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INVESTIGATING CULTURAL LEARNING IN DIGITAL ENVIRONMENTS THROUGH PERUDIGITAL

ABSTRACT

This article examines the PeruDigital project, a digital ethnography project that presents Peruvian festivals and folklore on the Internet through an immersive and interactive environment. This project, like others that employ the Participatory Design model, is an iterative process, one that involves evaluation and garnering feedback into the design loop. In addition to employing Participatory Design principles, the project seeks to bridge current work in digital heritage with the concerns of current anthropological theory. This article focuses on current interdisciplinary research between faculty in Digital Media, Anthropology, and Education to study what and how students learn about cultural heritage from the website. The experience tentatively suggests that the role-playing and immersive potential of digital environments can be used to facilitate cultural learning, but that pathways through those environments need to be carefully structured so that cultural knowledge can be learned.

KEYWORDS

Digital heritage; cultural learning; interactivity; immersion; cultural heritage; Latin America; perspective; role-playing

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INTRODUCTION

This article examines the PeruDigital project (www.perudigital.org), a digital ethnography project that presents Peruvian festivals and folklore on the Internet through an immersive and interactive environment. This project, like others that employ the Participatory Design model, is an iterative process, one that involves evaluation and garnering feedback into the design loop. In addition to employing Participatory Design principles, the project seeks to bridge current work in digital heritage with the concerns of current anthropological theory. This article focuses on current interdisciplinary research between faculty in Digital Media, Anthropology, and Education to study what and how students learn about cultural heritage from the website. The experience tentatively suggests that the role-playing and immersive potential of digital environments can be used to facilitate cultural learning, but that pathways through those environments need to be carefully structured so that cultural knowledge can be learned.

PARTICIPATORY DESIGN AND BRIDGING DIGITAL HUMANITIES WITH CURRENT ANTHROPOLOGICAL THEORY

The PeruDigital project employs ideas from recent work in archive and museum studies that integrate participatory and digital methods into the public presentation of cultural materials, and assembles a diverse group of humanities scholars—cultural anthropology, linguistic anthropology, curatorial studies, and Latin American Studies—along with cultural consultants with expertise in Peruvian, including native Andean (Quechua), folk art, folk dance, and language. The field of participatory digital archives and museums often focuses on the objects as a locus of attention to the relative exclusion of the social situations—and scenarios—in which such objects play a part in real life. The PeruDigital project aims to bring together participatory research methods with digital storytelling and educational game design techniques to convey more abstract aspects of intangible cultural heritage, which includes not just traditional arts and performances, but elements of cultural values and ideas about time, space, and movement (Fennell 2009; Gandhi and Gandhi 2009; Graham 2009; Keller 2009; Ruggles and Sinha 2009; Salomon and Peters 2009).

INTRODUCTION TO THE PERUDIGITAL PROJECT

The PeruDigital project presents and interprets Peruvian festivals and folklore through the medium of the Internet. Based primarily on archive materials from the Pontifical Catholic University of Peru-Lima's (PUCP) Institute of Ethnomusicology (IDE) as well as fieldwork conducted by the PeruDigital team, the project is a collaboration between faculty and students in the fields of Digital Media (including Character Animation), Anthropology, and Modern Languages and Literatures (Spanish).

FIGURE 1: PERUDIGITAL WEBSITE HOME PAGE.



FIGURE 2: LEARNING ABOUT PERUVIAN FOLKLORE IN THE VIRTUAL DIGITAL ETHNOGRAPHER'S OFFICE.

¹ Internal UCF funding has been received from the following: UCF School of Visual Arts and Design; UCF Department of Anthropology; UCF College of Arts and Humanities; UCF Center for Humanities and Digital Research; UCF Latin American, Caribbean, and Latino Studies Program; UCF Office of International Studies; and UCF CREATE (Center for Research and Education in Arts, Technology, and Entertainment).

The project, supported by internal UCF funding¹, has produced to date numerous publications and conference presentations (see, for example, Underberg-Goode 2015; Underberg-Goode and Adams 2015; Underberg and Zorn 2013 and 2012), and was used as a model in teaching graduate Visual Anthropology coursework in 2012 at the PUCP. The current PeruDigital website introduces users first to a busy Lima, Peru plaza where characters and objects indicate the perspectives to be found within the Website. From there, users can visit the ethnographer's office and explore orienting information about Peruvian folklore, religion, and regions. These multimedia materials help users better understand and appreciate the interactive festival environment in Afro-Peruvian Piura. There users can interact with festival performers such as a young girl preparing to perform in the *sarahuas* (a dance/drama about the historical conflict between the Christians and Moors in Spain) and objects such as the fieldwork videos integrated into the ethnographer's virtual mobile player showing festival characters like the *tamalera* (a playful representation of a local tamale-seller) in action. The goal is to introduce via simulation aspects of attending, performing in, and studying a festival.



The most recent addition to the Website has been a curriculum and quiz based on the Website materials and organized according to three social roles: ethnographer-as-researcher, the artist-as-performer, and the sponsor-as-community builder. The Website features three scenarios that set up the questions, both multiple choice that draw on material contained in the Website, and free-response that ask users to draw upon ideas from the Website to apply those lessons to their own experience and communities.

The curriculum is designed to encourage website users to adopt these points of view as they move through the digital environment:

1) The ethnographic perspective is set up through the following scenario:

Hector is a graduate student studying ethnomusicology (the cultural study of music) at the IDE at the PUCP in Lima, Peru. His family is from Puno, Peru, and he is the first generation in his family to go to college. He is interested in Peruvian traditional culture, but sees it as something that his parents' and grandparents' generation were concerned with, and believes it to be dying out. By learning to ask the questions an ethnographer would ask about the meanings and functions of the festival in Piura, you can help him understand that, far from dying out, Peruvian traditional culture is dynamic, changing and adapting all the time.

Questions include general ones such as, "Why do people all over the world seem to celebrate festivals?" to specific ones such as, "Where has the form of the *cumanana* (a form of verbal dueling) flourished?" Beyond this, users are asked to complete certain tasks that relate to ideas and themes explored in the site to the communities surrounding them, such as "Ask your friends and family if they can think of any other examples of stereotypes in festivals and other celebrations. Why do you think they exist?" To answer these questions requires a certain way of exploring that differs from the choice to experience the festival as a sponsor.

2) In the sponsor perspective, the user adopts the role of Xavier:

Xavier is a middle-aged member of the *hermandad* responsible for organizing the annual Lord of Agony festival in Piura. This is his first experience with sponsoring the festival, and he is replacing his uncle as chief festival organizer—and he hopes he can measure up to his uncle's performance. Xavier is the festival *mayordomo*, meaning that he undertakes the duty of organizing the religious and administrative tasks associated with putting on the festival including caring for the village saint (or Lord), administrative matters, and the festival schedule. He works with a *devoto* (devotee) as well

as an *escribano* (notary public) who is in charge of collecting the money and making the economic arrangements, and a *procurador* (procurator) who makes sure that everything is done adequately and according to tradition. Xavier wants to do a wonderful job in carrying out his *mayordomo* duties and coordinating the members of the *hermandad*, but he has a lot of work to do to make sure it is done correctly. By learning the answers to questions related to organizing the festival, you can help Xavier learn first-hand the value of cooperative labor and the importance of giving in order to receive.

In doing so he needs to understand issues like “What does the *escribano* in a *hermandad* do?,” and complete such tasks that relate to the sponsor role as “Find out what dish(es) are traditionally served [at the celebratory meal after the festivity], and how to make them.”

3) By adopting the performer role users are introduced to Ariana, a nine-year old planning to perform in the *sarahuas* dance/drama in Piura:

Ariana is a nine-year-old girl from Sechura who is performing for the first time as a *sarahua* in the Lord of Agony festival. She is somewhat disassociated from her cultural heritage, and doesn’t want to participate in this ‘stupid’ tradition. She wakes up the morning of the performance as a *sarahua*—not as a character, but in the middle of the drama the *sarahuas* are depicting. She must learn not only about how to play her role in the *sarahuas*, but about other characters’ roles in order to return to her everyday existence. When she successfully answers all the questions she needs to know how to perform—and for others to perform in the same festival—you can help her wake up on the day of the festival again, but this time ready to perform her heart out with a new appreciation for the history and heritage expressed in the festival.

To understand the festival performer perspective, the user explores the Website to understand matters like “What is a *compadre*, for which the *serrano* character says he is looking?” and “To what does the term *palla* refer?” To carry out this role, the user completes tasks including to “find out more about the conflict that the *sarahuas* represent in dramatic form.”

INVESTIGATING CULTURAL LEARNING IN INTERACTIVE ENVIRONMENTS

Digital media designers can exploit the role-playing and immersive potential of digital environments to facilitate cultural learning. Erik Champion (2006a, 2006b, 2011, 2015), for example, advocates integrating interactive elements including dynamic place, interactive task-oriented artifacts, avatars, and memento maps to accomplish this.

Dynamic place refers to the provision of paths that either help or block user navigation. Task-oriented artifacts involve the use of interactive elements to encourage users to reach goals through manipulation of objects, and can be employed in such a way that their use demonstrates their cultural significance.

Avatars (actors represented as three-dimensional characters) can represent agents that users can communicate with and from which they can learn, which can help create a sense of presence. Memento maps, meanwhile, can be devices by which users can customize map icons which would help with navigation. These ideas, while not fully realized in the pilot stage, have influenced the design of the PeruDigital Website.

Interactive environment design for cultural learning involves understanding how cultural learning may occur through observation, instruction, or trial and error. The objective is one of simulation, of imitating the procedural knowledge of cultural rituals and symbols, and thus to help outsiders better comprehend a different worldview. This involves provision of contextually appropriate goals, and consideration of the ways that knowledge learned in the virtual environment can be transferred beyond the interactive environment. Champion suggests considering the way in which role-playing figures in the accomplishment of cultural goals and values, and the role of items in social role identification. Designing interactive environments for cultural learning involves having users complete actions such as identifying correct and incorrect behaviors and communicating cultural knowledge (Champion 2006a, 2006b).

Ideas for designing virtual environments to support cultural learning have been adapted for use in the PeruDigital project in several ways. For example, the curriculum free-response tasks ask users to apply knowledge learned from the Website to their own experiences and communities, and to gain practice in using the skills of these social roles. For example, in the ethnographer perspective, we are asked to do the following:

Folklorists and anthropologists talk about an idea called 'religious syncretism,' by which they mean the combination of two or more religious belief systems into a new religious belief system. Find several examples of this 'syncretism' in Peruvian culture through exploring the PeruDigital Website, and by doing additional research as necessary. Can you find any other examples of this 'religious syncretism' in your community, or by asking people you know? What questions would you ask them to find out the answers you are seeking? Make a list of these questions, then ask someone the questions and take notes on what you are told.

In addition, PeruDigital aims to simulate the procedural knowledge of ritual and symbol. For example, by adopting the perspective of the festival sponsor, the user may gain a sense of the Andean cultural idea of cooperative labor as a form of wealth and social influence as indicated by the mobilization of cooperative work.

In this way, too, users are introduced to a different belief system, one which privileges the importance of the cargo system and cooperative labor (Bird n.d., 2010; Guillet 1980; Isbell 1997; De la Piedra 2009).

In addition to understanding the cultural importance of festivals in Peru, users are also given the contextually appropriate goal of gaining an ethnographer's understanding of the festival as a kind of universal human activity, one which provides common functions around the world like providing a "time out of time" in which social values and strains are displayed through ritualized actions and satirical figures, including stereotypes. This is shown by allowing the visitor to visit a street scene set during the Lord of Agony festival including the festival character of the *serrano* (representing an indigenous person from the highlands) and a PUCP student ethnographer holding a mobile video player with fieldwork videos. Within this street scene, the user can hear the *serrano* ask "¿Dónde está mi compadre?" ("Where is my ritual co-father?") and then see the fieldwork video of the *serrano* in the PUCP character's hand and note how he stays in character. Users can then visit the digital ethnographer's office and delve deeper into the history, development, and significance of the *serrano* through looking through fieldwork notes and slide shows either before or after these encounters. One lesson may be a greater understanding of how festival figures may represent regional stereotypes.

To learn more, a visitor might want to look at the Piura (coastal Peru) and Puno (highland Peru) booklets on the bookshelf in the digital ethnographer's office. This understanding is reinforced through completion of the following task questions under the ethnographic perspective: "Find out how the *serrano* represents a stereotypical character, and think of a list of questions to ask a real person who the stereotype represents to learn more about his or her culture. Ask your friends and family if they can think of any other examples of stereotypes in festivals and other celebrations. Why do you think they exist?" Another way is through the multiple choice question within the ethnographic perspective that asks: "Why do people all over the world seem to celebrate festivals?"

In order to better understand how the PeruDigital project does (or does not) enable this "cultural learning," and prepare to more fully integrate this cultural content into the Website, we felt it was important to examine what exactly students who received education based on the curriculum found in the PeruDigital Website actually learned, whether presented through exploring the Website or through receiving the same information via a static PowerPoint presentation.

Evaluating this cultural learning may involve some combination of direct observation, usability and experience questionnaires, and interviews. Observation may involve recording the amount of time taken to explore the environment and complete tasks. Questionnaires are also helpful tools. Pre-questionnaires can be used to gather demographic data and expectations of users.

Usability questionnaires address system effectiveness and user satisfaction. Post-tests can be used at the end to find out what was learned (Champion 2006a, 2006b; Pujol and Champion 2012; Wang and Champion 2011; Roussou, Oliver and Slater 2006). Specifically, Champion (2006b) outlines five categories of questions for evaluation of cultural learning: task performance (locating objects in the environment), cultural understanding (multiple questions on the environment), presence survey (evaluating users' sense of presence, especially cultural presence or the sense of being in the presence of a distinct cultural worldview), environmental recall (testing users' memory recall about the environment), and subjective experience of time passing (in which environment does time seem to pass by quickest). Ideas from the literature on evaluating cultural learning in virtual environments influenced the design of the questionnaires/quizzes for the study under discussion in this article. To this end, Carolyn Hopp, Natalie Underberg-Goode and Maria Eugenia Ulfe applied for and received internal UCF funding (a CAH Seed Funding grant) to study the acquisition of cultural learning in PeruDigital. The objective was to examine differences in learning attainment, motivation, and engagement, and to learn how to best utilize the role-playing and immersive potential of digital environments to facilitate cultural learning. We conducted a quantitative and qualitative research project with two groups of students from universities in different countries. The first class consisted of a graduate class in the UCF School of Education and Leadership taught by Carolyn Hopp. The second group of students came from the PUCP's Visual Anthropology program directed by María Eugenia Ulfe.

As part of this project, students took turns studying the curriculum associated with the PeruDigital project Website, via a static PowerPoint lecture and via an exploration of the Website itself. While the original plan was to randomly assign students to one of the two groups (the control group who would study the PeruDigital curriculum via a static PowerPoint lecture and an experimental group who would study the curriculum via exploration of the PeruDigital Website), during the course of seeking IRB approval we learned that due to student concerns raised during recent years we were now required to offer both interventions to all students during the course of a class.

The PowerPoint lesson included content related to topics including: basic facts about Peru (location, geography, climate, history, population, languages, etc.); introduction to the regions of Puno and Piura (covering the same basic topics, including discussion of the Virgin of Candlemas festival within Puno culture and the Lord of Agony festival within Piura culture); Peruvian religion (including Inca civilization, Catholicism, syncretism, and role of festivals); Peruvian folklore (including festival, verbal art, dance and drama, graphic and plastic arts, and textiles); and festivals in Peru (including the Lord of Agony).

Each student group (one in Peru and one in the U.S.) was then given a pre-test, post-test, and quiz (including both objective and free-response questions).

Our graduate student assistant Hariharan Ramakrishnan set up these instruments in Qualtrics. This, in addition to the focus group discussions, were the sources of data we collected.

Before taking the pre-test, Underberg-Goode gave a brief lecture to explain the project and the research grant activities (in person in Hopp's class and via a narrated PowerPoint to Ulfe's students). Underberg-Goode, Hopp, and Ulfe then created the pre-test, which drew from research on methods of evaluating cultural learning (cited earlier) and multicultural curriculum development and evaluation (Banks 1996; Hopp 2011; Ornstein, Pajak, and Ornstein 2015).

Demographic questions included age, gender, and educational background. Likert scale questions included asking about previous knowledge about Peruvian culture, interest in exploring a foreign cultural heritage, and attitudes toward the use of interactive media for learning. Open-ended questions included asking about background with developing interactive learning experiences, attitudes towards use of storytelling in education, and background knowledge related to ethnography and the functions of a festival.

The quiz was drawn from the Website curriculum, and included questions related to the topics and themes covered in the Website, such as the meaning of the festival figure of the *serrano* and why festivals are found world-wide. The free-response (task) questions were also drawn from the Website, and included such questions as "Find out how the *serrano* represents a stereotypical character, and think of a list of questions to ask a real person who the stereotype represents to learn more about his or her culture. Ask your friends and family if they can think of any other examples of stereotypes and festivals and other celebrations. Why do you think they exist?."

The post-test was also co-designed by Underberg-Goode, Hopp, and Ulfe. Again drawing from the literature on evaluating cultural learning in virtual environments, questions included first asking students to rate which format (Website or PowerPoint) was most challenging, interesting, interactive, and so on. Then Likert scale questions were posed including asking students to rate how they would answer questions regarding their understanding of some key ideas or themes in the Website (such as "I understand how the role of the sponsor differs from that of the artist"), how interesting they found the history behind festivals, and how willing they were to explore a foreign cultural heritage. Questions were also asked regarding their interest in the characters, if they thought completing the free-response "tasks" helped them in understanding the topic, and whether they thought the Website was easy to use. Free response questions asked again some of the questions from the pre-test, including "What do you think an ethnographer does?" and "How does an event like a festival reveal the way that culture and tradition may change over time?".

Video capture software was used to record how students used the curriculum and answered the questions. A considerable amount of time was spent in particular by our graduate research assistant to plan for and troubleshoot this part of the process.

He created a “How-To” guide for proctors and participants to use that explained how to record, render, and export the videos, and we conducted a trail run-through with Ulfe and her research assistant before the recording date via Skype to make sure the recording session with the students would be successful. Due to concerns about file size, computer capacity and Internet speed, the recordings were divided up into several parts, with a period of time in between each recording necessary to render the files. A log of the Camtasia recordings was made by our research assistant, which showed which pages the students visited at which points in the recordings.

In addition, focus group discussions were held to discuss and evaluate the project. The focus group format was somewhat open-ended, but included discussing topics like “What did you think of the curriculum format and structure?” and “Which feature of the Website was most memorable to you?” Due to scheduling difficulties, the focus group discussions were held separately with the students in Peru and in the United States. A student translator was hired to facilitate the discussion since Hopp and our research assistant did not speak Spanish and so the students at the PUCP could express themselves freely in Spanish.

RESULTS FROM RESEARCH

The pre-test results for the UCF students indicated, among other insights, that the majority of students began the project with very little knowledge about Peru in general or North Peru in particular, while just over half indicated strong willingness to learn about a foreign cultural heritage and a belief that interactive media is useful for learning about other cultures. Unfortunately, the students at the PUCP did not complete the pre-test, perhaps due to a misunderstanding on the part of proctors regarding this issue. Because of this, the conclusions presented here are tentative and not conclusive and indicate that more close teamwork is needed in future collaborations.

Students in Hopp’s class answered quiz questions as journal entry assignments within their online course environment, while Ulfe’s students answered the questions using Qualtrics survey software. The open-ended questions are where we may see the difference in areas of motivation and engagement. This allowed us to investigate the question: Is their experience more powerful? In part, this was measured through the reflection pieces, in which we asked students to consider the following: “What did you connect to and why?; What still challenges me?; and “I used to think...but now I think...” The post-test and survey consisted of reactions to curriculum including questions related to interest in cultural learning. The questions are designed to investigate the question: Do we see evidence of differences in areas of motivation and engagement? This can be explored by investigating the question: Is their experience more powerful in one curriculum format versus another?

The quiz results revealed some interesting insights, including that on the quiz for the group that initially saw the Website

curriculum, the PUCP students scored lower on 17 of the 28 questions than the UCF students. One possibility is that the Peruvian students may have taken many things for granted and not paid as much attention due to the subject matter—perhaps if presented with a project on U.S. culture their interest and attention may have been more sustained and thus led to higher scores. Responses to some of the free-response questions showed some interesting differences in what students focused on between the U.S. and Peruvian students. For example, in response to the question that asked students to imagine taking on the responsibility of organizing a festival, the U.S. students' responses were split between one half who noted both the Peruvian-specific roles (the *hermandad* or brotherhood religious organization structure) along with the objects and performers needed, and the other half who primarily focused on the objects and performers needed. In contrast, the Peruvian students all (except for one student who did not answer) noted the Peruvian-specific roles as well as the need for mobilizing a social/family network to complete this undertaking.

The majority of students in both groups rated the Website as more interesting and interactive, while opinions were more split on which format was more challenging. Answers to several of the post-test free response questions in the English-speaking group did reveal a somewhat more thorough or deep understanding of key topics like “What do you think an ethnographer does?” and “How does an event like a festival reveal the way that culture and tradition may change over time?” Student responses to the question: “Complete the following two statements in relation to the lesson on Peruvian religion, folklore, and festivals: I used to think...But now I think...” for the UCF students included some telling statements revealing a more in-depth engagement with the topic and culture, including: “I used to think festivals were just for fun. But now I think there is so much more we can learn...” and “But now I think that Peru is very rich in history and very distinct from all other cultures.” For the PUCP students in response to the same question, several responses focused on the effects of the digital/interactive elements, for example: “I think the digital tools are valuable,” while another attributed his/her change in thinking to the experience of having learned from the Website.

During the focus group discussion, the PUCP students made a number of points about their experience with the curriculum and the Website. Overall, they indicated that they were not intrigued by the curriculum being outside the Website and wanted to see it integrated more so that the pathways through the Website were more structured. Other comments included their desire to see more in-depth information about some of the material on the Website, such as about the musical instruments featured, and indicated that they would find the site more interesting if there were more short videos on the site. Students made it clear that they were not compelled by

the static image-with-text presentation format. The focus group with the U.S. students revealed that in relation to timing, students completed the curriculum in much less time than anticipated. Once they saw the surveys and questions related to the curriculum, regardless of which format they experienced, they commented that they realized they did not pay deep enough attention to the content and realized they needed to go back in some instances and revisit the curriculum. The students indicated that they did enjoy the interactive content more than the static PowerPoint content, but they did suggest adding content that provided more historical perspective and even the location of Peru with respect to other countries and cultures.

CONCLUSION

Drawing on our experience with the CAH seed funding grant, we are currently seeking grant funding to allow us to integrate the curriculum into the Website, which will allow us to take the information we learned and apply it to the creation of a “gamified” Website based on PeruDigital. Gamification refers to integrating game mechanics and design techniques to increase user motivation and engagement (Freitas and Maharg 2011; Ferdig 2012).

Its potential application to the field of cultural heritage has been the subject of discussion in the scholarly literature in recent years. Our interest in exploring the possibilities for “gamification” beyond that of a static online exhibit of archive materials is informed by the fact that the role-playing and immersive potential of digital environments can be used to facilitate cultural learning. The Website and curriculum could also potentially be used in cultural anthropology and Latin American Studies classes to model ways to learn about other cultures by adopting the perspectives of the ethnographer, or to understand through interaction and immersion the importance of wealth as cooperative labor, power through strength of community bonds, and community celebrations as rooted in the social economy of a region by exploring the environment from the point of view of a festival sponsor. Given what we have learned from the study, however, it would be highly desirable to have more videos integrated into the site and offer more opportunities to acquire deeper knowledge about specific traditions featured there. This would require further financial support for the project, which we are currently seeking.

hooks (1994) reminded us that deeper conversations about culture between students and teachers may require a change in teaching style and in content. The capacity to be open to dialogue about curriculum that transcends theory to one that challenges thinking and action requires a paradigm shift. When two university colleagues collaborated to examine a cultural curriculum through the lenses of classroom teachers, the PeruDigital curriculum project provided an opportunity to not only dialogue, but also to examine a cultural curriculum through different perspectives: interactive and lecture.

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A RETROSPECTIVE PERSPECTIVE ON THE DIGITAL RECREATION OF MID-CENTURY SUBJECTS

ABSTRACT

This article reflects on lessons learned and suggestions for future projects focused on using the tools of virtual heritage for the representation of the recent past. The earliest project that involved this combination of virtual heritage and “living history” was Shadows of Canaveral, a project based on oral history research with those involved in the Space Industry in Florida during the creation of a launch complex. More recently, the ChronoLeap project takes participants into the past to relive the 1964/1965 New York World’s Fair, and the ChronoPoints project attempts to recreate life inside mid-century structures including the Glass Bank in Cocoa Beach, Florida. The challenges and opportunities involved in this type of work result from the fact that those who are still alive can both contribute to the development of such projects and “talk back” regarding the representation of their history, lives, and culture. To that end, the article raises interesting questions about community participation, collaboration, and negotiation in contexts in which those represented can answer back and offer critiques.

