'' approach attends to the reality of embodiment, identity markers, and power.

As scholars are discovering then, definite continuities exist between digital and real-world cultures. For example, N. B. Christensen [2003] notes in his examination of the design of Arctic (Inuit) websites that the Inuit represented themselves in relation to cultural boundaries as well as local and national boundaries.

So, in contrast to those who view cyberspace as a place to create new identities, to be liberated from constraints of physical life, Christensen agrees with scholars like Robins that the focus on disembodiment has created a myth of cyberspace where social and political problems are seen as divorced from virtual space [Robins 1993]. Like Robins, Christensen wants to bring the concerns of the real world back into the virtual one. These realizations of how real-world considerations like ethnic identity, gender and the realities of globalization ''matter'' in digital cultures set the foundation for collaborative digital media work that may offer an alternative approach to utilizing the Internet to embed rather than transcend culture.

Coover, in *Cultures in Webs* [Coover and Castaing-Taylor 2003], explains that when presenting ethnographic documentation one of the main challenges is translating observations in such a way that outsiders can understand and gain insight into the culture being studied. What makes digital media like websites and games so exciting as media for sharing stories about culture is that these stories can be shown not only through words but also through a sense of perspective and spatiality that is potentially unique to digital environments. Materials and information can be displayed in such a way that a website about culture becomes a kind of cultural experience. It is to two such Peru-focused projects on which the authors have collaborated that we now turn.

NICARIO JIMÉNEZ'S WEBSITE ON FOLKVINE.ORG

For this website project, part of the Folkvine.org project which was an interdisciplinary effort of faculty and students at the University of Central Florida to present local artists on the Internet,[1] the authors worked closely with the Peruvian *retablo* (portable altar) artist Nicario Jiménez in the conceptualization of his website, in an attempt to incorporate aspects of Andean worldview into the design and implementation of the website about his work.

Mr. Jiménez is a native speaker of Quechua, but also speaks Spanish and English. Much of his work is based on Andean topics, both mythic and social, though his *retablos* also examine life in the United States. Through an explication of the website ''walkthrough'' (or layout of the site) and research methodology we followed, we offer suggestions for incorporating collaborative methods in the use of digital media to reflect cultures and worldviews.

Representing Andean worldview online can take many forms. Here we will focus on attempts to integrate two key concepts that scholars have repeatedly identified as fundamental to Andean thought: complementary duality and the threefold division of time/space. To convey the idea of complementary duality, the paired relationship of opposites needs to be presented with acknowledgement of their hierarchical relationship. An example of this is the complementary duality of genders expressed in dance and other performance, and in concepts about the relationship between women and men such as *chachawarmi* (literally, man-woman), which expresses the idealized unity of the married couple.

A second key concept is that of the threefold division of the universe, which involves both time and space. The Quechua (Inca) word *pacha* is used to express both concepts; a similar concept exists in Aymara, the other major indigenous language of the Andean highlands. In this conception there exists an Upper World (top or *Janaq*—or *Hanaq*, depending upon the dialect of Quechua—Pacha), a ''This'' World (middle or *Kay Pacha* in Quechua), and an Underworld (bottom or *Ukhu Pacha* in Quechua). This spatial division corresponds to a temporal division in which the top is the past (*Ñawpa Pacha*, meaning previous, old), the middle is the present (*Kay Pacha*, as above), and the bottom is the future (*Qepa Pacha*, future, or across). This spatial division relates to a distinctive Andean idea of the past as being in front of one because it is can be seen and thus known (unlike the Western perception that the past is behind one), while the future is

behind because it cannot be seen and thus is not known. *Retablos* are an ideal form for presenting this space-time relationship in Andean cosmology. Early *retablos* dating from the 19th century [Ulfe 2004] typically had a dual division, but since about the 1900s *retablos* have been divided into three sections.

The website attempts to integrate aspects of hypertext theory to enable features of multivocality [Bolter 2001; Landow 2006; Murray 1997]. The website is multivocal: it is presented in English and Spanish and, to a limited degree, in Quechua. Andean concepts are foregrounded throughout the site, including the hot-spot-embedded shelf of *retablos* that serves as the gateway to information on Jiménez's grandfather's *cajón san marcos* (literally, Saint Mark's box)—the earliest form of *retablo*. The splash page, or first page that is seen for Jiménez's site, is a virtual *retablo* that opens up to reveal three levels: the top is the past or history of *retablos*; the middle is the present/the artist's biography and presentation of *retablos*; and the bottom is the future and the artist at work, and the fieldwork trip. The main rollover text reads: ''Open the *retablo* to learn about Nicario Jiménez.''

Each section of the *retablo* responds to a mouse moving over it, serving as a hyperlink to a separate section of the website. The rollover text for the top section reads ''Roll over to hear Nicario Jiménez talking about his father making a *retablo ayacuchano*'' (i.e., a *retablo* from Ayacucho, a Peruvian highland region renowned for its arts but also its base as the center of Peru's recent civil war). The exploration of the ''Past'' includes a photo of a shelf on which *retablos* made by Jiménez's grandfather and father stand. There is a hyperlink from the third *retablo* from the left to a section of the *cajón san marcos* (the earliest form of the *retablo*), and from the fourth *retablo* from the left to the section on *retablos* (in their contemporary form). Under the section on the ''*cajón san marcos*'' we see a video of Jiménez describing his grandfather's *cajón san marcos*.

The text is a paraphrase of a section of Jiménez's videotaped interview (made by the Florida Folkvine team) in which he talks about his grandfather's work and the *retablo*'s earliest form as a *cajón san marcos*. We learn from Jiménez that ''They were little boxes, three-dimensional, many figures, in which scenes appear, divided into two because of the Quechua concept of duality: *hanaq pacha* (upper world) and *kay pacha* (this world).'' In this section the user finds photos of textiles from Jiménez's house, and explanations of which saints represent patrons of what animals (e.g., how Saint Luke is the patron saint of llamas) and how the *cajón san marcos* was used in religious ceremonies. This is supplemented with a paragraph about the Andean concept of duality (the two-level *cajón*) and, as part of this section, a brief explanation is included of how women making textiles represent a complementary duality to men who make *retablos*. By moving through the collection of *retablos* on Jiménez's shelf, the website shows the form's transformation to the contemporary *retablo ayacuchano* (transition into more secular and more varied kinds of scenes; now its primary value is artistic).

In the second section of the part of the website devoted to the ''Past,'' the *retablo ayacuchano*—the art's contemporary form—is presented and interpreted. This section includes video of Jiménez describing his father's *retablo*, and a textual explanation that paraphrases what Jiménez said during an interview about his father's work and the later form of the *retablo*. In addition this section has a paragraph about other well-known *retablo*-makers who represent this transitional

period from the *cajón san marcos* to the *retablo* with its genre scenes, thus placing Jiménez's work in a larger context.

In the middle section on the ''Present'' we are invited to ''Roll over to learn about Nicario Jiménez'' and to ''Roll over to see and learn about how Nicario Jiménez has taken the genre scene style and introduced political commentary into it.'' In this section we find a biography of Jiménez, along with his photo and textual explanation about the artist, including his Andean identity; the role of travel and crossing borders in his life and work; and how he has transformed the form to focus on political themes. The section on the *retablos* themselves focuses on six works, with links to other *retablos* that relate to other themes. These *retablos* include ''Mask Maker,'' ''Migration,'' ''Pishtaku,'' ''Chicago,'' ''Grape Harvest'' and ''Daily Work.''

The next section, that of Jiménez's *retablos*, allows a user to explore themes of travel, crossing borders, and moving through time and space in his *retablos*, including some for which he is best known, notably those *retablos* that offer social commentary about Peru [Damien, Stein and Jiménez 2005; Ulfe 2004] and about his adopted home, the United States. For example, in his ''Immigration'' *retablo*, we see the Miami airport as the top scene; the middle scene shows Haitians and Cubans arriving in Florida, and the bottom is of people trying to get across the Mexican-American border. This *retablo* illustrates the importance of travel, migration and crossing borders in his life and work.