KEYWORDS

Virtual heritage; heritage education; virtual environments; community participation; U.S. popular culture

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INTRODUCTION

Beginning with the 1957 launch of Sputnik, the Space-Age extended far beyond orbiting satellites and capsules. It would influence many elements of popular culture including architecture, fashion, automobiles and motion pictures. However, as the astronauts of Apollo 17 took humanity's final footsteps upon the lunar surface in 1972, it was a style that had become one of yesterday rather than the future. Few continued to appreciate the style's flamboyant traits and many commercial buildings sporting a Space-Age theme were demolished or severely altered (Walters 2015). Even the sentinels of the Space-Age, launch complexes of Cape Canaveral, faced demolition. It was a style that many in the 1970s and 1980s took for granted, and many failed to recognize the value of its preservation. To capture remnants of the era, researchers at the University of Central Florida's Institute for Simulation and Training embarked upon a digital exploration of these topics beginning in 2005.

SHADOWS OF CANAVERAL

Shadows of Canaveral was our first three dimensional educational experience, in which the user explored historic rocket launch facilities at Cape Canaveral, Florida. Throughout the 1960s, the orange gantries of the launch pads at Cape Canaveral created a skyline which rivaled New York City's as the world's most recognizable. Its outline was unmistakable, as the tall trestles of brightly painted steel rose up from Central Florida's sun-drenched sands, with each gantry tower standing as a sentinel awaiting the next launch to the heavens. But as with many Mid Century Modern traditional buildings of the era, the majority of these historic launch structures have been demolished. Their destruction represents more than a loss of a structure comprised of steel and concrete; it was a loss of a touchstone connecting us to a significant moment in our collective history - when the United States took its first steps into space.

The State of Florida's Bureau of Historic Preservation funded *Shadows of Canaveral Phase I*, in 2005/2006, to facilitate users' understanding of Astronaut John Glenn's February 20, 1962 Project Mercury mission. Detailed 3D models of significant structures and equipment were developed and presented to users on the Web through pre-rendered scenes in Adobe Flash. A first person perspective of 1962 Cape Canaveral allowed a user to tour the important sites while hearing accompanying audio describing the story behind the launch of Glenn and the contributions of thousands of aerospace workers to the success of the mission.

To place Cape Canaveral into the greater context of the era, the user in *Shadows Phase I* assumed the role of a fictitious correspondent covering Glenn's mission. By using this perspective, the development of the experience was not restricted to only exploring the Cape in isolation from the early 1960's as a whole. This connection was formed by having the user arrive at the Starlite Motel in nearby Cocoa Beach, and interacting with

FIGURE 1 - RENDER OF
LAUNCH COMPLEX 14 FROM
SHADOWS OF CANAVERAL



period appropriate props within the interface enabling the examination of national and international topics such as network television programs and the construction of the Berlin Wall.

Shadows of Canaveral Phase II, in 2006-2007, captured an earlier transitional moment of the Cape’s history – as it went from a maritime warning outpost to missile testing facility. Dating back to 1868, the historic Cape Canaveral Lighthouse and accompanying lighthouse keeper’s cottage complex stood in close proximity to the launch site of the Cape’s first launch complex and served as an observation tower. *Shadows Phase II* recreated the entire lighthouse, keeper’s cottage complex, and nearby Launch Complex 3, as workers prepared for the Cape’s first launch, Bumper 8, on July 24, 1950.

Unlike Glenn’s very public launch where tens of thousands of civilians in Cocoa Beach and neighboring communities were present to observe it, the first launch at Cape Canaveral was witnessed by only a few essential personnel. As a result, it was necessary to develop a realistic perspective for the user to observe these events. It was determined that a military photographer would have the required access and the ability to provide users a comprehensive experience. As with *Phase I*, scenes were pre-rendered and delivered through an Adobe Flash portal. Users began their journey at a photographer’s darkroom at Patrick Air Force Base and were subsequently transported to explore the launch and lighthouse complex at Cape Canaveral.

Originally, it was planned to recreate all of the launch complexes at the Cape, whereby each complex was represented by a significant launch during its initial 25 years of operation. From its inception, the project was seen as a mechanism to provide an understanding of 1950s/1960s Cape Canaveral operations for a generation whose only exposure to space had been the Space Shuttle. User feedback suggested that while this cohort was responsive in “visiting” historic Cape Canaveral, they were particularly interested in the how the supplemental materials in the environment related to the era. However, it was clear that if we were to build upon this concept, the environment would possess the ability to address a wider range of subjects.

While developing *Shadows of Canaveral*, we also recognized an element of personalized intergenerational conversation between several space worker retirees who served as project advisors when they explored the Cape area recreations with their grandchildren (Walters, Hughes, and Smith 2009). However, since such a small element of the population was involved in launches at the Cape, it was evident that we needed to select a theme that had potential to elicit intergenerational conversation among a wider population. Of even greater importance was the selection of an environment that could examine a wide range of science and technology topics and be of interest and relevance to youths.

CHRONOLEAP: THE GREAT WORLD'S FAIR ADVENTURE

The 1964/65 New York World's Fair (NYWF) served as the basis for our next significant virtual environment with the development of *ChronoLeap: The Great World's Fair Adventure* (2009-2014). The backdrop of a World's Fair provided an opportunity to realistically encompass a large scope of topics in a single location, as World's Fairs are events born from a society's desire to showcase their advancements, and often spotlight science and technology. Lasting no longer than two seasons, a Fair is a temporary exposition that provides a panoramic snapshot of an era depicting the hopes, aspirations, fears, and faults of a society (Walters, Hughes, and Hughes 2011). An example of this is the Great Exhibition of 1851 which served as a showcase for Victorian technology and cultural arrogance (Rydell, Findling and Pelle 2013). The 1939–1940 New York World's Fair rose from the valley of the ashes depicted in F. Scott Fitzgerald's *The Great Gatsby* and provided Fairgoers hope as to what the future might bring beyond the Great Depression (Kuznick 1994). The 1964/65 Fair promised a world of optimism and technological advances that marked the beginning of the world we now occupy (Samuel 2007).

Coming as it did in the midst of the "Space Race" this landmark event was notably infused with science and technology. This made it an ideal environment to convey a wide array of STEM (science, technology, engineering, and mathematics) content, much of which were nascent in the mid-1960s. Unlike many virtual recreations with real world settings, *ChronoLeap: The Great World's Fair Adventure* was not designed as an exact architectural reconstruction of the Fair; rather, it was seen as a learning destination because it was rooted in the core themes of science and technology. By exploring the extensive environment, users examine the boundaries of our current technologically-driven society and forge links which promote intellectual curiosity and engagement.

The enhanced digital world of *ChronoLeap* differs significantly from *Shadows of Canaveral* in regard to topics, target audience, and delivery method. Whereas Cape Canaveral was the focus of *Shadows*, *ChronoLeap* utilized the 1964/65 New

York World's Fair as a backdrop to convey STEM topics and was not the focus of the project. As an Informal Science Education grant funded by the National Science Foundation, the project was designed as an informal STEM learning tool for middle school aged youth. However, as with *Shadows*, the NYWF would prove to have significant potential to provide an intergenerational learning experience by fostering discussion between the target cohort and family members who were old enough to recall the mid-1960s. Finally, while *Shadows* was restricted to pre-rendered scenes delivered through Adobe Flash, *ChronoLeap* was envisioned as an interactive 3D virtual environment given the desire to elevate the user's ability to explore in a non-sequential fashion.

Researchers have frequently cited the strong potential for virtual environments to promote learning (e.g., Bailenson et al. 2008; Dede 2009). These environments can encourage exploration and discovery that are consistent with inquiry-based and constructivist pedagogies (Dalgarno and Lee 2010; de Freitas and Neumann 2009). Virtual environments can also immerse people within new perspectives and new identities that stimulate learning (Bers 2001; Dede 2009; Ross and Tomlinson 2010; Squire 2006) and lead users to think more like experts (Lindgren, 2012). Several virtual environments have been developed and shown to have significant benefits for learning; an example is *Quest Atlantis* (now called *Atlantis Remixed*), a learning platform that mixes classroom and online activities through a series of learning quests. Studies have shown that this environment has been an effective tool for motivating students to learn and for providing productive outlets for reflection on conceptual knowledge development (Barab et al. 2005, 2010). Another virtual environment, *River City*, put students in the role of scientists and guided them through the process of hypothesis testing and research design. Large-scale studies of *River City* have shown positive effects on collaborative problem solving and higher-order thinking skills (e.g. Ketelhut et al. 2010). A final example of a virtual learning environment, which was created specifically for informal science education, is *Wolf-Quest*, a downloadable application developed by the Minnesota Zoo that allows learners to become wolves and learn about their habits and ecology (Schaller et al. 2009).

Early in the development cycle of *ChronoLeap*, focus was on technical challenges of developing an expansive sandbox learning environment. Held at the current site of New York's Flushing Meadows-Corona Park (FMCP), the Fair was comprised of over 140 pavilions in an area exceeding 660 acres. We subscribed to the theory that depictions of the past for educational purposes should be as photorealistic as possible (Rousso and Drettakis 2003). Reference images were acquired at several public and corporate archives and by networking with the New York World's Fair collector community. Additionally, texture photography of existing Fair artifacts was captured in Flushing Meadows-Corona Park.

Research at the New York Parks Department provided elevation maps for FMCP that served as the basis for a topographical map depicting the virtual World's Fair terrain.

After substantial development, formative evaluation of a portion of sandbox environment populated with pavilions and props revealed a number of issues that led to an extensive redesign of how users interfaced with the environment. The evaluation revealed that the target cohort preferred a compartmentalized leveled world rather than the sandbox environment originally envisioned. Specifically, users experienced difficulty making learning connections across the expansive virtual environment. This change also enabled the introduction of a strong storyline to assist users in feeling a purpose. We found this during the second testing phase—answering the all-important question “why am I doing this task?” (Sorathia and Servidio 2012).



FIGURE 2 ■ RENDER OF
NEW YORK STATE PAVILION -
TENT OF TOMORROW FROM
CHRONOLEAP

Because of issues revealed in the formative evaluations pertaining to the sandbox environment, we developed a storyline that linked together the planned eight levels and permitted the potential for future expansion in a cost effective manner. The resulting game, *ChronoLeap*, is explored through a series of self-contained levels that we termed “Time Bubbles.” A virtual representation of the Queens Museum, a project partner situated in FMCP whose structure served as a pavilion during the actual Fair, acts as the central embarkation point for the experience. The main thread of the storyline is restoring a future *Queens Museum* when a time paradox transports artifacts into the past and in doing so, disrupts the evolution of technology. Each of the eight time bubbles focuses on a specific STEM quest. Upon accepting a mission for a particular level, users are transported to a specific region of the 1964/65 Fair where the pavilions provide clues to the location of the artifact. The intent of this action is to enhance players’ understanding of the technology and how each artifact they encounter influenced society and its evolution as a form of technology to the current day. The completion of each time bubble permits the user to return to the Queens Museum and embark on a new mission.

Users reported having enjoyed the developed storyline coupled with the mission-based level approach. As each mission was focused on an overriding STEM theme, it became easier for the user to make the connections between the subjects (Kitalong 2012).

Prior to 2014, all models created for our environments were developed with the software package Maya by artist modelers from photographs, blueprints, film and at times human memory as a reference. These materials permitted the creation of virtual buildings and objects of a sufficient level of detail for each project. In the case of *Shadows of Canaveral*, the scenes were rendered to play run in a static Flash environment and they could be highly detailed. *ChronoLeap* was a downloadable experience delivered through the open source object-oriented graphics rendering engine (OGRE) as the funding agency requested the use of open source resources for the project when possible. While OGRE's low-level interface provides an effective and flexible tool for building 3D game-like experiences, the effort to do so is much greater than with the Unity game engine. Moreover, the built-in visual effects found in Unity can result in a higher level of user engagement. After the 2013 launch of *ChronoLeap* we experimented with placing several of the models within the Unity engine to compare the level of realism. As anticipated, Unity greatly enhanced the visual quality and realism of the environment.

FIGURE 3 - RENDERS OF INTERIOR OF QUEENS MUSEUM FROM CHRONOLEAP/OGRE (LEFT) AND UNITY (RIGHT)



CHRONOPOINTS

With the acquisition of a FARO Focus3D S120 laser scanning unit in 2014, we embarked on a new research initiative, *ChronoPoints* - www.chronopoints.com. Laser scanning makes it possible to secure highly detailed as-built digital documentation of an existing structure. Scanned data can be used to assist in the restoration of a structure damaged by natural disaster, weather deterioration, or war as reflected in the destruction of world heritage treasures in Iraq and Syria (Farrell 2015). Laser scanners can also be used to assist in the development of 3D models that then can be used for cinematic-style visualizations or imported into popular game development tools to create interactive educational games and experiences. In the phase shift FARO Focus laser scanner, an infrared laser is emitted and reflected back to the system.

The distance between the object and the scanner is then calculated by analyzing the phase shifts in the wavelength of the return beam compared to the emitted light. The device records each laser reflection as a point within three-dimensional space, and the scanner also uses optical photography to gather color information of the point location and assigns that value to each one. After a series of scans, the data is then collectively registered, or joined, into a point cloud that provides a 3D representation of the structure/object scanned. What is remarkable about this technology is that a FARO S120 scanner can capture data with an accuracy of up to 2mm, allowing precise real and virtual recreations. When this 3D representation is created, it is still just a collection of individual points, not a model consisting of a mesh of polygons, which makes it useful for the development of motion pictures or virtual/augmented environments. Other software (e.g. Geomagic Wrap) is then used to transform the 3D point cloud data into a polygonal mesh model. Typically, the planned purpose of the model will determine the subsequent level of refinement work required by artist modelers. If the model is needed for a game or virtual environment, it will require the modeler to decimate the number of polygons to assure smooth rendering for the end user.

FIGURE 4 - RENDERS OF MERCURY MISSION CONTROL POINT CLOUD DATA

FIGURE 5 - RENDER OF MAYA MODEL OF MCC CONSOLE



Our first use for historic capture using the FARO scanner were the original consoles from Cape Canaveral's (Mercury) Mission Control Center (MCC). The consoles were transferred to the Kennedy Space Center Visitor Complex (KSCVC) for display after it had been determined asbestos contamination and structural issues had made the original structure at Cape Canaveral no longer safe for civilian tours. The laser scanner enabled capturing reference data with an unprecedented level of accuracy for the creation of Maya models. Previously, our visualization of MCC within *Shadows of Canaveral* was created with photographs of the units. By comparison, the laser scan data served as a template for the creation of the console model rather than being processed with Geomagic to automatically create a high polycount model. The laser scan enabled our model artists to have precise 3D measurements and to incorporate fine details into their console models.

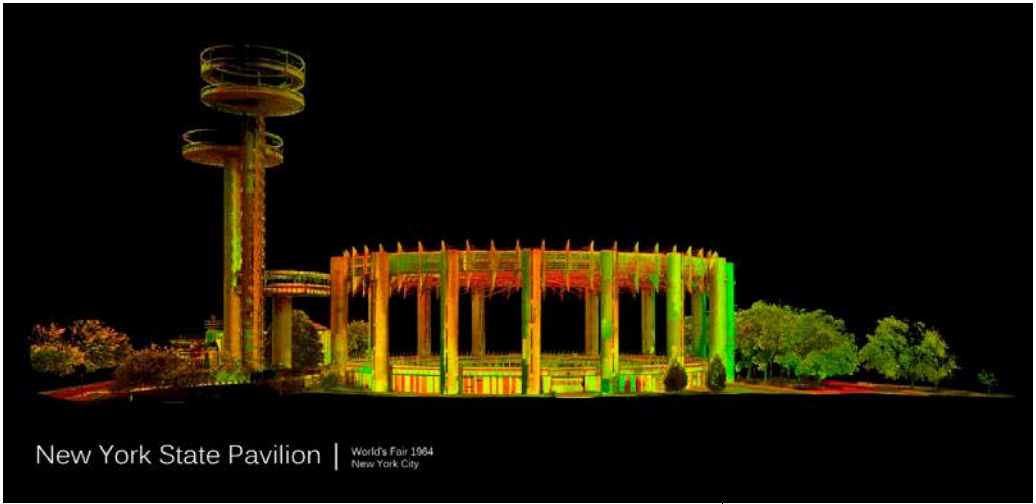
KSCVC provides public access to many Space-Age treasures, most notably one of three existing Saturn V launch vehicles and Space Shuttle Atlantis. At a height of 363 feet, the Saturn V booster is a towering testament to humanity's unceasing desire to explore the unknown. Partnering with FARO Technologies, *ChronoPoints* laser scanned the KSCVC Saturn V and four additional Project Apollo artifacts in preparation for a planned educational experience in celebration of the forthcoming 50th anniversaries of Apollo 8 and Apollo 11. The Saturn V, Apollo 14 command module, astronaut transfer van, Command/Service Module (CSM) 119 and a remaining portion of the Saturn Launch Umbilical Tower (LUT) were scanned to provide accurate 3D measurements for the educational experience and as a digital preservation record.

While an effective modeling aid, the laser scanner can only capture what still exists. In the case of the historic launch structures at Cape Canaveral and most of the 1964/65 New York World's Fair attractions, the vast majority of the structures were demolished decades ago. *ChronoPoints* was fortunate to receive permission from the New York City Department of Parks and Recreation to scan three relics from the NYWF. Working together with CyArk, a global leader in the digital preservation of heritage sites, the Unisphere, New York State Pavilion, and the Rocket Thrower were scanned.¹ Designed by noted American architect Philip Johnson, the New York State Pavilion (NYSP) is comprised of three independent components, the Tent of Tomorrow, Astro-View observation towers and Theaterama. In the fifty years since the closing of the Fair, this once majestic calling card to the future has deteriorated into an urban ruin. While the Fair's 50th Anniversary has provided a resurgence of interest in the New York State Pavilion, its ultimate fate was uncertain. A significant grassroots movement has brought attention to its condition and seeks to bring about the pavilion's preservation and potential repurposing.

In 2016 the National Trust initiated the New York State Pavilion Ideas Competition as an "anything goes approach to radically reimagine" the rusting Space-Age relic (National Trust 2016). The goal is to find a new use for the Pavilion as meaningful as Manhattan's repurposing of an abandoned elevated railroad spur, the High Line. Our laser scan of the NYSP can be a valuable resource to the repurposing effort as it provides a more accurate representation of the Pavilion's current state than as-built drawings. Of greater significance is that will serve as digital historical record of the structure's final state prior to future repurposing, and a testament to society's continual pattern of neglecting architectural treasures of the recent past.

The Space-Age is the cornerstone of the *ChronoPoints* laser scanning initiative and perhaps no community's relationship with the era resonates deeper than that of Cocoa Beach, Florida. The city was home to thousands of aerospace engineers and technicians, and many of the buildings within the community visually mimicked the activities at nearby Cape Canaveral.

¹ For additional information about CyArk visit www.cyark.org.



One of the finest representations, the Cocoa Beach Glass Bank, opened in April 1962 and quickly became a regional landmark. Designed by Sarasota School architect Reginald Knight, the building appeared as if an elegant glass cover had been delicately placed atop its four floors. A catwalk surrounded the top floor, providing patrons an ideal spot to watch rocket launches. By 2014 the building had fallen into a state of disrepair and was slated for demolition.

ChronoPoints was granted permission by the City of Cocoa Beach to perform a laser scan of the building prior to demolition. While the laser scan data provided a highly accurate three dimensional representation of the Glass Bank, it was one of the buildings following an early 1980s remodeling. The point cloud data enabled our artist modelers to replicate the complex exterior angles which were retained even after its remodeling. Unfortunately, the interior of the structure changed significantly and laser scans had no value. To complicate the project's goal, we had only a handful of interior images, and most focused on individuals within the frames, thus providing little assistance in the overall layout. The critical nature of community involvement will become evident in providing these details enabling the project team to recreate the 1962 Glass Bank (www.cocoa-beachglassbank.com).

FIGURE 6 - RENDER OF NEW YORK STATE PAVILION POINT CLOUD DATA - CYARK IMAGE.

FIGURE 7 - RENDER OF GLASS BANK POINT CLOUD DATA

FIGURE 8: RENDER OF GLASS BANK MAYA MODEL IN UNITY



COMMUNITY INVOLVEMENT

Our focus on Space-Age topics has afforded the research team the opportunity to gather greater first-hand information on the experiences than similar 3D historic projects addressing earlier eras, such as *Rome Reborn* and *Virtual Williamsburg 1776*.² Community involvement was significant and of great value in the development of *Shadows of Canaveral*, as former space industry workers aided the gathering the important photographs and confirmation of the veracity of models. Prior to the inception of *Shadows*, the lead author had undertaken an oral history project designed to capture the reflections of those who worked at Cape Canaveral in the 1950s and 1960s. During these oral histories, we found that many individuals had relatively extensive holdings of photographic materials in their possession, and so we began a project to digitize these materials. Their photographs and documents were instrumental in filling voids in documentation in traditional archival repositories.

Facility images and blueprints enabled the development of accurate models of all structure exteriors. However, we did encounter issues with several interiors of the structure. Blueprints permitted the creation of the shell of a room, but the imagery failed to reveal the full breadth of interior content.

The participation of retired space workers did not cease with supplying access to physical research materials, as in several instances their recollections provided the only link to lesser known areas of the launch complex. After consultation with a panel of retired space workers, we were able to achieve a consensus on the design of furniture and room content. This was achieved through their analysis of images from other launch complexes, catalogs, and similar resources. The contribution of the retired Cape workers enabled the project to go beyond a sterile architectural recreation and tour of the facilities associated with Glenn's flight to provide the fine details that added a level of humanity (Walters, Hughes, and Smith 2009).

During the development of *ChronoLeap*, we received numerous emails from individuals who followed the progress of our project on the Internet. From engineers to Academy Award winners, each conveyed how the original Fair inspired them to their current careers. Discussions with these individuals assisted in how we presented our STEM topics within *ChronoLeap*.

Publicity for the project in New York news outlets produced contact with many individuals who attended the Fair and were willing to send us their photographic slides, which were then digitized and returned to the donors. Additionally, the official filmmaker of the 64/65 New York World's Fair invited our team to digitize his Fair slides, scan various publicity materials, and access his private films. We secured pavilion images from a number of traditional archival repositories that were helpful with documenting the more popular attractions like General Motors, Ford, or the U.S. Space Park.

² For additional information on Rome Reborn visit romereborn.frischerconsulting.com/ and Williamsburg 1776 visit research.history.org/vw1776/

However, many other pavilions such as the Underground Home, Chunky Square, or even the Churchill Center, were not well represented within the visited archives. One issue that hampered research efforts was that many of the companies represented at the Fair no longer existed and their archival records had been liquidated. During the research process, we purchased personal slide and photograph collections on the eBay online auction site, but were surprised to continually see many of the same views. This was likely attributable to the cost of photography in the 1960s, visitors sharing views, restriction of locations where they were permitted to shoot, and the fact that many exhibitors prohibited flash photography. Restriction of locations where they were permitted to shoot, and the fact that many exhibitors prohibited flash photography. However, one of the most significant sources of period imagery emanated from the 1964/65 New York World's Fair enthusiast community. The community is sizable and comprised of individuals who attended the Fair as children, a smaller number of those who worked at the various Pavilions, and others who had no direct connection to the Fair but were interested in the topic. Many have vast image and ephemera collections and were generous with supplying us with digital materials when asked. Given the number of personal slide and photo collections within the group, they often could assist with the needed materials from more obscure Fair attractions. Additionally, the project was fortunate to have had members of this community serving on our advisory board who shared their exceptional knowledge of the Fair.

The Cocoa Beach Glass Bank is highly representative of the majority of "local" structures worthy of preservation - be it physical or digital. Many buildings in this category were not designed by an architect whose name is instantly recognizable by the general public like Frank Lloyd Wright or Eero Saarinen. Neither were they part of noted historic events like the launches at Cape Canaveral or a World's Fair that generated an abundance of photographs and documents. However, they were unique landmarks in their particular locales, and given the paucity of reference materials, the virtual restoration the Glass Bank to its original 1962 configuration was challenging and the local community became an important partner in the project.