We see the threefold division of time and space in another *retablo*, that of the *Pishtaku*, a creature that extracts human fat and so kills its victims. Depending on the period, this figure was either represented as a colonial Franciscan priest (as in the first, top level of the *retablo*) [Canessa 2000; Ulfe 2004]. The *Pishtaku* symbolizes the exploitation of Andeans in a literal way. It extracts fat, the essence of life, from humans. In the colonial period, according to legend, the *Pishtaku* used the human fat to make bells for churches. In the second level (and period) of this *retablo*, the *Pishtakus* are still dressed as priests, but now took fat to power machines like airplanes and tractor motors, which native and scholarly inter-preters have pointed out were not available to or used by Peruvian peasants. In this *retablo* we see the *Pishtakus* getting fat to pay down Peru's national debt. The third level shows the *Pishtaku* as Peruvian soldiers who extracted fat to power their helicopters (or machine-guns) during Peru's civil war between the guerrilla organization Sendero Luminoso and the Peruvian Armed Forces and police, in which it has been estimated that 69,000 people (mostly peasants) were killed or disappeared. Ayacucho, where the artist lived, was the birthplace of Sendero Luminoso and was the center of this brutal undeclared war. We see a similar tripartite division in the *retablo* ''Daily Work,'' one of the artist's *retablos* commenting on life in the United States. There are three levels: on the top are farm-workers; in the middle are workers waiting for people to drive up and offer daily jobs; and on the bottom are construction workers. (Construction is deemed more stable, better paying and more prestigious than day-work or farm-work.)

The top level is the most exploitative, and the bottom is a slightly more pres-tigious job (though still vulnerable). Going from top to bottom in the *retablo* one follows a temporal development as well (farm-work is typically one of the first jobs migrants will find). Along with the Andean concept of duality (with two

complementary elements that coexist), the *retablo* represents a tripartite division of the cosmos (top is Upper World, middle is This World, bottom is the Underworld). This corresponds to a temporal division in which top is past, middle is present and bottom is future.

In the ''Future'' section at the bottom of the virtual *retablo* a user is able to ''Roll over to learn more about Nicario Jiménez at work'' and ''Roll over to learn about color symbolism in *retablos*.'' In this section of the website we see Jiménez in his workshop, including video and photos, and text about the materials used and how his father developed the slow-drying mixture of plaster of Paris and potato that made it possible for *retablo* artists to manipulate figures to suggest action. In particular, we learn a little bit about potatoes, how Jiménez adapts his materials to the environment, how he is always working on more than one *retablo* at a time, and how he sees the relationship between art and craft. We also see an image of a paint table where one can select a paint color and learn about its symbolism. Placing presentation of Jiménez at work in the ''Future'' section communicates the message that his art is an ongoing process, one perpetually in development as he explores new themes and elaborates on established ones with new insights.

PERUVINE/PERUDIGITAL/PERUQUECHUA

These insights, which were developed during the production of previous Websites [Underberg 2006, 2010; Underberg and Congdon 2007] and computer games [Underberg 2008], were applied to the development of the later PeruVine/PeruDigital/PeruQuechua project. Its aim is to present Peruvian festivals on the Internet through a multilingual, interactive and immersive Website, using ethnographic data in the collection of the IDE. The project is a collaboration between anthropologists and digital media scholars at the Institute of Ethnomusicology (IDE) at the Pontifical Catholic University of Peru–Lima and the Digital Ethnography Lab, University of Central Florida, Orlando, and local consultants in Peru and the United States. The Website uses the potential of hypertext and digital environments to address how linguistic communities (English, Spanish, and Quechua [Inca]) view and interpret the world. Specifically the project interrogates ways that hypermedia may or may not look and function ''differently'' for diverse linguistic and cultural communities [Christensen 2003].