The goal of our project was not just an architectural reconstruction of a town landmark, but to share it as a vessel of Space-Age Cocoa Beach with users through an interactive experience. Therefore, it was critical to not only secure interior images, but to speak with those involved in the building's construction, with employees within it, and with members of the general Cocoa Beach community. The Glass Bank was not only home to the First Federal Savings & Loan, but Ramon's Rainbow Room also occupied the fourth floor, and it was not uncommon to see many of that era's Las Vegas headliners performing there.

The project was fortunate that the City of Cocoa and Cocoa Beach libraries held copies of a now defunct local newspaper and a series of smaller weekly publications that provided details to Rainbow Room events.

Those publications were helpful, but speaking to residents of Cocoa Beach and surrounding communities enabled the acquisition of the most detailed information. Additionally, during the demolition, Walters gave three public lectures on the history of the Glass Bank at the City of Cocoa Beach Public Library. At these events several individuals brought materials to share and were later willing to participate in formal oral history interviews. The demolition of such a key structure within the community made these lectures in many ways a community event. People came to observe and reminisce with others in attendance about the Glass Bank in its heyday. Some individuals had small micro-stories to tell and others had been intimately involved with an aspect of the building and were willing to speak with Walters.

Beyond the collection of oral histories, one of the greatest advantages researchers have when developing virtual environments from the recent past is that key individuals can give guidance to the project. Alternatively, the virtual Glass Bank was also a retrospective design tool. Walters put this tool to good effect by using the incomplete but recognizable model of the bank to tease lost details like colors, textures, layouts and furniture styles from the former bank manager Vivian Lindauer. Because Ms. Lindauer was able to “walk” through the building, the authors believe it was more evocative of memories than simply looking at a handful of black and white photos (which did not show the items in question) and being asked detailed questions. By exploring the virtual structure, she offered answers without being prompted. One might consider this a sort of reverse intergenerational experience; whereby younger cohorts create the past as a retrospective tool for those who came before them.

INTERGENERATIONAL EXPERIENCE

In both *Shadows of Canaveral* and *ChronoLeap* intergenerational engagement was a natural outgrowth of each project rather than an original research point. Still, when *Shadows* was developed, multiple levels of intergenerational exploration began and started to make itself apparent to the authors. First at the design stage, the space industry retirees were able to provide first-hand recollections of many undocumented details of the launches and launch complexes of Cape Canaveral. These individuals lived these important events and were personally invested in sharing them with a broader audience. In a second intergenerational level of participation, retirees served as guides and knowledge purveyors within *Shadows* and *ChronoLeap* as characters. Though these characters were static and non-interactive, the added authenticity of someone who did or could have participated in the events is something which would likely be accepted by users - especially youths. The third level of intergenerational engagement, where the actual space retirees and Fair attendees ventured through the experiences with youth partners, is probably the most beneficial.

An adult scaffolding a child when encountering new materials is known to assist learners to incorporate new knowledge (Vygotsky 1978).

Because of these multiple levels of intergenerational engagement and learning, perspectives on information, objects and events tend to be multiplied. Running through *Shadows*, *ChronoLeap* and the Glass Bank experiences are the perspectives of those individuals who participated in the actual events. Seniors share their observations of the era with children and other younger users of the way things were according to their memories.

There is the perspective of the researcher, who is guided by documents, contemporaneous news reports, photos/video, and how each site currently exists. Lastly, there is the perspective of a child or young person who has no direct connection to the objects or events seen in the virtual environments. For them, an intergenerational guide (i.e. an adult) can provide the recollections, interpretations, remembrances and support to a young person encountering a world which no longer exists.

Walters observed sharing of the event participant perspective when space industry retirees at the U.S. Space Walk of Fame Museum explored *Shadows* with young visitors at their facility. This was again observed during the testing of *ChronoLeap* as grandparents and other familiar adults would elaborate upon 1960s topics encountered within the virtual NYWF environment. What is interesting from a research perspective is that much of the joint intergenerational exploration of environments like *Shadows* and *ChronoLeap* are well supported in widely accepted educational theory. Vygotsky (1978) contends that a child's cognitive development is promoted as they interact with more knowledgeable and older people, and information is conveyed to them.

This transfer of information serves to move the child's understanding of the world to one which is more grounded in the common view of the society. Extending this theme, the type of encounters using virtual environments described are a modern version of the "situated learning" experiences from Lave and Wenger (1991). Young people learning new material in a communal fashion from experienced practitioners is viewed by them as normal and beneficial to the novice.

So, in parallel to much of this thought regarding how more experienced people support a child's learning, as well as evolving thought on how knowledge is transferred, emerged the advent of educational television. Using media to teach was a new concept when television programs like *Sesame Street* began airing, and researchers in the early 1970s were curious whether adults (typically parents) could enhance children's ability to learn the lessons conveyed (Reiser, Tessmer, and Phelps 1984; Salomon 1977). This activity was termed "covieing" and researchers examined both active (where parents questioned and prompted their children about content viewed) and passive (where parents were present as their children viewed) forms (Barr and Brito 2012; Dorr, Kovacic, and Doubleday 1989).

In the early 2000s, with the proliferation of new forms of media, researchers began exploring what they termed Joint Media Engagement (JME) (Moorthy, Penuel, and VandenBorgh, n.d.). This fully encompassed the concept of active social use of games, virtual environments and other forms of media (Takeuchi et al. 2011). This is the embarkation point for both “*Shadows'* and *ChronoLeap's*” use as more effective educational tools by encouraging their use in a more social fashion. What this draws into question for ongoing projects like the Glass Bank is 1) how we can ingrain JME from inception, and 2) what does good JME in a virtual learning environment look like?

CONCLUSION

The archiving of digital experiences and learning games are as challenging as their commercial video game counterparts (Newman 2012). Because of this, we believe the focus on archiving should be on two aspects of a project: 1) the resources used to create the experience: photographs, video, audio, oral histories, articles and notes and 2) the assets developed for the project: 3D models, videos, laser scans, audio and reports. This incentivizes the development of a large archive of materials that can be used by the resource creators and can be potentially shared with other educational institutions upon request.

As in the case of *Shadows of Canaveral*, its runtime environment, Adobe Flash, is being sunsetted and support for the tool will no longer be available from Adobe in the not so distant future. Our plans are to develop Web pages for each project with their details and videos so that its essence can remain on the Web. Finally, the experiences themselves will be stored so future generations who wish to view them via emulation technology could do so.

This retrospective of digital recreation and preservation efforts underway at the Institute for Simulation and Training at the University of Central Florida allows one to see depth of the issues and peer into the new directions taken. Although the subjects are varied, they share the common thread of the Space-Age. While the majority of the structures addressed in each project were constructed less than sixty years ago, many have faced demolition, lay in a state of ruin or have been substantially altered from their original configurations. Because of this the structures have required a degree of digital reconstruction equal to that of significantly older historic sites.

The ability to speak with those who have direct memory of the depicted structures and topics has provided the projects decided advantages. During production these individuals contribute lost details and fill the empty vessel of an architectural recreation with a sense of humanity. Additionally, even those individuals without connection to a project's production, can often serve as intergenerational guides and continue to contribute to the understanding of the Space-Age as a pivotal moment in human history.

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THE WAY IT USED TO BE: EXPLORING CULTURAL HERITAGE THROUGH THE AUGMENTED REALITY STORY OF A NEIGHBORHOOD SOUL FOOD RESTAURANT

ABSTRACT

This article documents the planning, creation, and user testing of a situated mobile story using the ARIS platform. The game, "Getting a Job at Nikki's Place," focuses on a neighborhood restaurant in Orlando, Florida and the life of its current owner, Nick Aiken. Our team used the historical and community aspects of soul food to connect Aiken's story to the broader story of urban revitalization in the Parramore neighborhood. This article illustrates the knowledge our team gained from the experience of mobile storytelling and articulates it into a call for educators to create digital stories with their own students.¹

KEYWORDS

Digital storytelling; interactive narrative; mobile storytelling; augmented reality; cultural heritage

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The authors are colleagues from the interdisciplinary Texts and Technology Ph.D. and Digital Media M.A. programs at the University of Central Florida in Orlando. They bring

¹ Aiming to help students find and tell their own community stories, the team wrote *Mobile Storytelling: A Guidebook For Teaching Students How To Tell Community-Based Mobile Stories In The Classroom*. The guidebook is available online at http://create.cah.ucf.edu/files/Mobile_Cookbook.pdf

varied backgrounds in digital storytelling, film, media studies, rhetoric, theatre, and user experience to the project, and were supervised throughout all phases by Dr. Natalie Underberg-Goode, associate professor in the School of Visual Arts and Design. For more information on the individual authors, visit: tandt.cah.ucf.edu/students.php

INTRODUCTION

In the Parramore neighborhood, near downtown Orlando, Florida one can taste, “Southern cuisine the way it used to be,” at Nikki’s Place. The catch phrase only hints at the historical importance of the plain, mirrored storefront in Parramore. Though it has gone through a few different incarnations, Nikki’s Place has been a popular destination since the area thrived in the 1950s. The original owner, Roser Mae Jones, or “Mama Rose,” as she was known locally, groomed a young Nick Aiken to take over her restaurant named Roser’s Restaurant. Aiken, owner of Nikki’s Place, has thus witnessed the ways Parramore has changed over the last sixty-some years. Today, few locals know this formerly thriving community hosted civil rights activists and members of the famous musical Chitlin’ Circuit; rather, much of that history now lives only in the memories of long-time residents like Aiken, as Parramore became an underserved area that one can, quite literally, drive over on the way to the Amway Center. One of Orlando’s main toll roads, the State Road 408, or the East-West Expressway, bisects the series of boarded-up, disintegrating buildings that once held businesses and now, for the most part, stand empty. Aiken knows well the tragic decline of his home. Our team aimed to illuminate Aiken’s sense of loss in his community by showing, through a historically accurate mobile narrative, the vibrant businesses and personalities that once inhabited the area. We tempered the melancholic reality by recognizing the hope that still lives in Parramore; after all, community gathering places like Nikki’s Place still exist.

At the restaurant, one can still enjoy the company of a man who believes in a community where scant evidence of its once-thriving past remains visible, and one can still enjoy a savory sweet potato pie served from a sixty-year-old recipe. With the town’s history in mind, our team set out to create a situated mobile documentary using the ARIS platform (www.arisgames.org). “Getting a Job at Nikki’s Place” focuses on the story of Nikki’s Place and the life of its current owner, Nick Aiken. Our team used the historical and community aspects of soul food to connect to the broader story of urban revitalization in the Parramore neighborhood. The project consisted of two phases. For the first phase, the team conducted initial historical research. Using that research, the team then created a prototype of an interactive mobile story using the ARIS platform, as well as a digital story about Aiken, which would serve as the denouement to the mobile narrative.² We designed the story to educate elementary school students in the fourth and fifth grades about the history of the Parramore neighborhood. In the second phase, the team revised the story and fixed bugs, optimizing the mobile game in a newer version of ARIS. Then, the team asked fourth and fifth grade students from Nap Ford Community school to test the game and provide feedback on the story and gameplay. This paper seeks to demystify the process of mobile story creation by pinpointing the challenges, design decisions, and ultimate aims of all facets of the “Getting a Job at Nikki’s Place” project.

² To view the digital story, “Welcome to Nikki’s Place,” please visit: create.cah.ucf.edu/projects_mobilestory.php.

DESIGNING “GETTING A JOB AT NIKKI’S PLACE”

For the creation of the story, we followed Carolyn Miller’s (2014) steps for narrative development in digital storytelling. She stresses the importance of the development period to forming a coherent and meaningful product. We began the development of the situated documentary, “Getting a Job at Nikki’s Place” as Miller does by asking the fundamental question: “What is the premise and purpose?” (Miller 2014: 189).

There were limitless directions the interactive project could take, including, but not limited to: a general history, urban planning, economic disparities, architectural changes, food ways, politics, and civil rights. However, after interviewing our subject, Aiken, and researching the history of his environment, the Holden-Parramore and Callahan neighborhoods of Orlando, Florida, our team shaped the story as a heritage-based project. We honed in on the aspects more closely associated with personal, everyday life as a business owner in the neighborhood, as opposed to larger, more socio-political narratives. Early on, the question of which story to tell confronted us. Even within the restaurant, there were many potential stories since the gathering place embodies the cultural story of a community. Through interviews with Aiken and his wife, Elaine, we determined the most common themes to be the physical changes in the neighborhood and the importance of education in the lives of its citizens. Indeed, Aiken stressed education and mentoring were essential to his survival. The changes that occurred in the Parramore neighborhood—gentrification, highways dividing the town, slow decay of buildings and concurrent decline of a once bustling culture—were of great concern to him. The project’s premise, therefore, supports education and mentoring of community youth, so the positive aspects of a community’s past can be realized in its future. We achieved this by informing the user about the life and success of Aiken, who came before them and experienced their neighborhood in a strikingly different way from how the player sees it today.

Another crucial consideration on Miller’s checklist is the “Audience and Market.” Historical documentation of the Parramore District is still in its infancy. Further, there has been substantial physical change in the area through the demolition of the majority of the businesses and homes that once helped define it. Hence, there is potential for this situated documentary to appeal to multiple demographics, including anyone unfamiliar with the history of the area. However, building off of our premise’s themes, we developed the project as an educational tool. We determined our target audience as fourth and fifth grade grammar school students from the neighborhoods represented in the project. As such, we had to address certain considerations. We determined, as authors who were not from the area, to keep our presence out of the final product as much as possible. Since the interpretation of the material presented depends largely on the user’s demographic (the framework with which they process visual and literary language, as well

as their current understanding of the physical environment), a reasonably familiar, demographically correct community omniscience should be perceived as the creator of the project. Aiken's words of wisdom aim to influence younger generations of the neighborhood's population, so it made sense for youth to be the target audience with regard to design and story formation. In his view, for positive change to happen in the community, children must become active citizens of their society. When developing the narrative and gaming elements, we considered another section of Miller's checklist concurrently with audience, the user's role and point of view, which go hand-in-hand with story development.

Further, we determined the user should experience what life was like in the neighborhood before the razing of the majority of its structures. It was an attempt to simulate life in Parramore as experienced by Nick Aiken. By using Aiken's story as a framework, we allowed the passage of time to indicate how Parramore changed from a progressive and vibrant community, to today's Parramore, a region dotted with physical desolation and a fragmented cultural identity. One of the more impactful narrative decisions we made was to utilize State Road 408 as a time travel tool. Passing underneath the highway became a symbolic passage, bringing the reader from the past into the present and from searching for ingredients to actually making the sweet potato pie. Thus, the transition brings the traditions from the past into the present. Through this transition, we found a powerful, yet subtle, way to attest to the complicated nature of the cultural history of Parramore. The story took shape and became accessible with this change in temporality. By using augmented reality, and incorporating video, audio, archive images, and text into the story, we could show the community's metamorphosis. The rich and immersive nature of multimedia shows how the construction of State Road 408 affected the community in a more impactful way than if our audience read the story or heard it orally. Furthermore, through the use of game-like elements, we hoped to encourage fun and deeper engagement into community history.

One of our primary concerns, however, was to avoid misrepresentation, as we are outsiders to the community. We wanted to make sure we acknowledged the rich, complicated history of Parramore without glossing over controversial moments in history with euphemisms or privilege. Wrapped up in this project are histories—both personal and public—interactions, physical space, and imagined space. We compiled the viewpoints, interpretations, and representations of a community into our narrative. As such, we strove to gather a plethora of perspectives in our research and maintain historical integrity during the story development. We understood, of course, that we needed elements of fantasy and creativity to further engage the target audience. We needed to allow names, events, and locations to be authentic, but in a hypothetical chronology. By inserting a time-traveling motif, we were able to take the user to the past, where these disparate stories exist.

This meant we could take a bit more license with the people players encounter, and when and where they meet. Historical photos that correspond with plot points from Aiken's personal interview match historically significant buildings, which helped us devise the physical journey travelled by our players. Tailoring our story to combine different eras and events allows the story to represent Parramore's past and present with a more engaging and coherent feel. For example, the player visits the former location of the South Street Casino, an important musical venue during the Segregation Era. The casino burned down in the 1980s, but Mama Rose sends the player on an errand to the casino in the 1950s. The errand gave us the opportunity to show a photo of the casino in the past while the player stands before its former location in the present. More importantly, it provided a narrative reason to explain the importance of the juke joint as a gathering space, and allowed the implicit introduction of the wider social narrative of segregated entertainment. Ultimately, the time-travel narrative aspects allow a framework for the gaming elements to make sense, for the goals to be accomplished, and for the inclusion of educational and historical themes throughout the story.

The arrangement of the story elements is another of Miller's considerations. Though the player travels through time, the game's tasks occur sequentially, and completing tasks allows the linear three-act storyline to unfold. We created a physical path for the project that is relatively circular, based on a navigable map of the area, and followed a basic three-act structure for the story. The first act occurs in the present; Aiken speaks to the player and sets the goals and background for the project. The second act begins when Aiken takes the user into the past. He introduces the player to his mentor, Mama Rose, and sends the player on errands for a catering event held at the restaurant. The errands allow the player to follow in Aiken's footsteps as a young man working at Roser's Restaurant. Together, Aiken and the player travel to different historical and current locations, and the augmented reality shows Parramore as it is and as it once was. Having completed all of the errands, Aiken returns the player to the present day to begin the third act. In this final section of the story, the player returns to the present to perform the final task, baking a virtual sweet potato pie with Aiken using the ingredients gathered on their errands. Thus, acts one and three are in the present and provide the impetus for and rewards of the journey. The journey is set in a generalized past and is narrated by Aiken. The time traveling device is appropriate for conveying history and adds an element of whimsy, hopefully increasing user engagement. By creating this idealized past, we laid the foundations for folklore. For their efforts, players achieve the game's highest honor, a job at Nikki's Place. The conclusion linked the two worlds, past and the present. As a first generation telling of Aiken's story, this situated documentary serves as personal ethnographic study. Yet, once reset, re-visioned, and retold, it takes on fable-like

dimensions expressing cultural details unique to the area and the generalized time period of “the past.” The photographs provide architectural details and generational differences like attire and activities. Dialogue provides vernacular traits and audio clips give insight to the day-to-day activities of the community. In short, the past looks strikingly different from the present and heightens the sense of being in a fantasy world or place of lore.

Miller also stresses the role of characters as an important consideration. Indeed, in the development of our project, we scrutinized various aspects of our characters. We determined that our player and Aiken would share duties as main characters. Aiken represents the older generations of the community, thus supporting the mentor/protégé relationship. The secondary characters of the story represent the cultural significance of Parramore and its citizens. There are artists, religious figures, entrepreneurs, and chefs. We felt these were the parts of Aiken’s story we needed to represent, and we allowed the characters to embody aspects of community life, giving the user a closer relationship to Parramore’s history and culture. We used Aiken’s history with Parramore to guide the interactions of the player and these characters, making their interactions support the idea of the community working together for positive change. The secondary characters mirror the voice of Aiken through their decisive and ordered behaviors. These sorts of decisions were made based on research, which served as a character bible. Instead of creating and implying a completely fictionalized collection of character traits, we used our knowledge of real community members to determine their behaviors as they would be interpreted by Aiken. By maintaining Aiken’s single voice, even as a tool to inform the purpose and demeanor of other characters, we allow the user to focus on meeting individuals who make up a community and culture. Education, work ethic, religion, food, and music are all ingredients in Parramore’s cultural recipe. Making the sweet potato pie with Aiken at the end of the game becomes a symbolic action, one that incorporates a community’s rich history and traditions into its composition.

CREATING A MOBILE STORY PROTOTYPE

Having crafted a narrative structure, characters, and dialogue, our team explored possible augmented reality programs for creating our mobile locative story. We considered the affordances and constraints of various platforms, eventually using an authoring tool called ARIS. ARIS has one downfall: one cannot use it on any device other than an iOS mobile device, such as an iPhone or iPad. Before beginning the project, our project team raised concerns about whether the dependency on iOS would limit the audiences who would have access to our game. However, we decided to move forward with our prototype using ARIS, as we determined school groups or visitors to a nearby museum could play it guided by an instructor or docent with more access to or with shared technology. Students and groups could share devices, mitigating the cost of the technology.

ARIS was a particularly good choice for our group, since we did not have a software developer or programmer on our team. Because ARIS is middleware, it allowed us to develop our prototype using a content management system, rather than coding from the ground up. The interface, GPS, and QR code technologies were already integrated into the platform, so we could focus on the story itself with relative ease. ARIS was also, as an augmented reality tool, a platform through which the user “could perceive both real and virtual information” (Falk Anderson et al. 2010: 15), giving us the ability to show the reality of Parramore today juxtaposed with the halcyon days of Parramore past. For our team, which was working on an abbreviated schedule, these aspects of the platform outweighed the constraints.

The constraints of ARIS platform were not detrimental to the gameplay experience, and were outweighed by the benefits and ease of designing with middleware. We nevertheless felt we should consider them, given that they would determine how our game could or could not be used in the future (Ritchie 2014: 53). In our case, the constraints seemed to be mostly media-related. For example, we were concerned about the ability to upload videos of a certain size to be played in the ARIS game, so we initially needed to place an outside link to the digital story within the game. We also had to alter some of our planned media into audio voiceovers with accompanying photographs, rather than video montages. We were able to communicate with the developers at the University of Wisconsin-Madison about our issues. Consequently, with the release of version 2.0, we found this process more efficient, and were able to modify some of our media to decrease loading time and improve the playability of our narrative.

However, we encountered some constraints using ARIS that we have not yet solved. First, following our initial discussions about reaching a wide audience, we hope ARIS will eventually develop a version of the platform for Android or other mobile operating systems, since other mobile devices now own a high portion of market share. Secondly, conversations with characters can, right now, only be conducted in text. Though we tried to write dialogue with distinctive voices, as discussed above, the content would feel richer if we could create a voiceover for characters so they could feel more personal and be more engaging when they hold a conversation with the user. These features would additionally allow more inclusive access for players with visual or learning disabilities. These improvements would also assist future teams designing similar projects.

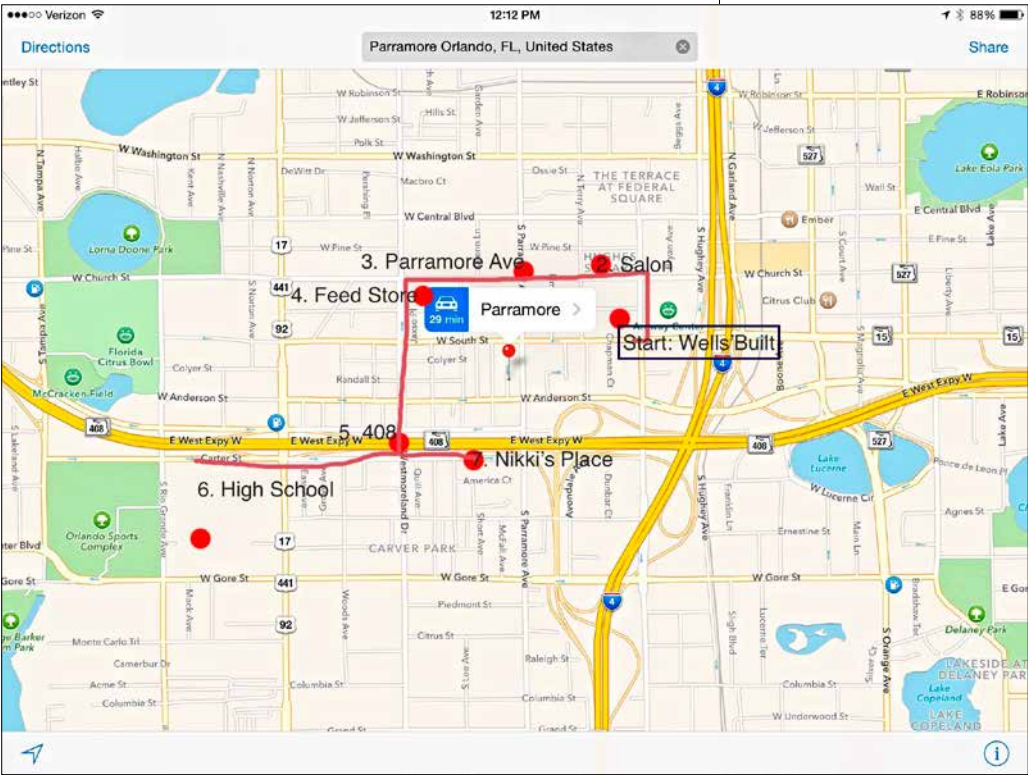
With our technological platform chosen and evaluated, our team began to think about mapping the project. Our first major decision was to take the user onto the streets of the neighborhood and describe, through the game, places that used to inhabit many of the now-empty buildings.

Jeff Ritchie, in his chapter, “The Affordances and Constraints of Mobile Locative Narratives,” states readers or users

of transmedia stories—tales told across a number of different media—“must perceive the rewards of the narrative to exceed the effort” (Ritchie 2014: 54). The audience necessitates the story, meaning it will not happen if the user does not bring it into being (Ritchie 2014: 56). Therefore, if we expected users to walk around the neighborhood and end at Nikki’s Place, we needed to make the map manageable enough that the user would be “willing to expend effort to travel and find narrative bridges” (Ritchie 2014: 57). We developed our initial map, shown in Figure 1 below, after a research trip to the neighborhood. This map took users out of the vicinity of Nikki’s Place in an effort to get to one of the story locations, Jones High School, and then forced them to double-back on their previous path to go back to the restaurant.

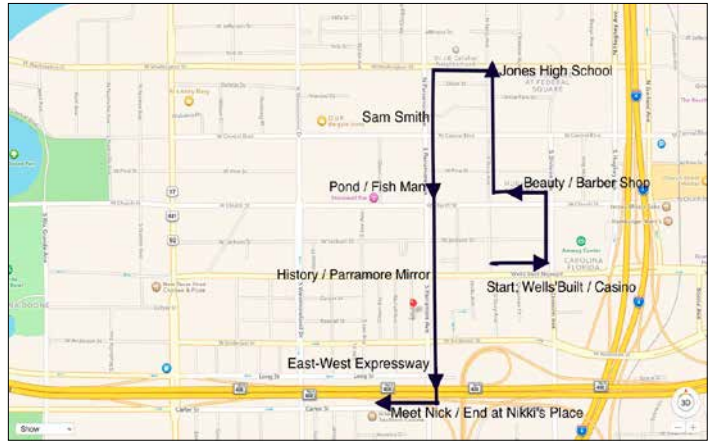
We felt this was not conducive to a good story experience, and redid the map prototype to create our final walking path, shown in Figure 2 below.

FIGURE 1. INITIAL DRAFT MAP OF “GETTING A JOB AT NIKKI’S PLACE” NARRATIVE NODES AND WALKING PATH.



This turned the game’s play area into something akin to an upside-down “U” where users start at the Wells’Built Museum, walk north to the original location of Jones High School, turn one block west, then turn back down Parramore Avenue, finally traversing under State Road 408 at one of its two underpasses to arrive at Nikki’s place, where the user experiences a digital story in the style of StoryCenter, about Aiken, the neighborhood, and the importance of soul food. When formulating the map, we also considered the importance of the setting within the narrative.

FIGURE 2 - FINAL MAP OF LOCATIVE STORY NODES FOR "GETTING A JOB AT NIKKI'S PLACE."



In *Playing with the Past* (2011), Erik Champion suggests the creators of culturally and socially based interactive media must “layer the place with the beliefs, intentions, and interactions of past inhabitants” (Champion 2011: 69). He then outlines three questions one must answer if one plans to create a sense of cultural presence within the media: “How is cultural coding possible?”; “How is it [entertainment] value adding?”; and “How is it educationally significant when delivered through digital media?” (Champion 2011: 70). In regards to the first question, we were able to display a semblance of past Parramore culture through the eyes of our main subject, Aiken, and through research, finding photographs and stories of former landmarks and people. The use of the walking tour was value-adding in that it displays an aspect of culture that the viewer would otherwise miss, and it is educationally significant through digital media because, as mentioned above, the media adds a layer of virtual reality to what would otherwise be a walking tour with little link to the past, since most of the past has been demolished and is only accessible through the mediated tour.

This use of food history and the importance of soul food cuisine further codes the culture by encouraging the user to taste its richness, playing to the entire range of human experiences and appealing to all the senses, rather than just the sight and sound as seen on the mobile device. Ken Jordan and Randall Packer suggest, in *Multimedia: From Wagner to Virtual Reality* (2001), that this hybrid form of expression heightens the artistic experience for the audience. As mentioned below in the “Results” section, some students who participated in user testing expressed interest in baking the sweet potato pie, rather than simply simulating the process. This additional sensory involvement would, following Sarah Pink’s assertions, create a more “coherent multisensory world, where sounds, smells, tastes, lights, and touches amalgamate” (Pink 2009: 28). However, because “Getting a Job at Nikki’s Place” is intended as a locative narrative, and the discussion of the importance of soul food occurs while exploring the Parramore neighborhood, we first ask the player to imagine and play through the baking process as they are experiencing the history of the neighborhood through the history of the restaurant.

We suggest via language and visuals that players can smell the pie as they take their virtual product out of the oven. Susanne Kuehling argues verbal or written descriptions of senses can impart only a partial meaning. However, supplementary images can help fill in sensory context and “help those who have experienced a scent recall it, and those who have not experienced a scent to imagine it” (Kuehling 2009: 14). When the game is over and players find themselves at Nikki’s Place, they have the option of turning imagination or memory into reality by ordering the sweet potato pie that Aiken prepares according to Mama Rose instructions. Pink argues, “I take imagining to be a more emplaced everyday practice carried out in relation to the multisensoriality of our actual social and material relations” (Pink 2009: 39). In the case of our narrative, the point is not necessarily to successfully cook the sweet potato pie—though we encourage the player to try it with their friends or family—but to learn about cooking and how the tradition of soul food can bring communities and people together. As Aiken narrates, food represents an opportunity to connect the current Parramore community to its history, as the restaurant has long been a gathering place for community members.

Therefore, though the narrative does not ensure the player will attempt to cook the sweet potato pie, the continued virtual presence of cultural food tells a more positive and upbeat story for our young audience than the urbanization of the neighborhood, and allows us to bridge the past and present. We wanted to include the digital story about Mr. Aiken and the restaurant itself so that the game would end with a note of promise and future-orientation, and the sweet potato pie lends a strong sensory representation of Aiken and Nikki’s Place. Alberto S. Galindo, in his essay, “Mobile Media After 9/11,” discusses mobile media as a form of memorialization, a way of preserving the history or memory of a site through a narrative ceremony (Galindo 2014). While our story does not focus on an event as tragic or involving such an extreme loss of life and shift in the culture of the entire country, it does help discuss the issues surrounding the shaping of the contemporary history of a particular site that has undergone drastic changes (Galindo 2014). Also, because the device allows someone touched by the changes in the neighborhood, Aiken, to tell the story, it fosters a sense of immediacy and intimacy the audience could not otherwise achieve by touring the neighborhood with an inanimate map of historical sites (Galindo 2014). This sense of intimacy highlights what Jean Burgess, in “Hearing Ordinary Voices: Cultural Studies, Vernacular Creativity, and Digital Storytelling” (2006), calls “ordinary participation through everyday cultural practices” (Burgess 2006: 205). With our project, we did not aim to come from a place of resistance or aesthetic innovation; rather, we hoped to communicate the experience of a changing Parramore neighborhood through “vernacular creativity,” making our digital story publically accessible and focusing, first and foremost, on the man that we saw as a strong voice within the community, Mr. Aiken.

Burgess recommends that, to create a digital story that has both emotional impact and cultural relevance, one should keep it brief and let “formal constraints force elegance” (Burgess 2006: 207). This suggestion helped us pare down the story for the game, and creates a great argument for the usefulness of the brief digital story as both a capstone and stand-alone piece of media. The digital story is effective and could be useful to Nikki’s Place and Mr. Aiken even simply as a marketing piece to share on the restaurant’s Website. We discussed creating a QR code associated with the video only; Aiken could print this on flyers or post it in the restaurant to share some of his own personal history.

After completing the prototype and playing through the game in ARIS, we identified several issues within the program that needed resolution prior to testing. For example, media loaded very slowly. We built the initial prototype using a single ARIS scene, which probably contributed to this issue, and was also causing the game to get stuck or loop back to a conversation that the user had already seen. We had to resolve this prior to testing, so our technical lead rebuilt the game from scratch using the scene functionality provided in ARIS. This ended up repairing the game logic and making the game much more playable, especially as the ARIS team released a major software update during this process, taking version two of the tool out of beta testing and releasing the updated version for general use. Having created a working prototype, we were ready to test it with the intended audience.

ENGAGING SCHOOL CHILDREN AS PROJECT USERS

Testing

We conducted User Experience (UX) testing to determine if the interactive mobile format effectively communicated the story to its audience. While UX has been defined to include “all elements that together make up that interface,” for the sake of this project UX had to be defined even more specifically (User Experience Professionals Association 2012). In order to best understand UX in this case, elements of the story needed to be considered. We expanded the definition of UX to include elements of both the mobile story and mobile device. We defined mobile story as any element of the plot or narrative, designed to support the project’s objective and included the following: characters, pacing, length, narrative, plot, story items (i.e., sweet potatoes, catfish, money to pay the band, etc.), and story content (i.e., the historical references as they relate to the project and its objective/s). We defined mobile device more traditionally as the iPad used during testing. Some additional hardware and software elements, which would normally be included in UX testing, were restricted by the ARIS platform. This included, but was not limited to, elements such as layout, visual design, button size and color. Therefore, these elements were excluded from analysis.

In order to determine the game’s effectiveness, we developed a specific methodology. First, we defined a sample population that included fourth and fifth grade students from NAP Ford Community School, located in the Parramore area. The University of Central Florida (UCF) IRB approved testing, and consent was received from students’ parents or guardians prior to testing.

We conducted testing in the UCF CREATE Lab, located in the UCF Center for Emerging Media in downtown Orlando, Florida on Wednesday, April 8, 2015. While the prototype was originally designed to be viewed within the Parramore area, with story segments activated by GPS technology, testing on-location wasn’t feasible at the time. Instead, we used QR codes as a substitute for the location-based technology. While this wasn’t optimal, the repercussions of this decision were carefully considered as we developed the methodology. One such consideration was the placement of QR codes throughout the UCF CREATE Lab in order to simulate the user’s movement throughout the space as if actually on the walking-tour of Parramore. A diagram of QR code placement is shown in Figure 3 below.

Furthermore, we displayed each QR code with an associated story image and name in order to replicate a sense of place as the students activated new story segments. We also carefully considered the story scripts to promote flow between the story segments as well as fill in any contextual gaps in the narrative due to the change in location-based technologies.

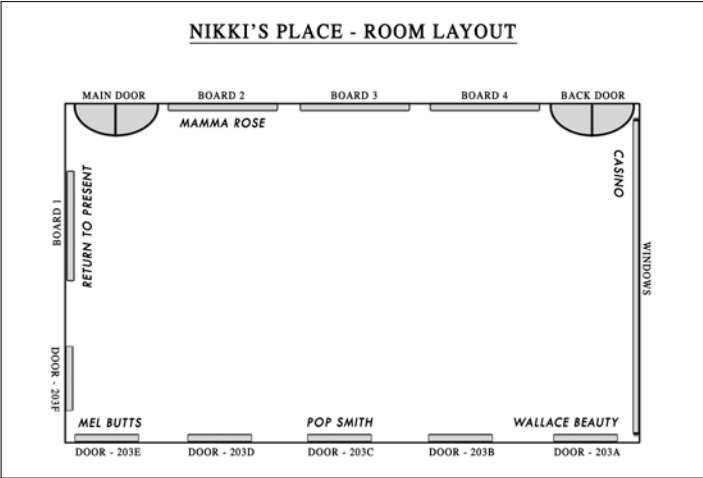


FIGURE 3 - DIAGRAM OF THE TESTING LOCATION (UCF CREATE LAB) AND QR CODE PLACEMENT, REPRESENTED BY STORY SEGMENT TITLE.

We borrowed five iPads from UCF in order to complete testing. We additionally gave each student a set of headphones and used audio-jack splitters to allow each headset to be used.

We recorded observation notes using digital tablets and pen and paper. Students took surveys using pen and paper and we later inputted their answers into a computer for data analysis. We did not record audio and video of the testing.

The entire testing session lasted approximately 45 minutes. In order to promote optimal group dynamics and mitigate any undue

influence, the students divided themselves into groups of two with the help of their teacher. We gave each student group an iPad with the ARIS platform pre-installed and the prototype loaded, and gave each group their own set of headphones for use during the research session. The student groups completed the story at their own pace. After the student groups finished the story, each individual student filled out a survey regarding the experience.

In addition to the prototype, we used several measures to determine the outcome of each student's experience. Students completed a survey about their game play following the entire test population's completion of the game. The survey included 26 rating scale questions and 7 free response questions. We based the survey on the System Usability Survey (SUS) and modified it for our case study (U.S. Department of Health & Human Services 2015).

Proctors used scripts and followed observation rubrics in order to guide research notes without biasing gameplay. The rubric included observing students for physical reactions, length and frequency of technical assistance (when applicable), and group dynamics. The script we used had two sections: a script to be read verbatim to the participating students before gameplay, and an informative section that guided interactions during testing should users require technical assistance.

We based survey scoring on the SUS and modified for this case study (U.S. Department of Health & Human Services 2015). We numbered survey items for data analysis only. Of the 26 rating scale questions, 10 were positive-keyed items and 6 were negative-keyed items. We calculated the total score for the surveys by taking the sum of the score contributions from each item. Each item's score contribution ranges from 0 to 4.

For items A1-A10, A12-A13, A16-A19, A21, A23, A25-A26 the score contribution is the scale position minus 1. For items A11, A14, A15, A20, A22, A24, the score contribution is 5 minus the scale position. We obtained the overall value of the survey score by subtracting the sum of the scores by 4. Survey scores have a range of 0 to 100. We considered a score above 68 to be above average, and a score below 68 to be below average. In scale position responses for positive-keyed items, we considered a 4-5 a positive response, 1-2 a negative response, and 3 a neutral response. In scale position responses for negative-keyed items, we considered 1-2 a positive, response 4-5 a negative response, and 3 a neutral response. An above average outcome was considered for positive, negative or neutral response categories over 60%. We conducted data analysis utilizing Google Forms and Microsoft Excel. We did not consider "Normalizing" the scores and we did not use statistical software in the data analysis.

Results

We recruited a total of 10 students (n=10) for research. The scale position scores for the rating scale survey responses are shown in Table 1 below. We indicate negative-keyed items with an asterisk (*).

We indicate items based on the SUS and modified for this case study with a double asterisk (**). We analyzed the data using Google Forms based on the scale position score for the rating scale survey responses, and we divided responses into two categories: mobile story, and mobile device.

The mobile story category had an above average outcome, with positive responses on all questions except item A13, which had a negative response of 50%, a positive response of 40% and a neutral response of 10%.

The bar graph for scale-position responses on item A13 can be viewed in Figure 4 below.

TABLE 1. SCALE POSITION SCORE FOR LIKERT-SCALE SURVEY RESPONSES.

Participant Code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11*	A12	A13	A14*	A15*	A16	A17	A18	A19	A20*	A21	A22*	A23	A24*	A25	A26
1	5	5	4	4	5	3	4	5	5	5	1	5	3	2	2	4	5	5	4	1	5	5	4	1	5	4
2	5	4	5	5	5	4	5	5	5	5	1	5	4	1	1	3	5	5	5	1	5	1	5	1	4	5
3	5	3	4	5	5	4	4	5	4	5	1	5	5	1	2	3	5	4	5	1	4	2	5	1	4	5
4	4	4	5	5	5	4	5	5	5	5	2	4	5	2	2	3	5	5	5	1	5	4	5	1	5	5
5	4	5	5	5	5	5	5	5	5	5	1	5	1	1	1	3	5	5	5	1	5	1	5	1	5	5
6	5	5	3	5	5	4	5	4	5	5	1	5	1	1	1	2	5	5	5	1	5	1	5	1	5	5
7	5	5	4	5	5	5	4	4	5	5	1	5	1	1	1	2	5	5	5	1	5	1	4	2	4	5
8	4	4	5	5	3	3	3	5	3	5	4	2	2	1	2	5	3	3	3	1	5	1	2	1	3	1
9	3	4	3	5	3	3	2	3	4	5	1	5	2	1	1	2	5	5	3	1	3	2	2	1	5	3
10	3	4	4	5	5	4	5	5	5	4	1	5	5	1	3	1	5	4	5	1	5	1	5	1	5	4
Average Score	4.3	4.3	4.2	4.9	4.6	3.9	4.2	4.6	4.6	4.9	1.4	4.6	2.9	1.2	1.6	2.8	4.8	4.6	4.5	1.0	4.7	1.9	4.2	1.1	4.5	4.2

Note 1: Negative-keyed items are indicated with an asterisk.

The mobile device category had an above average outcome, with positive responses on all questions except item A16, which had a negative response of 40%, a neutral response of 30% and a positive response of 20%. The bar graph for scale-position responses on item A16 can be viewed in Figure 5 below.

We calculated the total survey score using the scoring method outlined previously and displayed it on a scale of 0-100. The mean score was 84, the highest score was 94, and the lowest score was 65. Overall, the story can be considered above average, as all but one score being above 68. The total survey scores for each user are shown in Table 2.

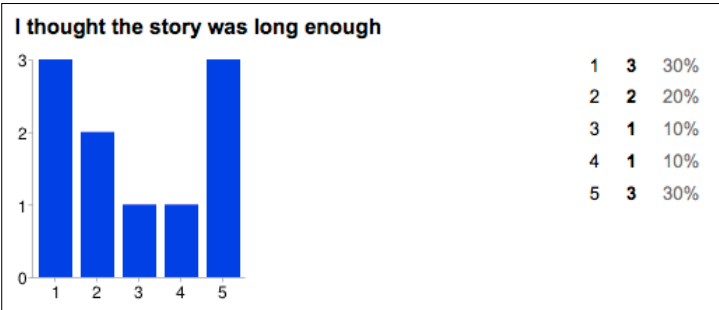


FIGURE 4. SCALE-POSITION RESPONSES FOR ITEM A13: "I THOUGHT THE STORY WAS LONG ENOUGH."

In the free response questions, all students who responded listed a game or gaming system for item B1. The most frequent games listed for item B1 include: *My Talking Tom/Angela* (a virtual pet game), *Angry Birds*, and racing games. The most frequent responses for item B2 were+ to make the pie featured in the final story segment and for the application to be in color.

FIGURE 5 - SCALE-POSITION
RESPONSES FOR ITEM A16:
"I WAS ABLE TO FINISH THE
STORY WITHOUT ASKING FOR
HELP."

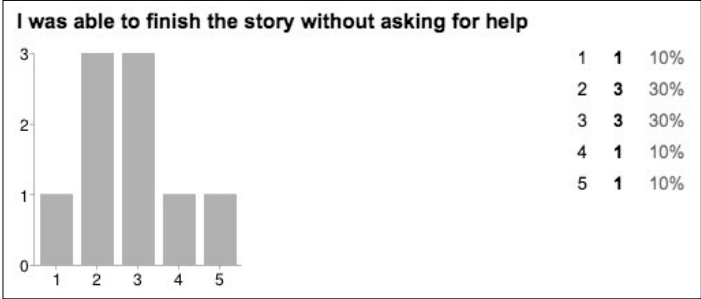


TABLE 2 - TOTAL SCORE
FOR LIKERT-SCALE SURVEY
RESPONSES.

Participant Code	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11*	A12	A13	A14*	A15*	A16	A17	A18	A19	A20*	A21	A22*	A23	A24*	A25	A26	Total Score
1	4	4	3	3	4	2	3	4	4	4	4	4	2	3	3	3	4	4	3	4	4	0	3	4	4	3	83
2	4	3	4	4	4	3	4	4	4	4	4	4	3	4	4	2	4	4	4	4	4	4	4	4	3	4	94
3	4	2	3	4	4	3	3	4	3	4	4	4	4	4	3	2	4	3	4	4	3	3	4	4	3	4	87
4	3	3	4	4	4	3	4	4	4	4	3	3	4	3	3	2	4	4	4	4	4	1	4	4	4	4	88
5	3	4	4	4	4	4	4	4	4	4	4	4	0	4	4	2	4	4	4	4	4	4	4	4	4	4	93
6	4	4	2	4	4	3	4	3	4	4	4	4	0	4	4	1	4	4	4	4	4	4	4	4	4	4	89
7	4	4	3	4	4	4	3	3	4	4	4	4	0	4	4	1	4	4	4	4	4	4	3	3	3	4	87
8	3	3	4	4	2	2	2	4	2	4	1	1	1	4	3	4	2	2	2	4	4	4	1	4	2	0	85
9	2	3	2	4	2	2	1	2	3	4	4	4	1	4	4	1	4	4	2	4	2	3	1	4	4	2	69
10	2	3	3	4	4	3	4	4	4	3	4	4	4	4	2	0	4	3	4	4	4	4	4	4	4	3	86
Total Possible	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	100

Note 1: Negative-keyed items are indicated with an asterisk.

Note 2: The total score displayed is out of 100.

For item B3, three students responded that they would not improve the mobile story, giving a response of “No.” Additional responses included: “needing help with the back button,” “lower the malfunctions,” and “a smaller device and more interactive things.”

The most memorable feature, listed in item B4, was the final gameplay segment where the students make sweet potato pie with

Aiken as well as the fisherman’s, Mel Butts, story segment and the videos included in the gameplay. For item B5, most students expected to either make the pie or play a game. The most useful or helpful features from item B6 were: the videos, the QR code scanner, and the menu. For item B7, the students most frequently wished they could make the pie or wished the mobile story were longer. We based the observation notes on the observation rubric. We compiled our notes and removed proctor names in order to keep data analysis anonymous.

There were several observations of confusion within the story narrative. One frequent area of confusion seemed to be the transition between the Mel Butts story segment and the Pop Smith story segment in which students viewed a brief video about State Road 408 (referred to as “408 video” in the observation notes). Another area of confusion seemed to be at the first video regarding the casino (referred to as “first video” or “casino” in the observation notes). Additionally, there were some observed occurrences of students having issues with ARIS user interface, such as the “quest completed circle”, and the “back button” as described in the observation notes.

Some observations regarding usability that were not anticipated include: “the iPad cases were helpful for protecting the

iPad, but the flap hindered some students while trying to scan the QR codes,” and “one group knew innately to raise the volume using the slider in the app.”

Discussion

Prior to testing, we anticipated some of the areas of confusion we observed during testing, and created solutions in an attempt to mitigate these issues. We knew most of the ARIS user interface issues prior to testing and as our team could not easily fix them, we created the “workshop” segment of the proctor script in order to assist students during testing. We scripted our responses as much as possible in order to limit influencing the students’ responses. Some observations we did not anticipate, included the issue with the iPad cases, which hindered usability. However, not all unanticipated observations hindered usability. For example, we observed one group raising the volume using the built-in application slider. Originally, we anticipated students having issues adjusting the volume and we took measures to address this in the proctor script. Yet this did not seem to be the case. This could be due to the fact that the equipment used was property of NAP Ford School. Although students had not used the ARIS software or seen the game prototype prior to testing, the students may have already been familiar with some of the mobile devices’ features, such as the volume. This could also be due to the large percentage of youth who are predisposed to mobile devices on a daily basis (Lenhart 2005).

One of the limitations present when testing our story was the change in location-based technology used. Originally, we designed the story to function using GPS technology, which would allow users to navigate through the Parramore area using their mobile devices to activate segments of the story as they approached specific locations. Unfortunately, it wasn’t feasible to complete testing utilizing this technology due to time constraints as well as complications in organizing and leading students through a large off-site area. In order to allow for an optimal testing environment, we chose to modify the prototype to allow for QR code activation of various predetermined locations throughout the UCF CREATE Lab, changing the distance traveled from several miles to a few feet. Obvious reasons for this include convenience, limitations on location options, and promoting optimal group dynamics. However, there are several reasons why this change, albeit necessary, could be both good and bad. Jeff Ritchie (2014), speaks of “really nontrivial effort”, in which he suggests locative narratives could be harder to understand because they span both physical spaces and story spaces.

In the case of our project, perhaps Ritchie would support the change to QR codes, seeing this taking “far less perceived effort than moving through physical space and attempting to identify a narrative element or narrative bridge” (Ritchie 2014: 56). Additionally, there are other challenges inherent to locative narratives that require movement across physical spaces.

Ritchie goes on to list several other limitations, such as constraints on narrative pacing caused by the passage through time

and space as well as the Kuleshov effect, in which the order of narrative elements can have an effect on perceptions later on. While these limitations are by no means an excuse to avoid the challenge altogether, they are worth considering when developing and testing location-based mobile stories.

Additionally, because we originally wrote the story to be viewed in the physical space, we had to rework several narrative elements, including narrative bridges, in order for the story to be less jarring for the user. We noted several students had trouble following some of the narrative elements. Specifically, in the story, students speak to Mel Butts and then jump to a QR code and view a video that talks about the influence the development of State Road 408 had on the Parramore community.