Humanities scholars, including some working in anthropology and new media, are examining the process of adapting materials collected in one medium (such as ethnographic photographs or film) into another (the Internet, or a computer game) in order to present information about cultures and communities using the techniques of narrative [Pink 2001; Titon 1995]. The interpretive approach in the Website the PeruVine/PeruDigital/PeruQuechua team is building uses the distinctive features of the digital environment—anticipated and analyzed by digital humanities scholars [e.g., Bolter 2001; Turkle 1984, 1995]. This digital process also reflects the reflexive, narrative and collaborative turn in folklore and anthropology [e.g., Clifford and Marcus 1986; Pink 2001; Ruby 1980]. Through the medium of hypertext (Internet), we draw on models of museum work with source communities [Peers and Brown 2003], and recent scholarship

on Peruvian popular culture [Cánepa 2002; Romero 2001; Ulfe 2004], to design the pilot Website collaboratively. Peruvian festivals with their associated forms have long been the focus of extensive scholarly interest by anthropologists in the fields of folklore [e.g., Romero 1993]; ethnomusicology [Bigenho 2002; Turino 1993]; cultural anthropology [Allen 2002; Cánepa 2002; Femenías 2004, etc.]; history [Damien *et al.* 2005; De la Cadena 2000; LaRosa and Mejía 2006; etc.]; and gender studies [Babb 1998; Femenías 2004]. The festival as a ''genre of genres'' makes clear the abundant connections between artistic forms, worldviews and identity [e.g., Arguedas 2002; Mendoza 2000, for the Latin American case]. The festival contains within it a number of other ''playful'' forms [Bakhtin 1968; Underberg 2001], compressing multiple events and experiences together into a particular time and place, which enables the public to see themselves as a community.

This project contributes to the development of a digital media-based visual anthropology and to the process of decolonizing knowledge [Varese 2006] by using technology to represent cultures in a collaborative manner. Specifically, we take a cue from the methodology of Participatory Design (PD) as outlined by scholars such as Watkins [2007]. Participatory Design, according to him, includes three phases. As he explains: ''Phase (1) of the new method comprises a period of due diligence, which informs phase (2) iterative design cycles. These cycles repeat until phase (3), the achievement of desired system/artifact performance'' [*ibid*.: 161]. The first phase, ''due diligence,'' includes three stages: conducting an organizational observation, creating a domain review, and devising an initial project strategy. This step was completed for the PeruVine/PeruDigital/PeruQuechua project through the following several activities: two partnership-building and research trips to Peru to establish collaborative relationships and identify archive materials;[2] research design completion and Wiki creation for project management and collaboration; development of a team of scholarly and cultural consultants; and initial consultations with the latter. Step two is the prototyping stage, which we have completed.[3] Through Directed Research classes with our students to help develop framing text, and the duplication and preparation of archive materials for the project, we designed a walk-through for the site and the site architecture. The creation of the downtown Lima environment (including the ethnographer's office) and the first festival space (of the Piura, the Peruvian setting for the Lord of Agony fiesta) permitted us to present a pilot, or proof of concept, to our interdisciplinary, international advisory board for evaluation. This project, like others that employ the Participatory Design (PD) model, is an iterative process, one that involves evaluation and garnering feedback into the design loop.

In addition to employing Participatory Design principles, we seek to bridge current work in digital heritage [e.g., Giaccardi and Palen 2008] with the concerns of current anthropological theory. Giaccardi and Palen, for example, discuss a project entitled Silence of the Lands which seeks to capture and share sound experiences related to ''natural heritage.'' Useful for our purposes is the way they outline both the technical and social infrastructure that underlies such a project. The technical infrastructure includes data capture, annotation and interpretation, while the social infrastructure is based on partnership relationships with some

''community stakeholders.'' Building the technical and social infrastructure for PeruVine/PeruDigital/PeruQuechua has involved consideration of contemporary anthropological concerns such as reflexivity [Pink 2001; Ruby 1980]. For example, in designing the site architecture for the project, we sought to employ interactivity and immersion to enable multiple interpretive frames: ethnographer, participant and spectator. Such a design choice raises interesting questions about the role of perspective in understanding social experiences, such as where does the role of the spectator end and that of the ethnographer begin? In what ways are participants' views of social events like the festival similar to or different from those of the anthropologist? Digital media allow us a ''field'' in which to explore these issues.