Originally, this QR code would have been replaced by a GPS coordinate in which the student would walk through an area where State Road 408 now stands, viewing photographs in the video depicting businesses that no longer exist. This was to function as a narrative bridge. In this case, students accessed this narrative segment utilizing a QR code in a computer lab instead of a GPS location, lacking both affordances and constraints present in the physical space. So although changes were made to the narrative bridges to mitigate these limitations in advance, the repercussions of this change, albeit necessary for testing, interrupt the story's sense of being real, much like Ritchie describes in the example of *The Tale of Two Roommates* (Ritchie 2014). Finally, many students made comments suggesting the addition of an audio narrative. The use of headphones may have spawned this suggestion; the absence of headphones may not have resulted in the same feedback. Either way, it suggests potential for the future of this project. Perhaps an elaborate soundscape could be integrated into the story narrative. The students may have merely suggested adding a narrator that reads the story text along with displaying it in the text prompts on screen. Regardless, insight gained as a result of testing suggests locative narratives may have so much more potential. What else could be afforded to the story by being more present? Perhaps future versions of our project could include more elaborate soundscapes, like the soft murmur of Parramore pedestrians as you walk past what is now a bustling freeway, or the sounds of sweet potato pie batter mixing in the kitchen while Aiken guides users on making their own. By using more elaborate soundscapes to encourage users' attentive listening, the story could become a deeper experience for the memory and history of Parramore.

OUR NARRATIVE: KID-TESTED

At the end of our process, the narrative we built was shaped in part by the information, stories and photos we collected from the Aiken family, the Parramore community members, the archives we researched, Professor Underberg-Goode's guidance, and the feedback we received from user experience testing. What follows is a brief summary of the finished sto-

ryline for “Getting a Job at Nikki’s Place.” The game consists of three acts: a to-do-list quest, a test of culinary skill, and the final reward of employment at Nikki’s Place.

The game opens with a welcome message that informs the player that they must help Mr. Aiken “prep for tonight’s big event.” The opening message promises that, once this to-do-list is completed, the player will be given a chance to “prove your worth,” earning a job at Nikki’s place the way Mr. Aiken did. Here is where the game begins.

In dialogue, the player speaks with modern day Mr. Aiken, inquiring about a job opportunity at Nikki’s Place. Mr. Aiken confirms that he has a job opening but that the player must prove themselves worthy of cooking in his kitchen first. This dialogue concludes with the assignment of very important errands that Mr. Aiken needs the player to accomplish. This moment begins the player’s quest through Parramore’s past; in order to prove their worth, the player is charged with completing a to-do-list for Mama Rose, who ran the restaurant when Mr. Aiken was young. The errands the player runs brings the player into conversation with many historic figures from Parramore’s past. The to-do-list quest the player must complete includes four tasks: paying the blues band scheduled for the night’s event, taking Mama Rose to the beauty salon, picking up sweet potatoes from Pop Smith, and retrieving catfish from Mel Butts.

The player then sets out on the quest, engaging in dialogue with Mama Rose, as she helps to tell the story of Parramore’s rich musical history. The first stop the player must make is to pay the band at the South Street Casino (now the Wells’Built Museum), a stop on the famous Chitlin’ Circuit. Once the player pays the band, the player then moves on to the second task on the list: escorting Mama Rose to Wallace’s Beauty Mill to get her hair done for tonight’s event. After the player has dropped off Mama Rose, the player must then collect some sweet potatoes from Pop Smith, near historic Jones High School.

This completes the third item on the list. Finally, the player must get some catfish from Mel Butts, who is fishing in the pond off Church Street. In the locative versions of the game, the traveling time between tasks on the list is narrated by Mr. Aiken during a slide show full of archival photos—showing what life was like in the Parramore of the past, reflecting on the effects of the construction of the highway through the community. Then the player has returned successfully to the restaurant with the to-do-list completed. Once these four tasks have been completed, the player must hurry back to Nikki’s Place to move on to the next quest, a culinary test.

Now that the player has proved their worth outside the kitchen, the player must prove their worth inside it to. On the way to the restaurant, the player is challenged to make a sweet potato pie with Mr. Aiken.

It is important to note that, as the player arrives back at Nikki’s Place, the player has transitioned back to present day

Parramore. At this point, Mr. Aiken narrates a recipe: a picture-filled step by step instruction for making Mama Rose's sweet potato pie. The recipe has pictures of Mr. Aiken making the pie himself, and is prompted with questions for the player to answer about the way the recipe is made. As the player makes the pie with Mr. Aiken, he imparts some wisdom to the player, explaining the value of soul food and its connection to their community. Once the player has successfully made a sweet potato pie with Mr. Aiken, the player has proved his/her worth to the satisfaction of Mr. Aiken.

At the conclusion of the game, the player finds out that not only do they get a job, but also a sweet potato pie of their very own to enjoy with the ones they love, reinforcing the connection of soul food to the value of community. Along with the knowledge of the recipe, the player receives a digital chef's hat as a trophy for successfully completing the game, the same chef's hat Mr. Aiken has worn in his avatar photo throughout the game. This completes the game's storyline, leading the player to a link to the digital story "Welcome to Nikki's Place."

DO TRY THIS AT HOME

In his introductory chapter to *The Mobile Story: Narrative Practices with Locative Technologies*, Jason Farman notes, mobile stories "reimagine our relationship to technology, place, and our own sense of self in the spaces through which we move" (Farman 2014: 5).³ This project forced us to use our own digital design and testing experiences to create our own digital mobile stories. Taking Farman's words to heart, we want to encourage educators to explore the value of the stories and voices in their communities so that they might make students aware of the important and sometimes underrepresented stories alive in their communities. One of the most important effects of this project was its emphasis on the connection between community and its future generations. When we give students many ways to contextualize their communities, they have a better understanding of their role within a community, whether or not they ultimately decide to live in the same community they were raised.

Farman explains mobile storytelling often leads to "a deeper sense of place and a stronger understanding of our own position within that place" (Farman 2014: 5). Especially with youth, it is important to help them discover how they can best interact and live in their environments.

This includes knowing the many diverse populations and peoples they might encounter within a community. Having an ability to understand, accept, and relate to different community members will make it easier for youth to adapt to new places as they move through life. Understanding the ways in which a community operates and its history can help students learn about the community's past while imagining its future.

Community stories can take many different forms, and it is important to recognize the story being told and acknowledge the ways you want to develop it. In our project, it was important

³ For a more in depth exploration of how educators can use mobile storytelling for their benefit, and gain the benefit of our own documented experience with this project, check out the guidebook we created as a result of this project: *Mobile Storytelling: A Guidebook for Teaching Students How to Tell Community-Based Mobile Stories in the Classroom*. The guidebook, located at create.cah.ucf.edu/files/Mobile_Cookbook.pdf, focuses on helping educators find community stories to tell with their students and pays specific attention to telling stories using ARIS and other free, open-source tools.

to recognize we were narrating multiple stories simultaneously: Aiken's story, the story of Parramore, and the story in which the player seeks a job. Community stories have multiple dimensions and perspectives. As Adriana de Souza e Silva and Jordan Frith write in "Re-Narrating the City through the Presentation of Location," "urban spaces might be represented and narrated in many different ways, producing multiple maps, each of which contains different elements and perspectives" (de Souza e Silva and Frith 2014: 41). The fragmentation they mention points to the multiplicity of identities and points of view that exist in one place and even within a single story. They conclude that it is impossible "to draw only one map of a city" (de Souza e Silva and Frith 2014: 41). Because of the multitude of stories available with any given community, we encourage educators to think inclusively as well as to take a look at one community story from multiple points of view. It is important to acknowledge different ways to approach historical contexts and to find historical materials in the community, in order to identify what contexts and stories are most relevant to the educators' projects. "The meaning of a story is affected by the place in which the story is told and, similarly, the meaning of a place tends to be told through stories," Farman explains (Farman 2014: 6).

Through the process of creating "Getting a Job at Nikki's Place" we hope that we have shown the need for standards in mobile story production. We hope to show that digital media can be used to tell community stories. We hope we found a way to explain our creation process to non-specialists in digital media production, making the medium accessible to them. In asking educators to use digital media tools as a means of creating community-based mobile stories, we are asking them to reimagine the traditional process of storytelling. Farman explains, "By linking mobile storytelling projects to the larger history of attaching narrative to specific places, these projects build on practices that have been done for millennia" (Farman 2014: 3). In essence, by asking educators to think about the larger story of their community and how best to relay that story, we are actually connecting them to a larger storytelling practice that has existed throughout history and has recently begun to delve into telling stories using digital mediums.

Farman uses the term "medium-specific analysis" to explain the process of determining what tools to use when storytelling. He writes, "such an approach asks us to understand the medium's unique capabilities (and constraints). These affordances and constraints will significantly affect the content of the story and the experience of it. Farman links this idea to Marshall McLuhan's seminal proclamation that "the medium is the message," and furthers his own explanation to include how the medium will additionally change the way the story is distributed. While "Getting a Job at Nikki's Place" is ultimately immersive and augments the player's perspective of the space they are in, it is important to recognize that not every mobile story needs to be immersive in this way, and further, that this is not possible for every group.

CONCLUSION

Throughout this process, we wanted to provide a way for grammar school students to learn about the history of their area without merely reporting facts. This project seeks to embody critical methodology in its very make up. Instead of providing disconnected dates and names, an engaging story speaks to larger concepts of community involvement and maintaining cultural identity in a world where globalization can inadvertently strip us of our sense of place. We simultaneously celebrate the cultural heritage of Parramore and soul food, while encouraging a strong work ethic and the value of education and tradition, without turning the story into an elegy for a bygone era. Our journey was a search for cultural and historical ingredients. Once they were collected, we could fully immerse ourselves in making the story. This story speaks, not only to a community history, but also to the richness of stories that revolve around food as access points to cultural heritage. Aiken's message on the importance of education and active participation for the community's future can now be passed on to another generation. The seed is planted and hopefully, the community will grow.

In developing the mobile narrative, "Getting a Job at Nikki's Place," creating a short digital story about the restaurant, and crafting an educational guidebook, we aimed to create an effective and engaging transmedia story to inspire others to tell their community stories in unique and compelling ways that invigorate community histories and allow for greater access to often under-represented narratives. Over the course of nine months, our team developed a story based in historical records and personal stories, crafted a digital story and mobile game, tested game play with students, and gathered educational resources for classroom educators. Through this project, we aimed to bring the Parramore area's story to light in a way that may today be overlooked, much in the same way commuters bypass the town using State Road 408. In showing the vibrancy of past businesses and people that inhabited the area, we hoped to inspire students to question the histories told of their communities and to complete historiographical records by including citizen voices within their collections. By connecting the narrative of changes in Parramore to the still-present narrative of time-honored soul food, we were able to show how Parramore's culture still lives within the neighborhood. Using this project as a starting point and continuing to encourage educators, scholars, and practitioners on the feasibility and effectiveness of transmedia mobile storytelling, we hope to ignite others to share their community stories.

AFTERWARD

In March 2015, during the completion of this project, Nikki's Place suffered fire damage that forced the restaurant to close for an extended period of time. At the time of this article's authorship, the restaurant remains closed, but hopes to reopen

in 2016 thanks to financial assistance from Orlando's Minority/Women Entrepreneur Business Assistance (MEBA) Program. Members of the project team have stayed in contact with the family, offered support where possible, and have been spreading the word about the situation via social media.

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TIMI REEDY AND TAMMY CLEMONS

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AUDIOVISUALIZING FAMILY HISTORY: AN AUTOETHNOGRAPHY OF A DIGITAL DOCUMENTARY

ABSTRACT

This article discusses issues of collaboration and voice in the ongoing production of a multimedia and multimodal documentary project about Frances and John Reedy from Harlan, Kentucky, their cyclical migration from Appalachia to Ohio, and their extensive musical recordings and contributions to the founding of Bluegrass music. The authors share insights about the educational purpose and process of producing a personal and public documentary in relation to digital design and community scholarship, family history and counterstorytelling, and memory and representation. Selected multimedia content from the documentary Website are featured as examples of the Reedys' self-documentation practices and how they relate to the collaborative documentary process and productions.

KEYWORDS

Appalachia; music; memory; community scholarship; counterstorytelling; digital archive; documentary

TIMI REEDY AND TAMMY CLEMONS

Timi Reedy and Tammy Clemons are ecofeminist homesteaders with deep Appalachian roots, and co-produce "Remembering the Reedys: Appalachian Music, Migration, and Memory," a multimedia documentary on Frances and John Reedy from Harlan, Kentucky (<http://rememberreedy.blogspot.com>). Timi Reedy serves as an independent public educator on mountain mycology and locally-dispersed intentional community, and is a board member for Appalachia—Science in the Public Interest, a non-profit organization for which she has also co-conducted oral history interviews

on Appalachian culture and forest ecology. Tammy Clemons has recently completed her doctorate at the University of Kentucky, Department of Anthropology where she researched how young visual media makers in different social contexts in Appalachia envision, construct, and act upon possibilities for young people in the region.

INTRODUCTION

This article discusses issues of collaboration and voice in the ongoing production of a multimedia and multimodal documentary project about Frances and John Reedy from Harlan, Kentucky, their cyclical migration from Appalachia to Ohio, and their extensive musical recordings and contributions to the founding of Bluegrass music. The co-producers of this project and co-authors of this article will first briefly summarize the project within the context of audiovisual production about and within Appalachia. Then we will share insights about the educational purpose and process of producing a personal and public documentary in relation to digital design and community scholarship, family history and counterstorytelling, and memory and representation. We will also feature selected multimedia content from the documentary Website as examples of the Reedys' self-documentation practices and how they relate to the collaborative documentary process and productions. We close with additional comments and questions as we consider other potential project developments and implications in the future.

CULTURAL PRODUCTIONS AND APPALACHIA

AudioVisual Cultural Productions About and Within Appalachia

In order to understand the significance of Frances and John Reedy's prolific cultural production, it is necessary to have a basic understanding of the "invention of Appalachia" (Batteau 1990) as a region and cultural stereotype within the United States. Scholars and artists have produced books, articles, music, films, community theatre, podcasts, etc. about the cultural production of, about, within, and without Appalachia. However for the purposes of this article, we will describe some of the basic stereotypes about Appalachia and summarize the commodification of such cultural stereotypes and productions relative to the political economy of regional migration patterns.

The diverse regional range and the potent symbols and stereotypes associated with its people comprise the "*idea*," "invention," and "social construction" of Appalachia that "was accomplished not in a professor's study but in the hurly-burly of politics and commerce and industry ... With some very specific political ends in view" (Batteau 1990: 16). Cultural stereotypes of Appalachian people are so common that they have become clichéd, and "the image of Appalachian culture in the American popular mind has evolved in marked contrast to American mainstream culture" (Olson and Kalra 2006: 163). Stereotypical representations are typically negative and serve as a convenient and socially acceptable "Other" in U.S. pop culture.

The very origin of Appalachian stereotypes is the result of print media like newspapers, novels, and travel memoirs. Cultural assumptions and imagery about Appalachia were proliferated in the "local color" literature of the late 1880s (Straw and Blethen 2004: 9-11), which helped justify and solidify outside

intervention efforts to “uplift the culture” (Straw and Blethen 2004: 10). “Mountain people were described as noble and savage, independent, proud, rugged, and violent, but also as dirty and uneducated yet crafty and practical. They drank too much and were lazy but managed to scare up the energy to produce excessively large families” (Straw and Blethen 2004: 9).

It is almost impossible to disassociate the term “Appalachian” from the word “hillbilly,” in spite of the fact that the fictional family in the popular 1960s sit-com “The Beverly Hillbillies” were from the Ozark Mountains (which are located in the Midwest region of the U.S. and not part of the Appalachian Mountain ranges). In their essay on “Appalachian Music: Examining Popular Assumptions,” Olson and Kalra (2006) note that “The term ‘hillbilly’ did not always have derogatory connotations ... and was not used exclusively to refer to Appalachian residents” (Olson and Kalra 2006: 168) when it was first used in print in the early 20th century. There are numerous other relevant and significant examples of Appalachian stereotypes in the media that cannot all be named here. However, a comprehensive litany of new stories, television shows, and movies is not necessary to understand that stereotypes about “hillbillies” are ubiquitous and have been relatively consistent over time. Interestingly, the history of the country music industry in the U.S. represents a particularly lucrative construction and commodification of a somewhat celebratory stereotype.

Anthropological understandings of the “field of cultural production” (Bourdieu and Johnson 1993: 37) recognize “media and popular culture forms as both *cultural product* and *social process*” (Mahon 2000: 468). Consumers of cultural productions do not always use or interpret them as intended, and scholars have analyzed the “creative ways in which social actors manipulate these products, often for purposes of resistance and political expression” (Mahon 2000: 469).

Moreover, “consumers” also have agency as cultural producers who engage in “public visible processes” and “use the media and artistic forms to critique the social terrain they inhabit and the social verities they inherit” (Mahon 2000: 474). It is important to note, however, that cultural productions can reproduce assumptions and representations of Appalachian White rurality that reflect an erasure of racial and ethnic diversity as well as urban environments and issues in the region (Halfacree 2003, Kingsolver 2011; Scott 2010). Therefore, some scholars have striven to unearth and disseminate stories and knowledge about African-American Appalachians (or “Affrilachians”) (Walker 1999) and their contributions to regional music and other cultural traditions (Cantwell 2003; Thompson 2012). Stereotypes and cultural productions of the American South and Appalachia have also been reproduced and technologically transmitted through various socioeconomic patterns and development efforts, such as the commodification of rurality (Kingsolver 2011) and the commercialization of “country” music traditions into new mainstream music industries (Cantwell 2003).

Cultural productions like “Country music” and its many musical sub-genres have been constructed as a set of class “tastes” and aesthetics (Bourdieu and Johnson 1993) by a combination of cultural and commercial forces such as the political economy of regional migration patterns and the commodification of cultural stereotypes and productions. However, none of the different labels of “Appalachian,” “Bluegrass,” “Country,” etc. represent totally distinct or isolated categories of musical style or even geographic origin. Malone writes: “Bluegrass music is neither Appalachian nor very old. Bluegrass receives its name from the music made by Bill Monroe’s string band, the Blue Grass Boys, between 1944 and 1948. No one in the seminal band came from Appalachia” (Malone 2004: 125) but from Western Kentucky (Monroe), the Piedmont region of North Carolina (Scruggs), and Florida (Wise) (Malone 2004: 125).

Malone (2004) likewise points out:

There is no such thing as ‘Appalachian music.’ ...But it is clear that music made by Appalachian musicians bore the marks of an intensely rural society and of the technological forces that were transforming the region: the railroads, textile industry, coalmining, lumbering, and urban growth. Ancient ballads, gospel songs, ragtime pieces, and Tin Pan Alley ditties coexisted in the repertoires of mountain musicians, with no apparent sense of contradiction. (Malone 2004: 115).

The creation and popularization of the country music industry and related technological developments coincided with the outmigration of many Southern and Appalachian families to Northern urban areas in search of work between the 1940s and 1960s. Some of these families, including the Reedy, engaged in “shuttle migration” patterns of returning home periodically (and/or eventually for good) between working in Northern factories (Obermiller 2004: 90). Malone writes: “Transplanted Southerners certainly contributed to the popularity of ‘mountain music’ in cities throughout the industrial North” (Monroe 2004: 124), and “many working people searched their radio dials for familiar voices and stories” (Malone 2004: 124).

The advent and availability of radio technology occurred at the same time that the U.S. was experiencing a national economic crisis, and radio helped migrant Appalachians to reminisce about home and also connected more rural communities to a larger cultural geography. Oral histories with older residents in Appalachian Ohio illustrate how “the inception of radio in the 1920s that brought a genesis of belonging to a national community into this region of the [U.S.]” (Podber 2007: 388). Within rural Appalachia, there were also issues of access related to class, including access to a radio and the electricity to power one: “If they listened to the radio in their home, this might indicate a level of wealth, as many respondents... were too poor to afford a radio. As a result... they went to the home of a neighbor or relative to listen” (Podber 2007:392).

Conversely, the broadcast range and regional musical content of urban radio stations in Appalachia and the American South reached local rural communities as well as national audiences because there were so few radio stations competing for the (then) unpopulated airwaves. For example, radio stations like WNOX in Knoxville, Tennessee, which is one of the stations where Frances and John Reedy played, “could be heard as far as New York City” (Hooper 2009: 7). Local “radio” audiences at WNOX and WHLN, where the Reedys had their own radio program for more than 17 years, often crowded around outside the station to listen to (and sometimes watch) live shows as they were being broadcast (Hopper 2009; Reedy 1996; Rounder 1974). “Once they made their reputation through radio broadcasts, musicians could then enlarge their audiences through public appearances in country schoolhouses and movie theaters” (Malone 2004: 124); which the Reedys continued to do for several decades.

We have described some of the ethnoscapings and mediascapings (Appadurai 1990) that the Reedys participated in and co-produced to help contextualize the audiovisual representations of their voices featured in this article and our documentary project. Next we will discuss how the documentary processes and productions contribute to multisensory approaches in visual anthropology (Pink 2006) and media archaeology “as a mode of studying media that gives particular attention to the often-overlooked sidepaths of media history” (Shapins 2012: 94) through our consciously collaborative effort to digitize and archive various analog audiovisual media artifacts in a public, interactive format.

COMMUNITY SCHOLARSHIP AND DIGITAL DESIGN

John and Frances Reedy’s granddaughter Timi Reedy and her partner Tammy Clemons maintain a documentary blog called, “Remembering the Reedys: Appalachian Music, Memory, and Migration” (rememberreedy.blogspot.com/), where we post and analyze research findings and multimedia artifacts related to the Reedys’ musical legacy, such as photos, news clippings, videos, audio clips, and other personal memorabilia.

Before discussing some of the more personal documentary content and our experiences as digital curators and mediators, we will summarize some of its general educational purposes and audiences, how the project came about, and how community scholarship and digital design serve as core methodological approaches for documentation and representation.

The documentary blog has evolved as the primary organizing medium for preserving and sharing the rich history and content of the Reedys’ music, migration, and memories. As such, it has served a variety of educational purposes and a broad range of audiences that have evolved alongside its development. As we will discuss more in-depth, it was originally created to serve as a publicly accessible reporting structure for following up on funding that we received to archive the Reedy artifact collection.

It was also a way for us to share information as it surfaced and to educate family, friends, and fellow fans about our work as we went along, which became a model for collaborative knowledge production.

For example, we have used the blog for communicating and confirming information with immediate family members; vinyl collectors and aficionados; and experts such as archivists and historians of these musical genres and time periods. We have shared it with community scholars and folklife enthusiasts as well as with more scholarly audiences in presentations at the annual Appalachian Studies Association conference.

We had already video-recorded some important but isolated pieces of Reedy family history, like two oral histories that Timi conducted with her grandmother (or “Mamaw”) in the 1990s and some home video footage we shot with her in the 1990s and early 2000s. However, when Timi’s Mamaw passed away, we literally inherited a much greater material abundance of (and responsibility for) family history that Frances had collected and tucked away throughout her long and culturally productive life. Her personal (and now public) archive includes more than a dozen commercial recordings on various vinyl formats and an 8-track cassette; 15 reel-to-reel tapes and more than 20 cassette tapes of home audio recordings; VHS videos of John and Frances’ last recorded performance together and both oral history interviews with Frances; more than 200 photographs; liner notes from commercial recordings; news clippings; musical correspondence; and other music and family keepsakes.

We chose to curate and care for this wealth of material culture as community scholars of both the personal history of the Frances and John Reedy and of the broader historical contexts of migration of both Appalachian people and music traditions from the region. We officially launched the documentary project in 2009 when Tammy’s grant-funded professional position at Berea College ended and we applied for and were awarded a three-month Appalachian Sound Archives Fellowship to conduct research in the Berea College Special Collections and Sound Archives. We decided to donate the Reedy collection to Berea College as part of our proposed fellowship project in order to preserve and make public the Reedys’ extensive collection of recordings and memorabilia from their musical career. The Berea College Sound Archivist and support staff had encyclopedic knowledge about diverse musical eras and genres, and their expertise was crucial in digitizing outdated analog media (especially reel-to-reel recordings), which we could not have done ourselves.

During part of our fellowship period, we simultaneously completed the Community Scholars certification program sponsored by the Kentucky Folklife Program, which included basic field methods training and an oral history project. In 2010, we conducted additional archival research at the Kentucky Historical Society as part of a Family Research Fellowship, and we publicly presented our findings and different multimedia components at the Appalachian Studies Conference in 2010 and 2012.

From the outset, we knew that we wanted to create a public archive of not only the artifacts that we digitized, so we created an online documentary blog to chronicle our research process and collect findings. In terms of our co-authorship methods for the Reedy documentary blog (and this article), we use the collective “we” to describe our collaborative efforts rather than single out one person’s role or voice. Where we need to emphasize one individual’s voices or relationships, we refer to each person in third-person by their proper first name.¹ In our blog posts, we have consciously chosen to share supporting resources, such as successful grant proposals and follow-up reports, as examples for other people applying to these programs or seeking support for similar projects. Similarly, we hope this discussion of public scholarship and digital methods includes lessons and considerations that are helpful to other independent researchers.

In terms of the project’s digital design, we have utilized various freely available online applications for storage and public distribution that we use in combination with one another to support the interactive, multimedia storytelling of the primary documentary project blog. This digital toolbox includes (but is not limited to) the following free web-based Google applications: Blogger (www.blogger.com), Feedburner (feedburner.google.com), Analytics (analytics.google.com), My Maps (www.google.com/mymaps), Picasa Photos (picasaweb.google.com), and Webmaster Tools (www.google.com/webmasters/tools/home). To post audio and video files, we use YourListen (www.yourlisten.com) and YouTube (www.youtube.com) respectively.

There are definitely limitations and liabilities for relying on a complex corporate package of applications like Google products. First of all, all of these products are not universally available in every country or in the same way; and everyone who has access to these products must accept the risks of corporate (and likely governmental) access to all of their private data beneath what they choose to share publicly. However, there are also some handy advantages to having multiple integrated online platforms and Website tools available in a single free log-in account, and we were able to tie together existing accounts, like Blogger and YouTube, with other web development tools when they became Google products. There is not sufficient space here for a comprehensive discussion of risks and benefits of proprietary versus open source digital technologies and applications, but they are worthy of further exploration by do-it-yourself digital archivists with limited resources (e.g., Kurzweily 2015; Tactical Technology Collective n.d.).

The organization of the blog itself has developed over time to include several standalone components in addition to periodic postings of findings and other updates. For example, the blog layout includes a universal sidebar that appears on every page of the Website. This customizable sidebar features images, the Reedy YouTube playlist, a blog archives, keywords, search functions, subscription options, and links to other relevant blogs. It also includes a menu of individual pages where

¹ We discuss other issues related to naming, voice, representation, and reflexive engagement in other sections throughout this article.

we have compiled, cross-referenced, and organized various media and information in different ways. For example, we have pages with brief bios and acknowledgements of production support, as well as more archival pages like a multi-media library of all posted material, a comprehensive discography of the Reedys' commercial recordings, and an interactive map that illustrates their migratory patterns and cultural productions. We have also built additional and more complex multimedia elements and interactivity by locating and modifying existing code for additional interactivity and creative control over multimedia elements of the blog. However, it is important to note that Tammy is a digital native who literally grew up alongside the development of personal computing (since the 1980s), had access to each generation of technology in educational settings, and has a basic understanding of HTML and other source code. Therefore, different skill-sets and levels of comfort with digital technologies will determine what is feasible for other documentary projects and documentarians.

We have contemplated establishing a Facebook page for the project, but there are similar issues with establishing another proprietary account in terms of privacy and security. We have also wondered whether this might take away from the very carefully crafted and richly textured digital landscape of the documentary itself toward the more homogenous visual environment of the blue and white social network site. The main advantage would be increased social connectivity, but questions remain about whether these would result in meaningful engagements with the content or simply more cursory interactions based on superficial "liking" habits. We are still debating this possibility and welcome input regarding this.

When we began our sound archives fellowship at Berea College, we took our personal desktop computer and image scanner to Special Collections and set up a station where we could sort through, digitize, log, and organize the large amount of artifacts we were donating. We each spent about 20 hours a week processing this collection and conducting primary research listening to recordings and reading oral history transcripts in the reading room. The use of these facilities and the generous stipend made it possible for us to work on this project as an almost full-time occupation during the three-month fellowship. We would later realize how crucial such infrastructure, including free and unlimited access to broadband Internet, is for the effective and efficient implementation of a large-scale digital project.

In rural communities in Appalachia and other parts of the U.S., socioeconomic factors can contribute to the pervasive "digital divide" that continues to limit different levels of access to digital technologies, information, and social media (Banks 2012). As Banks points out, equal access is not just about consumption but also about material, functional, experiential, critical, and transformative access to the technologies, resources, and critical literacy for producing content (Banks 2012: 9-11).

Efforts to address inequities in access must also “build meaningful access, using our engagements with technologies to strengthen our communities and our connections to each other” (Banks 2012:13).

Until recently, we did not have reliable Internet access at our home, and we still do not have mobile phone access. We had access only to dial-up service over the phone or satellite Internet with a dish that would also tie up the land phone line and require cutting down trees to install the receiver dish. So over the past six years or so, we only had intermittent dial-up Internet at home because we would get frustrated with the speed and quality and cancel our account and later re-subscribe to see if we were any better than before (it never was, so we would cancel it again). This meant that we had very limited ability to upload digital content or even post regular updates. In May 2015, DSL broadband Internet finally became available in our neighborhood, which has changed the way that we can work on this project again (not to mention streamlining the workflow and reducing the stress of Tammy’s graduate school career).

We cannot overemphasize how crucial high-quality Internet access is for any public digital archive or documentary project. We have made do with dated electronic equipment (like computers and digitization tools) when necessary, but the interconnectivity of online community scholarship is difficult and sometimes impossible without access to broader channels of communication and distribution. In spite our digital constraints, our methodological emphasis on community scholarship and collaboration, with one another as co-producers and with relevant programs, has enabled and supported our ongoing work on a grassroots digital archive of audiovisual artifacts and stories.

FAMILY HISTORY AND COUNTERSTORYTELLING

As “[m]edia archaeologists ‘excavating’ forgotten media-cultural phenomena that have been left outside the canonized narratives about media culture and history” (Shapins 2012: 94-95), we began this project with the goal of documenting the Reedys’ family history by situating them as under-represented founding participants in the development of new cultural productions of Appalachian identity as well as the commercialization of country styles of folk and popular music in various geographical contexts. Another key project goal was the compilation, production, and distribution of counterhistories about Bluegrass music and Appalachian migration, disrupting mainstream narratives about the history of Bluegrass that often mis-credit Bill Monroe or the Stanley Brothers for some of the Reedys’ songs or that completely subsume or erase Frances Reedy’s songwriting and lead vocal credits under the umbrella of her husband John. Counterstories serve as “competing versions that can be used to challenge a stock story and prepare the way for a new one” (Delgado 1989: 2415-2416), and counter-storytelling is a method of inquiry and theory-building

that arises from critical race theory and can provide a means for marginalized identities to represent their own subjectivities in response to powerful media representations. Delgado writes:

Stories humanize us. They emphasize our differences in ways that can ultimately bring us closer together. They allow us to see how the world looks from behind someone else's spectacles. They challenge us to wipe off our own lenses and ask, "Could I have been overlooking something all along?" Telling stories invests text with feeling, gives voice to those who were taught to hide their emotions. (Delgado 1989:2440)

Because the project blog already recounts the Reedys' personal history in great detail, we will highlight the voices of John and Frances Reedy by focusing on specific family history vignettes and multimedia examples of their self-documentation practices. As previously noted, Frances and John Reedy were literally part of the creation and commodification of "country" music as a capitalist industry.

They played with notable Bluegrass icons like Bill Monroe and the Stanley Brothers when they were beginning their own music careers and inventing their own distinctive styles. As previously noted, the Bluegrass genre is derived from Monroe's band the "Blue Grass Boys," and Monroe himself was (and continues to be) hyper-successful at exploiting this commercial opportunity and reaching legendary celebrity status within the specific genre and country/folk circles in general.

The more localized experiences and contributions of the Reedys are enormously important but previously and largely unrecognized in mainstream histories and folklore, which we will address more in depth later. Meanwhile, it is helpful to contrast the Reedys' collective focus on producing music and the resulting fellowship they experienced with other musicians rather than the singular commercial success. For example, in one of her oral history interviews, Frances commented, "Music then, was kindly [kind of] a family thing. When you run across somebody who wanted to join the band or wanted to come and play, why, you would bring 'em home with you. You would keep 'em, you know. And it was just kindly everybody was family" (Reedy 1996). However, it is also important to acknowledge that Frances and John Reedy also had slightly different aspirations between them, as he loved the attention and desired greater recognition than she did.

When we began our documentary project, we were able to find few reliable references to their contributions in mainstream historical narratives about who "invented" Bluegrass music, who was credited with and/or copyrighted which songs versus their actual authors, and who was listed on the artist credits on different commercial recordings, etc. For example, Bill Monroe has been frequently credited with writing the Bluegrass gospel song, "Somebody Touched Me," which was actually written by John Reedy, whose original 1939 recording of the song was included among

the influential 1974 Rounder Records vinyl LP compilation, “The Early Days of Bluegrass, Vol. 1” of founding Bluegrass musicians (Reedy 1974). This album featured lesser known but instrumental artists who pre-dated or were contemporaries of Bill Monroe, who interestingly enough is not included in this compilation or any subsequent volumes in the Early Days of Bluegrass series (neither are the Stanley Brothers). In addition to our own public history efforts, several recent historical publications have corrected this error in authorship attribution (Gibson 2011; Reid 2014; Rosenberg and Wolfe 2007), and one also points out an erroneous credit to John Reedy for another famous gospel song called, “Oh Death” (Reid 2014). We recently learned that another song that we thought was originally written by John was actually a political campaign song from 1912, and he wrote new verse lyrics that he and Frances recorded commercially multiple times (Clemons and Reedy 2016b).

Another important aspect of our documentary’s emphasis on providing a counter-history to that of commercial superstars who dominate the mainstream narrative is telling the consciously feminist counter-history of Frances Reedy’s previously invisible contributions and influence. Of the 24 commercial recordings they made together in shared lifetimes, only three name Frances directly in the artist credits, and two of them misspell her name as “Francis” and the third is listed as a humorous nickname, “Frankie.” Otherwise, all song credits list John Reedy in various combinations of band names or individual artist names. Therefore, in our textual representation of Timi’s grandparents, we refer to them collectively as the “Reedys” or, when possible and it makes sense, in alphabetical order as “Frances and John” rather than reinscribe the patriarchal order that maintained his predominance on their commercial artist credits. Otherwise, we use individual artist credits when referring to the actual recordings with which they are associated. In terms of counterhistories, our project also challenges some typical assumptions about long-term continuous Appalachian migration to urban industrial settings for employment. As previously noted, the Reedys participated in cyclical “shuttle” migration North with the intention of moving back to Kentucky and buying land. However, they also consciously sought out and exploited the commercial radio and recording opportunities that were available for the burgeoning migration and remixing of musical traditions in cities like Dayton and Cincinnati. Their music career also challenges assumptions about the cultural production of Appalachia and Appalachian music.

While the Reedys are largely noted as founding Bluegrass musicians, their actual musical repertoire was far more diverse and contributed to overlapping aural sub-cultures around commercial and custom vinyl recordings of early Bluegrass, Rock-a-Billy, and Honky Tonk music. One of the recordings (Reedy 1976) even includes a contributing artist playing a jazzy Klezmer clarinet solo and a honky tonk piano instrumental. From personal communications with some collectors and aficionados in these sub-genres, we have learned about the Reedys’ continued

influence among contemporary social scenes and cultural productions. We also recently learned about a young female duo that performs “traditional” and “old-timey” music who recorded a new cover of a gospel song written by Frances Reedy, unaware of her original recording from the early 1960s, which was a very contemporary country version with a Honky Tonk flavor (Reedy 1962).

In addition to their commercial recordings and radio appearances, Frances and John Reedy consciously and prolifically self-documented themselves through whatever technological innovation was available. For example, one of our project’s most recent developments and yet probably the Reedys’ very first attempt at self-recording was a circa 1953 “Voice-O-Graph” recording. Voice-O-Graph recording booths were about the size of a phone booth, and the recordings they produced represent one of the earliest forms of “voicemail” (Levin 2011-2015). The Reedys’ Voice-O-Graph features primarily John’s voice, with his sister adding asides in the background, and Frances uttering a seemingly reluctant “Hello,” when directed by John. In this two-minute narrative, he recounts their early migration experience and its promise, and he ends with a humorous reference to their son Harold (Timi’s father) (available at: yourlisten.com/Tam-bone/john-reedy-voice-o-graph-to-all-the-family).

This surviving Voice-O-Graph recording contributes indirectly to the efforts of PhonoPost, an entire “research archive investigating the media archaeology of voicemail” directed by Princeton professor Thomas Y. Levin in collaboration with the Friedrich Schlegel Graduate School for Literary Studies and the Einstein Foundation in Berlin (Levin 2011-2015). In the late 1950s or early 1960s, the Reedys self-recorded and released vinyl pressings of some of their songs.²

During this time, they also purchased a reel-to-reel tape recorder, which would have been state-of-the-art technology at the time, and they used it to record rehearsals before studio recording sessions and informal jam sessions at their home. Frances also made some back-up recordings of their commercial records on both reel-to-reel and cassette tapes, the latter of which were more commonly in use by the 1970s.

Occasionally, Frances or John recorded their own solo performances or sound-checks that included everyday household activities and conversations. They also audio-recorded memories of family members. For example, on one reel-to-reel tape, John Reedy recorded the family gathering for a Christmas celebration in 1961.

They had been living in Dayton, Ohio for about a decade by that time, and it was just a couple of years before Timi was born and they moved back to Kentucky (Clemons and Reedy 2016a). The recording included a radio-like sermon by John’s brother Roger Reedy, a couple of gospel songs, and some interviews with different family members. In the first interview, John talks to his nephew Junior (son of his sister Cleedia) about whether he prefers living in Dayton or Kentucky. The clip captures a fas-

² Custom pressings by companies like RITE Record Productions provided the Reedys and many other artists with the means to mass-produce and distribute their music (De Clark 2001-2016). These activities pre-date the surprisingly similar cultural production of multiple sub-cultures and musical genres in the field of DIY (do-it-yourself) record labels and punk scenes in the U.S. decades later (O’Connor 2008).

cinating moment in time and space where John is consciously recording the family gathering for posterity and documenting his own attachment to Kentucky in contrast to his young nephew who prefers Ohio. The informal interview (available at: yourlisten.com/Tambone/john-interviews-junior-christmas-eve-1961) literally foreshadows Frances and John's return to Kentucky, and along with the Voice-O-Graph recording, serves an audio bookend for their shuttle migration (Obermiller 2004) to Dayton, Ohio while they earned money to buy land in Kentucky. Interestingly, the Christmas recording also occurs around the same time that they would have divorced and remarried, which we will discuss in greater detail in the next section. Their son Harold Reedy documented another family Christmas gathering at his home in Corbin, Kentucky in 1980, and as a result, he made the last known recording of Frances and John performing together on a VHS home video recording (John Reedy died just three years later). We posted a video excerpt of the Reedys performing the song, "Little Sparrow," which is the second most viewed video on Tammy's YouTube channel and the most viewed video related to the Reedy documentary (available at: www.youtube.com/watch?v=A7XIoZoDpII).

In the mid-1990s, Timi helped conduct two interviews with her grandmother Frances as part of a larger oral history project conducted by a regional non-profit organization. Both interviews were videorecorded on VHS, and one of them focused on her early musical background and career before she and her husband left Harlan and migrated north to Dayton. She discussed forming their first band, their first 78 rpm recording of "Somebody Touched Me" in the late 1930s, their radio program in Harlan during the 1940s, and various famous musicians they met and performed with during that time. She also reluctantly performed two songs at Timi's request, which ultimately became her last recorded performance. For our Appalachian Sound Archives Fellowship, Tammy edited a 10-minute excerpt from the original 20-minute interview about her musical background, including historical photographs wherever possible to illustrate her stories.³ In contrast to mainstream histories of Bluegrass music and even of the Reedys' musical career, this video privileges Frances Reedy's narrative and voice. While she was self-conscious about the sound of her literal voice, which had deepened significantly after many years of smoking, she performed well and with both humor and sincerity (available at: www.youtube.com/watch?v=RfHy87ebIGw).

By highlighting Frances and John's voices through such self-documented media artifacts, this documentary project archives and makes public counterhistories of Appalachian music and migration. The project also places their voices in context and in conversation with other primary sources and scholarly histories about different geographical places and time periods in which they were cultural producers.

³ There is one visual error in the edited oral history video, which is a photo of an unknown young man when Frances talks about playing her uncle's guitar. Based on the quality of the photo and the young man's attire, it would have been taken decades later than the time period Frances described in her narrative.

MEMORY AND REPRESENTATION: AFFECTIVE RESOURCES AND LIABILITIES

Having access to hidden histories entails a responsibility to preserve and/or circulate them to family and even broader audiences relative to their historical contexts. Because the Reedys' cultural productions reached commercial radio audiences and subcultures, it is not enough to share these memories with family members alone given their wide spatial and temporal reach. However, sharing family memories in a public fashion also requires the ethical and political responsibility for choosing what should be publicly included and how it should be represented. We will discuss how we navigated some of the tensions between preservation for the public good and personal privacy by highlighting two particular stories and the multimedia artifacts that accompany them on the documentary blog.

The Reedy documentary has become more autoethnographic over time as we have situated history in living and past relationships that continue to effect contemporary cultural processes and productions. Ellis notes: "As a method, autoethnography combines characteristics of autobiography and ethnography" (Ellis et al. 2011: 275), and thus, "it is both process and product" (Ellis et al. 2011: 273). Autoethnographic writing incorporates "retroactively and selectively [writing] about past [autobiographical] experiences" (Ellis et al. 2011: 275) as well as "retrospectively and selectively [writing] about epiphanies that stem from, or are made possible by, being part of a culture and/or by possessing a particular cultural identity" (Ellis et al. 2011: 276). Like other autoethnographic researchers, they "seek to produce aesthetic and evocative thick descriptions of personal and interpersonal experience" (Ellis et al. 2011: 277) while remaining mindful of the "relational ethics" of how "we implicate others in our work," including our family and friends (Ellis et al. 2011: 281). The documentary is autoethnographic because we cannot extricate our family histories and memories from the raw materials we have organized or the representations that we present. Timi is a product of her grandparents' upbringing, music-making, and storytelling, so our documentary maintains continuity with Frances and John's self-documentation practices on behalf of their family.

We carefully craft our documentary posts for the purpose of public scholarship by maintaining certain stylistic and ethical rigors of scholarly work while presenting content in an informal conversational style that can reach audiences of various ages, educational levels, and topical interests. We must also be selective about what content we share because the sheer volume of artifacts that Frances Reedy collected limits the amount of material that we can meaningfully post and the amount of time we are able to devote to the project in an ongoing manner.

The comprehensive archive documents the Reedys' public musical career in great depth, but it also includes a substantial number of more informal home recordings that shed light on the behind-the-scenes history and personal dynamics of their cultural production.

Because this is also part of Timi's own family history and many of her personal memories, we bear another layer of responsibility as researchers and co-producers that must account for how these stories impact other living relatives and colleagues.

For example, we have shared draft blog posts that reference people like Timi's uncle Tim, who is Frances and John's last living child, before publicly sharing our interpretations of findings. We have received very positive feedback from him as well as other family members and friends who have commented on the documentary sites or contacted us directly, and we would like to see more interactive engagement from our overall audience. However, it is still an emotional challenge to be responsible for telling not only the celebratory stories about the Reedys' historical impact but also the more intimate tales of struggle and heartache that lay the foundation for good Country music.

One story about Frances and John's marital relationship includes both public representations and surreptitious acknowledgement of their temporary divorce. Timi knew that her grandparents had briefly divorced and remarried shortly before she was born in the early 1960s and that her grandmother had continued to feel hurt about it after they reconciled.

However, we were able to discern and disclose some hidden narratives of their relationship through the discovery of and intimate interaction with various multimedia artifacts, including a particular photograph cut in two, a couple of newspaper clippings, and a couple of vinyl records that disclosed different details about the divorce. As part of our Community Scholar training, one of our assignments was an archival document analysis exercise, and we chose to analyze a picture of Frances and John that she had cut in half and never chose to put back together.



FIGURE 1 - WHOLE SIDE-BY-SIDE DOG PATCH IMAGE



FIGURE 2: HALF IMAGE OF JOHN (DOGPATCH IMAGE)

FIGURE 3: HALF IMAGE OF FRANCES (IN DOGPATCH IMAGE)



Rather than reiterate our complete analysis (Clemons and Reedy 2009), for the purposes of this article we note that the photograph is interesting because its content shows us hillbilly stereotypes at the time the photo was taken and its form shows us how Frances secretly felt about their relationship even after they reunited.

More public representations of their divorce included a clipping of their remarriage announcement from an Ohio newspaper where they lived in 1961, and another of a story in the *Corbin Times-Tribune* when John's song "Somebody Touched Me" was included on the Rounder Records "Early Days of Bluegrass, Vol. 1" compilation recording of the emerging tradition's founding musicians. In the article, they also talk about another song, "Tiny Bitty Pieces," that Frances wrote and narrates in third person as the story about two friends whose marriage was "on the rocks" (O'Connor 1975). She actually wrote it for John to describe the state of her heart when they separated, and it points to another hidden history not referenced in the article, which is the fact that he also wrote and recorded his own break-up song to her called, "Knockin' on Your Door." It is also interesting to note that the Reedys' recorded a commercial record of "Tiny Bitty Pieces" on Jewel Records in 1973, but they also a self-produced an earlier vinyl record of the song as "Frankie and Johnnie Reedy," which is play on their names and references a well-known American break-up ballad from the turn of the last century about Frankie catching her lover Johnnie cheating on her and shooting him dead.

As part of public presentations for mostly scholarly audiences about our project, we have told this story by showing the Dogpatch photo(s) and playing a mash-up of Frances and John's mutual break-up songs that Tammy edited together with Audacity (available at: <http://yourlisten.com/tabmbone/tiny-bitty-pieces-knockin-on-your-door>). The overall (and somewhat intended) effect of the story, and particularly these audiovisual components, is amusing and entertaining as if constructed for public consumption at one of the live music and comedy variety radio shows where the Reedys early in their career.

By rendering the photo as both separate and whole and stitching their heartbreak songs together as a musical mash-up, we use them to weave together public and private stories and to mend metaphorically the lingering emotional distance that Frances felt toward her first, second, and only husband. Frances and John obviously chose to remain removed from their personal history in the public forum of the newspaper article in order to emphasize the celebratory nature of their inclusion on the Bluegrass album. However, the songs themselves and the permanently severed photograph help paint a more complex picture of the disruption and (at least partial) re-establishment of family unity as well as the role of cultural productions in mediating emotional conflict and suffering.

Another personal story of reconciliation and loss includes our own experience helping to be a caregiver for Timi's father Harold during the last couple of years of his life, which we shared publicly in a blog post a couple of months after his death (Clemons and Reedy 2011). We talked about trying to honor the person Harold was while learning new strategies for managing his severe short-term memory loss that grew worse over time. For example, we learned that listening to his parents' musical recordings helped comfort Harold and provided an expressive outlet (i.e., smiling, tapping his foot, gesturing with his hands) when he was no longer able to communicate verbally. We later learned that our experience connected with larger public conversations and research regarding the therapeutic effects of music for memory-related illnesses. It was difficult but also important to write these autoethnographic vignettes because they represent healing and reconciliation between Timi and her father at the end of his life.

These stories illustrate how emotional entanglement can be both a liability and resource in terms of representing family histories as public narratives. On the most basic level, there is tremendous emotional turmoil in sifting through a loved one's belongings, and some of Frances Reedy's things were discarded before Timi had a chance to look through them. Thus she experienced multiple levels of loss in losing her lifelong mother-figure and also losing some of her collected artifacts before determining their importance. There is also the emotional weight of interpreting and representing findings both honestly and respectfully for disparate audiences of immediate family members and a largely anonymous public.



FIGURE 4 - THIS BRIEF FOOTAGE SEGMENT FEATURES HAROLD REEDY DURING ONE OF HIS VISITS TO OUR HOME. THE SOUNDTRACK IS THE "SONG TITLE MEDLEY," IMPROVISED AND SUNG BY HIS FATHER JOHN REEDY AND DIGITIZED FROM A REEL-TO-REEL HOME RECORDING CIRCA THE 1960S.

While the emotional toll of watching Harold's memory and overall health deteriorate was great, we developed emotional resources like using music and photographs to soothe and anchor him when he visited, and Timi and her father gained emotional closure to resolve past hurts before his memory and speaking ability were completely compromised.

Multi-sensory interpretations and representations of these various material cultural productions include the ways they evoke feelings and memory of family: those of the Reedys now and in the past. Timi has her own memories of her grandparents and her dad, and we have shared memories of her Mamaw and now Harold. Timi has also had her own migration experiences, spending summers with her mom in Dayton or Harlan, going to school in Richmond, and temporarily moving back to Corbin to live with Frances when John died. We strive to honor and integrate the different voices we encounter, including our own, in such a holistic manner, though we are aware that our subjectivities are dominant as the living co-producers of the documentary project who control what content is presented and how. For example, our narrative about Frances and John's divorce and remarriage is no less selective nor any more true than Frances' telling. Her story in the newspaper about "friends" could just as well describe their own distance (in time, space, and emotion) from the feelings and experiences of that long-ago couple (and not) that they were. Our version documents it as a temporary but pivotal moment in their relationship and career when they chose to commercially record their private troubles. This project is reflexive not only because we are documenting the interpretation of family history, but also because we have to choose how much of ourselves to include, which became more of an issue when we were helping care for Harold and these memories became a link to the present and the past.