The pilot website takes users on a virtual guided tour of a busy downtown Lima plaza and the site of the Lord of Agony festival in Afro-Peruvian coastal Piura (a future highland Puno environment for the Virgin of Candlemas is planned). The Lima environment is modeled on a busy downtown plaza in the city where users can meet the avatars or digital characters who relate to the subsequent Peruvian environments (specifically, people from the southern highland region of Puno which is a future ''environment'' and the north coast region of Piura which has been created, along with a Catholic University student), and interact with objects and texts that orient visitors to introductory information about the country, the regions, and Peruvian folklore, religion and festivals. We have also finished a pilot of the first festival environment, the Piura setting of the Lord of Agony festival, where visitors can learn about the festival, interact with several avatars and key objects, and learn about the performance and preparation for the festival.

Through real-time and virtual consultative process and design, we are developing the Website as a series of linked, navigable festival-related environments, including rehearsal spaces for musicians and for dancers, the public plaza where the festival takes place, and paths along which the procession moves. The central anthropological themes that the project addresses, including legacies of cultural contact and identity, and community formation through expressive culture, form the bases of the interpretive approach. Each environment explores these themes, providing thematic continuity throughout the entire Website. This website is being designed in a way that presents the holdings of the IDE from the perspective of anthropological scholarship. These examples were developed in preliminary consultation with the IDE, anthropologists and community consultants. These will be refined or may be changed as a result of the consultative process.

The festival in its *gestalt* joins many forms of expressive culture that in the United States generally take place separately from one another. As such, the festival, and the website we are developing, both provide models that can be applied to the presentation and study of numerous forms of expressive culture. The project's approach is experimental and experiential. The public who use the website will interpret components of the festival actively by role-playing and by interacting with objects, thus imitating the work of an anthropologist. In this regard, Erik Champion [2002] argues for the usefulness of adapting game-design techniques to virtual heritage projects. Specifically, he outlines four interactive elements that can facilitate ''cultural learning'': dynamic place (including paths

or obstacles to help or hinder navigation); interactive task-oriented artifacts (relating their use to tasks and setting so as to demonstrate the cultural significance of an object); avatars (agents that users can talk to and learn from); and memento maps (the ability to select, place and adjust icons of events, objects or interactions relevant to their experience onto a map) [*idem*]. Features of these interactive elements have already been adapted to the design of the web-based experience of the PeruVine/PeruDigital/PeruQuechua user.

   The goal is to embed not just the knowledge but the investigative methodology of the scholar. Thus the users not only role-play the participants in the festival but also the scholars who interpret the events and their emic meanings. Such an approach attempts to enact aspects of reflexive methodology outlined by anthropologists such as Sam Pack [2006] and Jay Ruby [1980]. Pack writes: ''According to Jay Ruby, to be reflexive 'is to insist that anthropologists systematically and rigorously reveal their methodology and themselves as the instrument of data generation' (1980: 153). More specifically, it is to be accountable to the three components of the communicative process: producer, process, and product'' [Ruby 1980: 157, cited in Pack 2006: 106].

   By attending equally to the ethnographic fieldwork and interpretation process and the ''work'' of the spectator (such as the festival sponsor) and participant (such as a festival dancer), to enable the presentation of expressive culture to the public, the PeruVine/PeruDigital/PeruQuechua project attempts to address all three components outlined above by Ruby. A further primary goal is communicating the cultural context of the festival in a narrative way that evokes experience and privileges subjectivity. This approach is a move away from a monographic style in which one tries to present as much information as possible. Conveying the essence of experience is the goal: telling a good story. This means, then, giving the overall sense of the story and enacting the ethnographic process by bringing a user behind the scenes using digital and artistic techniques in a hypermedia context which thus exploits the medium's imitative and interactive nature [Pink 2001].

   In the remainder of this article we provide a ''walk-through'' of the pilot website, focusing on its interpretive frame to illustrate how we attempted to convey key anthropological themes and integrate not only the knowledge but the methodology of the scholar.

   As visitors enter the Piura environment, after choosing either English, Spanish or Quechua (the site is partially available in Quechua as of this writing), the user encounters an image of the Lord of Agony in Bernal, Piura, where the primary festival activities occur. The next scene includes a street scene, populated by dancers including a *tamale*-seller and someone from the highlands. Through these figures, and that of a Peruvian college student, the user will be able to explore the festival space from the perspective of the performer or ethnographer (the third perspective, a sponsor or festival planner, is in development).