CONCLUSION: FINDING ANSWERS OR RAISING QUESTIONS?

We originally hoped to make a feature-length documentary about the Reedys' musical legacy and how it fits with the larger history of bluegrass and country-western music traditions and sub-cultures. While this is still a worthy and achievable educational goal, the documentary project has grown beyond the confines of a single, static, linear production of a single, static, linear narrative. Its intended and actual audiences have also continued and evolved. Our online documentation, community and institutional partnerships, and our revisiting of familiar topics through different lenses, all contribute to a more interactive, dialectical knowledge commons that both invites others to engage with this particular set of materials and to explore how they might organize and present their own family or community's history, material culture, and social reproduction. While we did not consciously understand or label our project as autoethnographic (Ellis et al. 2011) when we started it, we later realized

the multidisciplinary significance of our various methods, sources, and representational practices as cultural producers and mediators of others' voices alongside our own. As previously noted, we have presented the documentary project in formal educational settings such as archival institutions and regional studies gatherings, and we have also discussed our work with other community scholars at workshops in Kentucky and elsewhere.

However, we have learned that the project has a much broader educational scope and geographical reach beyond the audiences we interact with. For example, our documentary blog is cited as an "inspiration" and "model" for other music and community history projects and is included among oral history and music resources at Berea College and University of Wisconsin-Madison (Clemons and Reedy 2015). Our current Website analytics indicate that our project has been accessed from the District of Columbia and all 50 of the United States as well as 106 other countries around the world.

The most common keyword searches that lead people to our site are about who wrote "Somebody Touched Me" and "John Reedy" with various configurations of the band's name over the years. People also search for Frances Reedy, which was an important goal for the documentary overall. Many people find our project by searching for general information about regional Appalachian and Kentucky music as well as other artists and bands documented on the blog. In this way, the documentary blog has taken on encyclopedic and educational roles defined by members of increasingly global audiences.

One of the most unexpected (though not surprising) outcomes of the documentary is the broader use of our discographies and research about various record labels and producers. There are various cultural associations with vinyl as an archaic analog medium, based on its sensory materiality, personal memories and nostalgic references, and sometimes conscious resistance to hegemonic media productions and commodification (Bartmanski and Woodward 2015). We have personally corresponded electronically with several collectors, discographers, and digital archivists of vinyl records produced by the Reedys and their contemporaries.

These collaborators have shared valuable information to fill in gaps or correct aspects of the discographies on our documentary blog, and we have likewise contributed images and information to some of their online databases. One interesting possibility would be to coordinate and curate a common online exhibit space (Underberg and Congdon 2007) where the contributions of different artists, archivists, collectors, and other cultural producers could be explored together in an experiential, non-linear format (Pink 2006). Through some of our personal communications, we have also learned about present-day Rock-a-Billy and other sub-cultures that have evolved from early country music traditions and continued to pay homage to more obscure recording artists like Frances and John Reedy. Therefore, we have discussed the potential for ethnographic participant observation among some of the people that we have only interacted with virtually.

However, there is temporal disadvantage that we have encountered in trying to access and document additional voices from the Reedys vinyl-pressing past: the difficulty (and sometimes impossibility) of capturing different people's memories and perspectives about cultural productions during the time period and the Reedys' particular contributions. For example, we intended to interview several record label founders that the Reedys recorded with, such as Jack Lynch of Jalyn Records in Dayton and Rusty York of Jewel Records in Cincinnati. We learned that one of them was deceased, and then a few years later, Jack Lynch passed away. We did manage to interview David Lundy who, to our knowledge, continues to operate an independent country and gospel record label in Barbourville, Kentucky (Lundy 2010). His oral history interview and our video tour of his recording studio are among the top five most viewed videos on Tammy's YouTube channel. We have collected names and contact information for additional family members who remember the Reedys' radio show on WHLN in Harlan and other important moments of their musical career, but various constraints in terms of time, money, and other family obligations always impact what we can actually accomplish as a two-person part-time production team.

In addition to the archives and discographies that we have already contributed to, we would also like to include a digital copy of John Reedy's Voice-O-Graph "To All the Family" in the PhonoPost online audio-visual archive (Levin 2011-2015). PhonoPost archive of similar recordings "represents the first systematic attempt to document an astonishingly important yet surprisingly neglected moment in media history: the practice of sending individually recorded audio messages as acoustic letters via the mail. The ... ongoing endeavor is both amassing and making available to scholars a vast archive of these highly fragile, rapidly disappearing and unique multi-media artefacts" (Levin 2011-2015). Both the digitized Reedy recording and the image of the actual record are important media artifacts that would contribute to documenting Appalachian migration within a larger global collection.

Finally, we have discussed some low-cost mini-production projects to continue featuring media that we have already digitized. For example, we have media playlists of presentation materials from our public talks at the Appalachian Studies Conference, and some of these individual media components are available on the documentary blog, but we do not yet have a comprehensive online digital archive to post a complete playlist of what we have shared with live audiences.

We have also talked about doing a New Year's Eve podcast to celebrate Frances Reedy's birthday and highlight her voice and story with tracks featuring her voice and/or lyrics. One of the main tensions we continue to work through in order to make more digital material available is between our questions and concerns about copyright issues and our desire to share information and media artifacts as openly and collaboratively as possible.

We have several allies who are scholars or practitioners with relevant expertise about the distinctions and responsibilities of copyright and Creative Commons licenses and hope to post additional content with more knowledge and confidence in the future.

In this article, we have discussed the ongoing production of our documentary project about Frances and John Reedy and their prolific cultural production during their lifetimes. Their musical history is clearly situated in their participation in migrational and musical flows between the Appalachian region, other U.S. geographies, and American imaginations. As pioneers of self-documentation practices, they also produced primary sources for counter narratives about the history and meaning of country music traditions and industries. These stories, the Reedys' voices, and our representation of them are audible and visible through documentary processes and products that are both personal and public. These multisensory media artifacts also invoke affective engagement and complexity as they are embedded with many mixed memories and emotions.

The very process of writing this article was more emotionally challenging than we anticipated, but it also provided another lens for exploring the project's theoretical, methodological, and educational implications. We hope that our experience producing a personal family project in the context of community participation and collaboration likewise enables productive reflection for other cultural producers, scholars, and family historians.

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TUNING SOLARIS: FROM THE DARKNESS OF A SHOPPING MALL TOWARDS POST-HUMANIST CINEMA.

ABSTRACT

Building upon the audiovisual project on a Tallinn shopping mall, the article outlines the conceptual resources vital to the ethico-aesthetic agenda of sensory ethnography, and links them with the ambitions of an emerging post-humanist cinema. By doing so it tells the story of a personal struggle for the embodiment of a non-representative and object-oriented stance and challenges the main premises of human-centered observational filmmaking style. Finally, the article argues that by provoking the experience of disorientation and more-than-human closeness, sensory ethnography can contribute to the birth of a post-human awareness and an ontological reconstitution of our being-in-the-world in the Anthropocene era.

KEYWORDS

visual anthropology; sensory ethnography; observational cinema; atmosphere; perspective; immersion; empathy; more-than-human; speculative realism; non-representative theory

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INTRODUCTION

“Is the soundscape post-produced?” asks a man in the audience after the film screening of a short portrait of a shopping mall. As I am trying to delineate what the main point of the question could be, I ponder the presence of non-diegetic sounds, the employment of sound filters, a number of volume corrections and the principles upon which the transitions between different sonic layers were made. Is the question about the veracity of the cinematic account? Is he interested to know whether I am mocking him?

Since I see no reason to cover anything up, my response is a plain “yes.” Without a chance to expand more on how we as authors perceived the sonic environment of the mall, the man continues: “If human ears cannot hear this way, why do you do it?” In response, I find myself mumbling something along the lines of unexpected impact on the viewers. The immediacy of the professional opinion suggested by the question is, however, stimulating.

Later, when I have a chance to talk to the man personally, David MacDougall expands on the issue and shares his reservations about the experimentation in Lucien Castaing-Taylor’s elegiac poem “*Sweetgrass*” (IMDB 2009). Referring to the scene where the filmmaker is atop the summit and his subjects, a cowboy cursing the flock of sheep, down in the valley, he utters: “I see no point in wiring people up and being far away from them. It is unnatural.” Is he warning us about misguided attempts to simulate bodily sensations which would be impossible without the sophisticated technological tools that permit this? Why does he feel a need to distance himself from the cinematic methods grounded in the approach he himself explored as a theoretician and practitioner of observational cinema?

Later, when MacDougall mentions that it is *the cinema of consciousness* that needs to be hailed as the pinnacle of the anthropological endeavor, I am reminded of the centrality of human experience he and his wife Judith have been trying to render throughout their careers. Subjected to the visions and voices of people with whom they have been collaborating, to the stance of humble observance and the ideal of habituated perception, they have committed themselves to the development of cinema as a space of social encounters and anthropology as a field dedicated to the exploration of the diverse ways by which humans are made human. In the following text, I will argue that judging certain practices of ethnographic filmmaking as “unnatural” overlooks the *modus operandi* of why sensory ethnographers employ them in the first place. Connecting the relatively arbitrary yet insightful anecdote about meeting David MacDougall at the Freiburg Film Forum to the main premises of observational cinema, I intend to pinpoint the paradigmatic limitations of this approach. Expanding on my recent filmmaking experience, I will outline the conceptual resources vital to the ethico-aesthetic project of sensory ethnography, and, finally, offer a modest proposition to link them with the ambitions of an emerging post-humanist cinema. To begin, I will venture back in time and re-explore the methodological apparatus my colleague and I have used in order to harness the *mallness* of the shopping mall.

ENTERING THE MALL

“What is the night time like in the mall once everyone leaves?” The question strongly resonated with me. I felt an immediate excitement nurtured by the image of having access to an unfamiliar place, of doing observations and walkthroughs, of being alone in the twilights and echoes of a silenced system. While working on an observational film assignment for “Directing Documentary,” a class at Tallin University where I had been studying Audiovisual Ethnography, it was to the engagement with the indoor spaces and rhythms of employees’ routines that I wanted to expose myself. In order to gain access, I approached six department stores in Tallin. Due to occasional grocery shopping the preference belonged to the one I knew the best - the most downtown, the most spacious and the newest in the city. When the so-called “church of the holy Vaino,” a former political command of the country and the office of the first secretary of the Communist Party of Estonia, has been replaced by “the largest entertainment, trade and cultural centre in Tallinn” (AS Merko 2009), the monumental stone-made modernism of Sakala Keskus had to give way to light and flexible construction made of glass, steel and plywood. Regardless of the opinions oscillating along the lines of the aggressivity of profit-oriented public wealth privatization or the inevitability of post-socialist transformation (Hackmann 2009; Martínez 2014), the controversial demolition was approved by the city administration in 2006. Eventually, after eight years of negotiations, Solaris Centre was opened in October 2009. Since then it has accommodated a wide array of functions such as shopping mall, office space, food court, parking lot, roof terrace, cinema hall and concert hall. Converted into a luxury restaurant, the Sakala corner tower has remained the only tangible residue of a Communist history.

I spent fifteen nights in the building. First, doing observations without a camera, then executing a tentative shot-list, and, last, accompanying my colleague sonic ethnographer Kevin Molloy who I had invited to work on a soundscape. Once inside, having received relatively unrestricted access from the

FIGURE 1 - SAKALA KESKUS, 1985 (ARCH. RAINE KARP) (SOURCE: MUIS.EE/MUSEAALVIEW/2644028)





FIGURE 2: SOLARIS KESKUS
VISUALISATION, 2010
(ARCH. RAIVO PUUSEPP)
(SOURCE: WWW.PUUSEPP.
EE/?PORTFOLIO=2010-
SOLARIS-SHOPPING-CENTRE)

management, we have been asking ourselves how we are to depict and juxtapose our feelings of outdoor public space, grocery store, atrium, staircases, cinemas, stores, parking lots and the building's rooftop. How are we to deal with employees and visitors, including ourselves? How could camera framing and the workings of microphones "fit" together? Observing ceilings with kilometers of exposed water tubes, or sitting in the THX-certified silence of the cinema hall, we have been puzzled by questions about what it is that we are looking at and what it is that we are listening to in this project. In other words, thinking as filmmaking storytellers and following a structuralist rationale, the pressing issue we found ourselves captivated by was how the sensorial glimpses of a gloaming mall can come together, transcending the chaos of sensations into a progressively evolving series of situations – a narrative, "a semiotic phenomenon that transcends disciplines and media" (Herman et al. 2005: 344). In other words, what's the story that we want to make about? As I elaborate later, such an initial reaction did not serve the framework with which we started.

Lacking an academic terminology for what we would like to achieve, I admit that the following theoretical pronouncements are, to a certain degree, merely a reflection of the iterative processes of crafting inside the building and of the self-critical contemplations we experienced from the first day to the very first film screenings. What has started as me experiencing the indoor spaces through walking and observing by, to use the words of Sarah Pink (2009: 7), "physical engagements with the materiality and sensoriality," resulted in an attempt to subject Kevin and myself to the corporeal weight of the environment. As we did not want to encounter "the unknown," collect reflections of ourselves in the mirror of objects around us and serve it to the viewer as a ready-made statement, we have decided to challenge our mindsets which have been trained to look for cause-and-effect narratives and nurtured to tackle the issues akin to representational logic.

Such a direction was inspired by our discussion about how to engage with material culture discourse, an approach which advocates a more profound attention to the world of things and goes against the “tyranny of the subject” (Holbraad 2011: 3). This helped inform our cinematic intervention. Therefore, instead of thinking in terms of what a store, public space, or shopping mall is, we have tried to “place objects rather than concepts first” (Cubero 2013: 4) in the very act of filming. In other words, we needed to prevent ourselves from abstracting from the experience, to move away from thinking of *what* the place is and move closer to *how it is* (Merleau-Ponty 2005), instantaneously mediated through the act of recording.

The key aim was to depict human and non-human entities as the interacting elements equally contributing to the *mall-ness* of the space and to render the nocturnal site as it slips into a stand-by mode. Since the cinematic space and weight of its atmospheres was to offer “a horizon of expectations” (Gardies in Penz, 2012: 4), non-human qualities of the environment were to come out first in an unexpected, occasionally almost uncanny, way. Maintaining distance from supporting human characters and shopping mall workers, as well as observing in silence and employing tracking shots were not only tactics used to render the depth of surrounding corridors on screen, but, primarily, served as an attempt to block the empathetic relation viewers tend to make with other beings. By doing so, we present a glimpse into the routines of those who physically operate, yet simultaneously are being operated by, the predefined designs of the working place. Moreover, we believed the rushes that had been categorized during the post-production phase according to the dominating presence they might induce—camera operator, humans, non-humans and built environs—could, eventually, transpire to evoke *more-than-human* perspectives and embody a new sense of what the world of shopping malls might feel like.

As sound is never a purely acoustic element, but energy profoundly related to socioeconomic conditions, connecting with the shopping mall through sound was extremely important to us. Influenced by the writings of Michel Chion (1999: 5) and his notion of *vococentrism*, the assumption that the presence of the human voice “structures the sonic space that contains it,” the soundscape of *Solaris* is dialogue-free, and free of explicit human-centered perspective. Consequently, the very process of turning off the building, a closure of publicly accessible private space, has become an invitation for the viewer to slow down, “unhumanize” a little and enter a state of extreme listening. Nonetheless, all customers are almost gone and the audience is left with a strange jellyfish floating in a water tank.

Heartening the senses, viewers are thrown into the blender of extreme close-ups of objects and wide fixed shots on the built environment. Finally, during the montage, we start to treat the film itself as a *perceptual object* (Merleau-Ponty 1964) which flashes out, attacks, and then draws viewers into the experience.

However, even if we, as researchers and filmmaking sensory ethnographers, succumbed to the belief that there is something valuable in getting closer to the inanimate structures, was it not to the dreams of its builders, translated into materials, designs, and procedures that we have been attuning ourselves? Was it not us foolishly trying to give up our individual agency over the creation of an art object, a sensory ethnography film? If so, what did we learn from it about ourselves and the aims of the anthropological endeavor?

In the next section, before we put *Solaris* into conversation with observational cinema, I will expand on the subject of mall experience as seen by contemporary scholars—both orientation and disorientation—and illuminate our post-fieldwork “hangover”.

SOLARIS AS A POST-MODERNIST ABJECT

Once the production was done, I wrote the following lines in the Author’s statement: “Its light burns right through my eyes. Apparently, my chances of becoming a big fan of shopping malls have never been high. However, getting older, I have realized it is not about the architecture or the perfection of daily shoppers, but rather my concern has shifted towards what it represents to me. A world of blissful ignorance, delivered packed and perfumed comfort from all around the world in an instant? A place where take-away happiness can be bought? I decided to confront that...” (Borecký 2015). Channeling the contempt into the Statement, was it me being unfaithful to the *how* approach we subjected ourselves to in the project? Where did such an interpretation come from and was it even possible to avoid it?

The number of urban thinkers, researchers of mall experience, who have never been “big fans” either is quite remarkable. In times of a booming international economy, crowd practice (Jameson, 1991), damnation to disorientation (Harvey 1989; Langman 1991), fetishistic consumption of commodities (Sennett 1994; Shields 1989), or notable condemnation of the mall as a postmodern simulacral place outside of history and identity, or “non-place” (Augé 1995; Baudrillard 1988; Soja 1989) these were the terms repeatedly illustrating the fatal power of the shopping mall over the agency of the individual. In this sense, the sad-but-true story of the builder of the first American malls in the 1950s pinpoints the persistent speculation that the design itself renders the centripetal logic of the capitalistic machine.

In the book *Centers for the Urban Environment* Victor Gruen (1973) presented his vision of a shopping mall as “an architectural panacea” helping to solve the problem of suburban labyrinth – the vicious circle of urban sprawl, motorization and separation of urban functions. Allowing Americans to leave their cars, stop being cut off from the city and from each other, the environmental, commercial and social issues were to be solved by one multifunctional building. Where the mall builder envisioned the liberation of human from machinic car-

oriented future and the concentration of people for the sake of community-building (and shopping), contemporary critics theorize “the classification on the basis of the observable characteristics of built form” (Woodward 2000: 340). In the urban studies terminology, “the Gruen effect” stands for a moment when consumers respond to “scripted disorientation” cues in the environment (Crawford 1992). Today, despite the growing scholarship that opposes consumption as “evil practice” (see, for instance, Daniel Miller’s 1998 case on shopping as an act of love, thrift and sacrifice), Gruen’s name represents recurrent suspicion leveled against shopping mall designs as an inherently simulacral prisons where one is to “get lost” and become a compulsive shopper.

However, in 2000, Ian Woodward’s anthropological team carried out a sociological survey among shoppers across three distinct malls in the Queensland region of Australia. While contributing to the refutation of “the unsupported assertions about the disorienting effects of postmodern space” (Woodward 2000), the case study points in two directions significant for the argument. First, in order to support the claim that it is flawed to confuse Marxist theoretical appeal with empirical validity, researchers cite Nigel Thrift’s observation made in “Geographies of Consumption” (Jackson and Thrift 1995: 341): “The picture of the mall as ‘an essentially threatening presence able to bend consumers to its will’ reflects the ‘residual influence of Marxian political economy’.”

Second, Woodward’s team proposed an alternative way of researching spatial experience, the one I find useful to think with while crafting cinematic sensory ethnographies. Quoting the first urban phenomenologist Kevin Lynch (in Woodward 2000: 343), the author of the influential *Image of the City*, they propose a thorough practice-oriented exploration of everydayness through the prism of *wayfinding* as “the ability of people to comprehend physical space and to generate problem-solving strategies” (Lynch 1960). Coming back to the Author’s statement, experiencing shopping environments for me in the past has never been associated just with a physical discomfort I wished to avoid.

Rather, I recognize now that it was the experience of physical discomfort itself that was influencing my views on concepts like the global economy, ecological sustainability, and Central European post-socialist momentum. In my text, infused with emotions, moral judgments, and a fair dose of irony, the building of a shopping mall serves as Saussurean signifier; an empty vehiculum standing as an epiphenomenon of perspective, formulated by Marxist critique, prior to the project of sensory ethnography itself. Would I be able to go beyond the search for language-driven narrative if one realized I had embedded contextual anchors directly within the film?

During the post-production stage I added Merleau-Ponty’s “where are we to put the limit between the body and the world since the world is flesh” as the opening quote and “to all aban-

doned vessels of consumerism” as the closing dedication (from the author’s film Website). As you can see, even during the editing stage, it has been difficult for me to bypass what Merleau-Ponty (1964: 49) calls an “attitude of analytical perception” and not offer a key to how to engage with and use the film, not to try to alleviate the anticipated sensory disorientation of a dialogue-free film by ideology-laden textual anchorage. Today, I think such a course of action is not only stimulated by a particular school of thought, but by my recurring concerns about questions of representation and, eventually, practices of scientific knowledge production itself. This impulse to eschew ambiguity, half-knowledge, and uncertainty is so rarely hailed in the world of academia, where to bring light into dark places is a noble goal everyone sets out to achieve.

Noticing that the post-modern mall somewhat prevented urban researchers from ironic, reflexive, and anarchistic types of movement known as *flânerie* and *dérive* advanced by Marxist writers Debord (1956), Benjamin (1983) or De Certeau (2011), opens up a new set of questions. Can and should anthropologists be free of an intellectual mindset in which a place, in our case a shopping mall, embodies first and foremost a specific nod created by the tradition critical of the totalitarian tendencies of capitalism? Is it viable, or even possible, to disregard the politics of perception in sensory ethnographic projects? Such a line of questioning can actually lead us down the transdisciplinary influences on and role of anthropology in the 21st century and cause us to ask: What do we aim to accomplish through our practices?

David MacDougall, in his book *Transcultural Cinema* (1998: 245), understands the key contribution of visual anthropology as: “the challenge that images and film pose to abstract cultural representations.” When it comes back to the prolific urban thinkers, would it be any different if Augé, Sennett and Harvey resisted treating the mall as a post-modernist abject and employed the audiovisual methods of sensory ethnography? Would they face the same challenges as I did in communicating their cultural critique? Before I pose what cinematic sensory ethnographies aspire to offer, what intellectual resources they tap into, and how the metaphor of *wayfinding* and the Antropocene debate fit into the picture, I will briefly elucidate the history of anthropological cinema and the framework of observational style, the one that uses the “humanized camera” (Grimshaw 2001), operates in a primarily realist film model (Taylor 1996), and which has nowadays become a new “golden standard” of ethnographic cinema worldwide (comp. Banks 1992; Kiener 2006; Suhr and Willerslev 2012).

THE SHAPES OF HUMANISTIC CINEMA

“Our ears cannot hear this way.” In a moment, I assume MacDougall might be suggesting this is not something worthwhile to be explored by anthropologists. It is just some frequency under or above the hearing range of humans, out of the scope of our perception.

What limits have we been touching here? As a prelude to the following section when we look into the ideas of perception and knowledge in visual anthropology, I suggest bearing in mind MacDougall's quote that "implicit in a camera style there is a theory of knowledge" (MacDougall 1998: 202).

To begin with a brief examination of the observational paradigm in visual anthropology, it is important to recognize that in foregrounding the issues of mind and body MacDougall and his collaborators contributed to a move away from the concept of the body as a transmitter/receiver of cultural knowledge (Lock 1993) and a "discursive object" (Turner 1994). Moreover, it is worth stressing that this happened before the introduction of practice theory (Bourdieu 1977; Ortner 1984) and following the rise of practice-oriented approaches. Yet despite the proliferation of more generative, inclusive, and human-centered research tactics, and the acknowledgement of the participatory character of knowledge creation, ever since the "writing culture" debate (Clifford and Marcus 1986), the shadow of the valid representation of a "cultural other" and the possibility of self-indulgent symbolic violence against the research participants has been eclipsing all contemporary anthropological endeavors.

In the field of visual anthropology, analogous concerns pertaining to the capacities of cinema have been debated intensively since the late 1960s. As MacDougall (2001: 88), one of the founders of the observational approach to filmmaking (UCLA), noted: "we wanted to replace the word-dominated structures of the illustrated lecture film and the all-knowing eye of Hollywood." In other words, we can see it as a response to the standardized form of anthropological film and as the formation of apparatus theory (comp. Baudry 1974; Metz 1974) which sees viewers as passive recipients. Thus, fitting the context of its time, liberating aspirations of filmmaking anthropologists were grounded in the conviction that film ought not to be understood as a carefully wrapped package of meanings or a self-contained, ready-made show, but rather as a more open-ended venture carried out by the participating viewer.