   Navigation of the festival space enables the user to appreciate the history, aesthetics, politics, economics, religious significance, and gender and ethnic identity issues associated with the festival in this region where Spanish and African (former slave) cultures interact. For example, a user sees a brief video clip from the IDE of the *serrano* Highlander figure (someone from the mountains who

is assumed to be indigenous). He wears a mask and a hat, and asks in a slightly nasal voice, ''Where is my *compadre* (ritual co-father)?'' By clicking on the *serrano*, the visitor can better understand how playful figures may represent local stereotypes. Stereotypical figures appear in festivals throughout the world. The visitor can examine a close-up of a digital character recreation of the *serrano* figure based on a fieldwork photo from the IDE archives and, by interacting with the avatar and the IDE ethnomusicology student, explore the history of the *serrano* stereotype in relation to issues of identity. As anthropologists know, one of the ways that the identity of a local group is sustained is through contrast with another group; in this sense, Piurans understand themselves as ''non-Highlanders.''

Helping to contextualize this stereotypical figure is another avatar or digital character who is a student at the Católica studying ethnomusicology. He provides helpful commentary within the environment, explaining the origin and functions of the *serrano* and festival figures like him. Finally, within this environment are embedded original fieldwork videos of the *serrano* and other festival characters displayed within a mobile video player held in the Catholic University student's hand.

Based on our pilot project, we assert that digital media can indeed be used to create cultural experiences and subjectivities (multiple perspectives) to examine not only the consumption of but also the production and documentation of culture. The immersive and interactive potential of digital environments, for example, makes it possible for users to experience and reflect upon the performance of cultural events like the festival; the sponsorship or planning of festivals, particularly important in Peru where festivals are complex, community-wide events that involve local economies, political structures, and so on; and the documentation and study of festivals. We believe that cultural experiences and ideas, then, can be represented by digital media through digital anthropology projects like this. We seek to re-create cultures online by combining collaborative methodologies with digital technologies, a process that Underberg has dubbed elsewhere ''reciprocal technology'' [Underberg 2006].

Through PeruVine/PeruDigital, the general public has the opportunity to explore aspects of Peruvian festival behavior in ways that enhance their understanding of both the festival behavior of diverse immigrant communities, festivals of different kinds, the worth of anthropologists, and issues of intercultural and multilingual collaboration. The website enables these audiences to understand and appreciate the arts, artists and community participants, and the relation of artistic expressions to anthropological themes in ways that expand upon available films, television programs and museum exhibitions related to these subjects, while also making these subjects easily accessible through the medium of the Internet.

CONCLUSION

In hypertext studies, (largely literary) scholars have grappled with issues such as whether and how digital technology liberates or else devalues human creative expression and how the features of digital environments affect narrative creation

and sharing. In this regard, Janet Murray [1997] has usefully articulated the ongoing tension between the ''utopic'' and ''dystopic.'' In her seminal book *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* [1997], she opens with a scene of Captain Kathryn Janeway of the starship Voyager engaging in a holo-gram virtual-reality fiction (using a device called a holodeck), where she plays Lucy Davenport, governess to the mysterious Victorian literary hero Lord Burleigh. It is a vision of the potential for new storytelling using new technology and one that, to the extent that Captain Janeway remains in control of her experi-ence, is a utopian one. In contrast, the dystopic vision of storytelling using new media is well-developed in the literature and media. The dystopian (depicting a nightmare scenario) vision of the effect of these new technologies on story and entertainment is illustrated by works such as Aldous Huxley's *Brave New World* [1932] and Ray Bradbury's *Fahrenheit 451* [1953]. *Brave New World*'s ''feelies'' hor-rify because they manipulate audience response, while *Fahrenheit 451*'s ''televi-sors'' are evil because they distract people from the real world around them. Murray offers us, then, two visions: the literature of cyberspace as a continuation of a great literary tradition, and a dehumanizing and addictive computerized experience. These issues are equally applicable, as anthropologists well know, to the potentially controversial issue of how to use digital technology to virtually represent cultural ideas and identities. In this regard, through making our design and interpretation process transparent, we intend our projects to be models for public anthropology in the digital age.

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