From the 1970s onwards, under the influence of observational reasoning, ethnographic filmmakers have been developing a distinguishable methodology and filmmaking style. It has been primarily evolving around the emotionally-invested filmmaker bonding with the main characters, the mimetic camera as "a physical extension of the camera's body," and a continuous montage of the *cinema of duration* (Grimshaw and Ravetz 2009: 548). Techniques of montage that evoke discontinuity are dismissed as methods evoking an omniscient view (Suhr and Willerslev 2012) whereas human embodied consciousness, cinematic *becomings* and empathetic *perception-images*, as elaborated later, were to translate into the methodology of unprivileged filming of "normal human participants" (Henley 2004: 114). Finally, ethnographic filmmaking has been gaining momentum since the 1990s due to works such as *The Corporeal Image* (MacDougall 2006) which helped to establish the new canon worldwide.

Since there have been others who eloquently expanded on the history of observational cinema (comp. Henley 1996; MacDougall 2006; Grimshaw 2001, 2008, 2009), for the sake of argument, I only suggest that the stance against the simulation of an omnipresent view of the camera, commitment to empirical experience, and a profound belief that the sense of truth may be recaptured through the intersubjective encounter were the main premises guiding the adventures of observational filmmakers. Yet, what lies behind the methodology and its premises? I suggest a focus on the notions that, in my opinion, provide the approach with a solid human-centered footing—perspective, empathy, and immersion.

Looking at Perugino's fresco it is difficult not to be overwhelmed by the depths and magnitudes it offers to the viewer – seemingly infinite landscape on a horizon, monumental architecture animated by everyday life in the middle and unfolding Biblical scene with Christ handing the keys of the Kingdom of Heaven in front.

FIGURE 3 - PERUGINO: THE DELIVERY OF THE KEYS (C. 1481-1482) SISTINE CHAPEL, VATICAN CITY (SOURCE: [UPLOAD.WIKIMEDIA.ORG/WIKIPEDIA/COMMONS/B/B4/ENTREGA_DE_LAS_LLAVES_A_SAN_PEDRO_%28PERUGINO%29.JPG](https://upload.wikimedia.org/wikipedia/commons/B/B4/ENTREGA_DE_LAS_LLAVES_A_SAN_PEDRO_%28PERUGINO%29.JPG))



Due to the 13th-century invention of perspective and projective geometry, boundless domains of art and science were to accurately render what was observed in the world and, subsequently, introduce a fundamentally new concern: how a scene actually looks to a particular person from a particular point of view. What kind of knowledge has become implicitly communicated in works of art masterfully adapting to and exploring new techniques of depicting the world?

In contrast to Giotto, the first Renaissance master who composed his sacral relations of men and godly beings on the indigo background of a vertical plane, it is the perspectival landscape

of Perugino that opens horizontal depths to the imagination of self in relation to other earthly beings and, consequently, draws Western civilization towards modernity and Nietzsche's "death of God." It is symptomatic that the commitment to realism in art starts receding only with the invention of the photographic camera, yet it has been the performance of perspectival art objects contributing to a gradual process of affective "enskillment of vision" (Grasseni 2007) that underpinned the humanist Enlightenment project. To make a quick "jump cut," so to speak: in the post-World War-era of inalienable human rights, once cultural differences become the ever-present basis of politics and acknowledging someone's "point of view" is a matter of mutual respect, "the plurality of perspectives" is already firmly entrenched in language metaphors of everyday life.

What theory of knowledge is implicit in the observational camera style? Echoing Anna Grimshaw (2001), I speculate that it is primarily the thinking of entities, distances and relations grounded in the recognition of an "ultimately shared humanity." What finally helps observational filmmakers to render the premises of "cinematic encounter" into film projects is a recursive rethinking of positionality, human perception, and film reception along the lines of phenomenology and Deleuzian film theory. At this point, let us be reminded of these foundations.

For phenomenologists, beings endowed with life are always conscious of something in their presence. Thorsten Gieser, paraphrasing Heidegger (2008: 301-302), offers a tentative phenomenological explanation of consciousness: "being is never alone but always 'with' other beings... Our being is therefore neither located in ourselves as subjects nor in the objects we are dealing with, but in between, in our relationships with the world." In other words, there is no barrier between the *self* and the world as one is always-already-elsewhere.

Inevitably, observational filmmakers find themselves attracted to the corresponding film theory. In the book *Deleuze and Film* Tereza Rizzo (2012: 70) argues that for the French theorist "cinematic images have the potential to produce *becomings* with the viewer blurring the distinction between the object and the subject, the film and the viewer... (cinema) contains both perspectives in the same shot, so that the perspective of one is reflected in the other without merging with it." What follows is a Deleuzian theory of *perception-image* as the image producing a sense of being with other characters. Direct encounter with the "other" who is ultimately *self-in-becoming* is of the utmost importance for the humanizing mission of anthropology.

When Pink (2006: 134) envisions the future of visual anthropology, she concluded that the main goal of observational cinema is to enable viewer empathy so he or she "can achieve understanding through those human similarities that transcend culture." Listening to the explanations of ethnographic filmmakers around the world, I can confirm that the phenomenological position is widespread—due to the synergy of senses one can "get there" and experience empowerment through appropriation.

In this sense, MacDougall’s recent writing (2015) is noteworthy. Whereas he revisits the theoretical description of the sense of proprioception, “the physical awareness we have of our own bodies” (Sherrington 1906: 5), and links it with the discovery of mirror neurons (Ramachandran 2010), he finally claims that if the sensations of a sensory environment in a film can be evoked through the experiences of film subjects, then, in effect, by watching film we actually share our proprioception with film subjects.

Consequently, evoking immersive associations with other human characters through empathy, “imaginative, at once emotional and cognitive, projection of oneself into the perspective or situation of another” (Hollan and Throop 2011: 5), thus becomes the pinnacle of observational filmmaking in visual anthropology. Since I assume the experienced filmmaker is aware that there is no such thing as non-mediated recording and that perception is a performative act, I deduce that David MacDougall’s comment in Freiburg was mainly based on the conviction that without an orientation toward the cinematic mediation of human consciousness, the project of anthropological cinema would lose its power and influence.

Instead, as I intend to argue in this paper, visual anthropology with its contemporary theory of knowledge has reached the stage when the initial motivations, be it a struggle against lecture films, the “all-knowing” cinematic eye, and a human-centered focus, have slowly exhausted themselves. Coinciding with the success of hybrid genres of docufiction and mockumentary--implying the increasing film literacy among the audience--are new questions and challenges that ethnographic filmmakers need to face. In this article I propose that the mission of filmmaking anthropologists needs to revisit approaches that were suppressed during the purification era and enrich the paradigm by introducing new methodologies, while moving beyond the frame of human-centered cinematic evocations.

FIGURE 4 - KEVIN MOLLOY, SONIC ETHNOGRAPHER IN SOLARIS (2015) (SOURCE: AUTHOR)



More specifically, I will argue that these are the thresholds that sensory ethnographers, including our modest contribution of a short film on nighttime in a Tallin shopping mall, have already started inhabiting, thus rejuvenating the very observational tradition itself.

THROUGH THE LAND WHERE THINGS CAN SPEAK

First, let us remind ourselves of the epistemological uncertainties stemming from an encounter with an inanimate object that was to be rendered “on its own terms,” and the fact that the mall might not be anything more than the tangible result of the creative agency of human builders. Isn’t there an apparent paradox? Isn’t the idea of the non-human perspective only wishful thinking, and a misguided anthropomorphism introduced by the authors?

To bypass the drawbacks of the question of what an accurate and reliable representation could be, and reach beyond the relics of social constructivism, human geographers Jamie Lorimer (2005) and Nigel Thrift (2008), inspired by Latourian “flat ontology,” suggest a radical shift of the human-centered paradigm in the humanities. In the attempt to encompass diverse yet interrelated intellectual strands (actor-network theory, material culture studies, phenomenology and speculative realism most influential among them), non-representational theory has been envisioned as “an umbrella term for diverse work that seeks to better cope with our self-evidently more-than-human, more-than-textual, multi-sensual worlds” (Lorimer 2005: 83). The subject matter of the research concerns itself with practices and performance, affective resonances, backgrounds and events as vital processes through which relations take place.

To outline the potential of the hybrid genre, while being anti-biographical and pre-individual, experimental, materialist and, preferably, body-oriented, Thrift (2008: 5) suggests that the first programmatic tenet is to “capture the on-flow of everyday life.” If one is to recognize the syncretic character of the non-representative way of thinking and, gradually, to approximate its status as “the logical development of post-structuralist thought and the most notable intellectual force behind the turn away from cognition, symbolic meaning, and textuality” (Vannini 2015: 2), then one consequently enters a landscape in which the deeply entrenched Cartesian divide between body and mind, nature and culture, object and subject, has been challenged. In simple terms, the first architects of non-representative theory inspire us to look elsewhere, to feel differently. To forget memories that make us see what we have learned to see and instead embody the perceptions of a child, of fresh openness, of limitless curiosity, of fearless passion.

To draw conclusions significant to the *Solaris* project, it is fascinating that the same impulse was a recursive motive of the filmmaker-poet Andrei Tarkovsky. Inviting the filmmaker into the conversation, I need to admit that, since the original sci-fi

film *Solaris* addresses the limits of communication in proximity to a living planetary entity, exploring the *more-than-human* entanglements in the shopping mall sharing the same name intentionally adds an extra-diegetic interpretative layer I played with during the production phase. Next, what the admirer of Japanese haiku hails as a “precise observation of life,” akin to the essential truth of cinema (repeatedly elucidated in his films), was the human weakness which “does not allow for individual expansionism, for the assertion of the personality at the expense of others or of life itself” (Tarkovsky 1987: 209). In my view, the filmmaker’s fervor echoes the anxieties of post-humanism, a branch of cultural theory critical of the foundations of humanism and its legacy (Esposito 2011), one which seems to be unlimited by being confined to a particular discipline and, instead, marks a deeper ethico-aesthetic metamorphosis that Western science (namely, the humanities), is currently undergoing.

Bringing material discourse into the mix, shall we say that the mall could really “speak to us” as Martin Holbraad (2011: 4) suggests? According to him, there is an issue that goes untouched in the discourse on the rise of things, one central to the aims of sensory ethnography. As for how to widen the circle of the human and resist pits of positivism, the anthropologist distinguishes two stages on “the axis of radicalism” labeled as “humanist” and “post-humanist.” Humanists, such as Danny Miller or Alfred Gell, seek to emancipate the “thing” in terms of “the ontological division between humans and things,” i.e. emancipate things by association with humans, while post-humanists, here Latour, Ingold and Viveiros de Castro, would do so by going further and emancipating them in and of themselves, i.e., by “showing that they can radiate light for themselves” (Holbraad 2011: 4). The author (2011: 18) himself speculates that the “thing” must be de-theorized so it could “differentiate...itself no longer as an instantiation of a concept but self-transformation as a concept.” To summarize the principal difference and to translate the lesson of the Russian filmmaker into the vocabulary of cultural studies, whereas for humanist-oriented materialists the epistemological tradition remains unchallenged, post-humanism frames a different ontology of both people and things which basically involves a profound redefinition of being in the world. However, how to make such a project attainable?

Here we have reached the land dominated by philosophical thought. I thus elucidate the notions of epistemology and ontology as they are seen from the like-minded outposts of speculative realism. In opposition to Kantian philosophy, in which the ontology of things is conceived in terms of “closure” and the epistemology of human beings to whom the world is predetermined by their minds, languages, and cultures, the contemporary philosophical movement insists on the primacy of “things,” flattened subjects and objects, while recognizing alterity as a primordial phenomenon of gentleness (Levinas 1969). In this sense, the ontological question of what things are, cannot be reduced to the hegemonic human-centered focus on the epistemological cognition of “things.”

FIGURE 5 - THE MAIN HALL OF SOLARIS KESKUS ("SOLARIS," FILM STILL, 2014) (SOURCE: AUTHOR)



Instead, *ontological realists* such as Brassier, Morton, Harman or Shaviro claim that, in order to “run away from traditional anthropocentrism and take the existence of non-human worlds seriously” (Shaviro 2014: 45), we need to speculate as children touching snow for the first time. We need to speculate about a profoundly suggestive proposition: a concept of the social that does not stop with the human community.

Taking the aforementioned schools of thought seriously and attempting the see links between them, I thus dare to speculate that non-representative theorizing strives to transcend the postmodern relationalism which, in its extreme, posits that the existence of things resides in their relations to other things.

As a consequence, when you (as viewer), me, and a jellyfish engage with the mall or perceive the film-object in cinema, the thing itself dissolves in the network of divergent perceptual relations.

Eventually, individuals and cultures melt into interpretative perspectives, because, to turn Susan Sontag’s (1966) formulation on its head, the thing does not matter; rather, what matters it is what is said about the thing. On the contrary, forming non-representative methodologies posits that in order to move beyond fundamental constructivism, it would be fruitful to come back to the intellectual cross-road that led us to the nature/culture divide, humble ourselves before the dynamics of current ecological challenges, and open the conversation with inherently speculative practices developed in other domains of human activity.

What are anthropologists to share with the field of art? The scholarship examining the potential for the mutual enrichment of “makers” has grown in recent years (see Marcus and Myers 1995; Schneider and Wright 2010; and Ingold 2013).



FIGURE 6 - "THE STORE" (AN EXCERPT OF PHOTOGRAPHIC COLLECTION, MARIA AUA, 2015) (SOURCE: AUTHOR)

Where as Tim Ingold (2013: 73) argues that anthropology needs to aspire to a more generative rather than descriptive horizon and pinpoints the capacity of cultural makers of different sorts to catch “dreams and coaxing materials,” editors of influential collections on art and anthropology have been consistently underlining the capacity of art to push the limits of moral and aesthetic values. More specifically, for Marcus (1995) the affinity of “discourse fields” concerned with culture and values prompts him to seek ways that art stimulates “cultural critique.”

Arnd Schneider and Christopher Wright (2010), meanwhile, locate the impact produced by an “aesthetics of estrangement” within dialectical aspects of the interplay between perceiver and perceived. I read these claims as calls for the future expansion of new transdisciplinary spaces where the anthropologist’s skill at connecting individual practice to the wider social world, and the artist’s motivation to make a re-generative impact on society, engender the use of diverse media through which the embodiment of implication-in-things and ethical action become both methods and aims. In terms of the argument put forth in my article, I recognize one overarching challenge that has already started to breach the shared ground.

Concluding this overview of recent developments in domains vital to the project of sensory ethnography, I pose a provocative question: Isn’t it somewhat paradoxical to strive for the decentralization of the human ego and the ontological reconstitution of our being-in-the-world precisely at the height of the Great Acceleration, when a globalizing civilization has awakened to the Anthropocene era, a new geological epoch marked by the

fundamental influence of humans over planetary ecosystems (Crutzen and Stoermer 2000; Steffen et al. 2015)? Allow me to illustrate the subject with a question from Donna Haraway: “The *anthropos*—what is that? All of *Homo sapiens sapiens*? All of mankind? Fossil-fuel-burning humanity is the first short answer...[Anthropocene] would probably be better named the Capitalocene, if one wanted a single word” (Haraway in Davis and Turpin 2015: 259). Once the use of the negative *non-representative* label slowly shifts into that of the *more-than-representational* (Lorimer 2005) and the *more-than-human* (Tsing 2014; Whatmore 2006), it is the moment of the revival of ecosystemic approaches spearheaded by Bateson and Deleuze that feed into emerging multispecies methodologies. This moment coincides with the urge for an instigator of the new materialism to start doing the anthropology of the future while focusing on the ethics of possibility, the collective practice of imagination and a general reconstruction of the idea of the social (Appadurai 2013). Today, the overlapping contributions of geography, anthropology, and philosophy are the first responses to scholarship spanning arts, humanities, and natural science. This is the call that the methodologies and aspirations of visual anthropology need to acknowledge. Therefore, in spite of the possible reservations, this is the moment I feel compelled to ask: What challenges do these recent reconfigurations exposed by the debate pose to the dominant observational tradition in visual anthropology?

THE SENSORY ETHNOGRAPHY IN TIMES OF ANTHROPOCENE

When blindness abruptly entered the life of Professor John M. Hull, he felt it was not only his eyes losing sight, it was happening to his whole body. While reorganizing his sensorium, throughout the years John had to face the disappearance of visual images of his wife and closest friends. Fighting the loss of memory by clinging to nostalgia it was one of the most stressful periods in his life. However, one day John made the decision: “I have decided to let the memories go and live in now. I have decided to become a deep blind person and create a new world with tactile non-visual images” (Hull 1992: 159). Delivering the speech to the participants of the Serpentine Gallery’s Memory Marathon he added: “Sighted people on a whole do not realize that they live in the world which is a projection of their sighted bodies. They think the sighted world is the world, therefore they think blind people must be without the world... To unite we need to discover wholeness through plurality. If we go too quickly to unity we finish up with the totality of the dominant, with the one world created by the powerful” (Hull 2013). It is as if I could hear a comment by multispecies ethnographers on the exclusionary centrality of humans, or, more specifically, Anna Tsing’s accusation raised against Heidegger’s phenomenological scholarship which posits that an animal cannot make the world because it has no language and no history.

Moreover, similar to how John was clinging to beloved memories, I was looking for familiar patterns while finding myself in the disappearing lights of the gloaming shopping mall. I found Marxist political economy and the anchoring quotes of Merleau-Ponty. In contrast to John, I was not brave enough to give myself fully to the embodiment of a non-representative and object-oriented attitude. However, struggling with disorientation, I fathom how the *how* approach of sensory ethnography initiated the enskillment of a special perceptivity that has much more to offer than I could possibly fathom in words.

Now, following the advice of ontological realists, I will risk stepping further into the land of speculation and continue tapping into the intellectual resources which may guide the post-humanist filmmaking project. I start by questioning the whole idea of perspective, saying it is cold as a tomb because it has been co-opted by the postmodern constructivist paradigm that suggests the world is created by competing representations. Even though the paradigm tends to generate a solid resource for relativizing the lures of totalitarian ideologies, it still reminds us of the anthropocentric world. Next, as has already become apparent I advocate for the suspicious approach towards externalized concepts ruling over the agency of an individual. Judging language and resulting ontic *meta-objects* (Rapport 1997) as some kind of evolutionary advantage over nature can be at once liberating, yet at the same time we need to be aware of the costs. The dominance of the human voice in a cinematic soundscape is only the notorious tip of an iceberg. Last, I cannot help but see the possibility of violence behind the notion of immersion through empathy and a conflict with Levinasian alterity one is to compelled to preserve. For instance, the definition of empathy coined by Carl Rogers (1975: 4) directly suggests that: “it involves entering the private perceptual world of the other.” Rather, I side with Bubandt and Willerslev (2015), who recently rightly proposed that the ability to empathize can serve “darker” power-laden purposes. Is it viable to think of the limits of such a penetrative concept of empathy?

Drawing on the previous sections of this article, I believe that the fine and solid tree of the observational film has already started to grow new tender and pliant branches. They sprout from the non-representative strands of *becomings* without merging perspective and the materialist ontology of things as *radiating light for themselves*. While once the technological advancement of the 1960s allowed filmmakers to enter the lives of people and develop variations of an observational approach spearheaded by Rouch, Leacock or MacDougall, now it is the experimentation with miniature contact microphones and Go-Pro cameras that merges with the introduction of multispecies ethnography, the growing awareness of a damaged planet and the rejuvenating fields of art and anthropology; the attempts to pay attention to what has been backgrounded, yet always present. Even though one could classify the work of observational cinema as inherently humanistic, i.e. falling into Holbraad’s

category of projects who strive to “emancipate things by association with humans,” it has been David MacDougall who has pointed in the direction he, however, has not been willing to advance cinematographically.

At the conference “The Challenge of Atmospheres” MacDougall (2015) advocated for a “cinema of proximity.” Drawing on a difference between the long-range and close-range vision of art historian Aloïs Riegl (Riegl in Deleuze 1987), the author suggests entering “tactile space,” the ability of vision to evoke sensations of touch which are attainable only within the close-range sphere. This tactic was used while exploring an elite boarding school in India and the phenomena was described as social aesthetics: “the specific combination of rituals, customs, colours, textures, and physical surroundings that peculiarly defined the school” (MacDougall 2015: 2). The solution to the problem of how to film an elusive and ever-present phenomenon of social aesthetics, the school’s distinctive atmosphere, was to recall the subjective experience of school students while closely examining their daily life (MacDougall 2015). Following the empathetic approach, it is the experience of being a student that renders the environment. For the emergence of post-humanist cinema, it is, however, essential to draw a bit different conclusion from Riegl, rethink and expand the sphere of aesthetics, and continue further.

First, to start seeing contours of post-humanist cinema, I suggest we need to escape the notion of aesthetics as a matter of beauty or art; the judgmental discipline shaped by the orientation to communication and the resulting dominance of semiotics. The path inspired by phenomenology and fueled by the sensuous shift in the humanities was proposed by Gernot Böhme, who argued for new aesthetics as concerned with “the relation between environmental qualities and human states” (Böhme 1993). The expanding sphere of aesthetics is to overcome the subjective-objective dichotomy by encompassing the shared reality of the perceiver and the perceived within the relational idea of the atmosphere.

Second, it is worthwhile to liberate the notion of atmosphere in film theory from its vague use. While pointing to the “halo, atmosphere or nimbus,” Böhme (1993: 117) credits Walter Benjamin for “opening a new dimension of art theory.” However, to Benjamin “the aural effect,” something happening in a presence of aesthetic objects, possessed an environmental origin since it was derived from observations of himself and natural landscapes: “the experience of aura...[has] a certain natural impression or mood as background and certain receptivity in the observer.” Aura, then, flows forth in a spatial manner.

In my opinion, it could be aesthetics, a domain neglected and ridiculed by ethnographic filmmakers (Weinberger 1992), now theorized as “a sphere of causality” (Morton 2013) and atmospheres as “the primary ‘subjects’ of perception... by means of which environmental qualities and human states are related” (Böhme 1993: 179) that opens a new terrain of sensuousness to the post-humanist cinema.

Third, an important cornerstone of the new aesthetics is that of the revision of emotions as a person's imminent being-in-the-world. As I have briefly described in the section on observational film, to Heidegger (1993: 179) what is often felt as an "atmosphere" one can enter, is not a purely inner state but a mood resulting from "a context of involvements." As long as we allow ourselves to think of perception not as a sum of stimuli but, simultaneously, the variation of relations with "others" and emotions existing in the gesture (Merleau-Ponty 2005), we could start tuning ourselves to experiences of sensory ethnographies as *wayfinding* ventures akin to the *raw moments* described by Kirsten Hastrup (2010: 205); moments when "thought, emotion and action unite in a singular experience of the boundaries between the self and the environment." It would strike a challenge to current theories of causality that have replaced moments of mystery with demystification, understanding, and knowledge, and represent a leap of faith into the uncharted terrain of *more-than-human* worlds.

Given the consistent attempts to crystallize post-humanist theories and refurbish aesthetics as a plateau from which to embark on *more-than-human* projects, I propose that there is something promising in spatial metaphors. Growing out of the ecosophical practice of Gilles Deleuze and his notion of *territory* as a distance between two beings (2004), this could enhance thinking about perspective in a wider, more nuanced, and more respectful way, a looking and listening as if gently touching not for the sake of penetrative immersion but rather for the ethico-aesthetic act of *witnessing without distance* (Ruyer 1952). This is the way sensory ethnographic film might act upon the viewer: rather than representing the subject, the film would have a bio-political dimension. On this matter I refer to the explication of Allana Thain (2015: 42) in the special edition of *Leviathan* (IMDB, 2012): "the tactic of sensory ethnography refuses the corrective distancing from sensation as a way of knowing the world, [rather] proposing an immanent alternative to the politics of representation through the ethico-aesthetic experience." What films such as *Sweetgrass*, *Leviathan*, and *Solaris* exemplify through the rejection of language-driven human-centered narrative, is an anthropology allowing for a politics not bound to colonization by one particular message and filmic perspective. Instead of merging and exploiting each other, they proceed along and look in the same dimension.

In conclusion, where MacDougall argues "close-range" for the sake of a human-centered exploration of social aesthetics, I claim that the ethico-aesthetic project of sensory ethnography is the practice of elaborating atmospheres in an attempt to reframe a human-centered window. In this sense, hyper-realist enhancements of seeing and hearing serve as an invitation to revisit the confidence of civilized humanity.

Presenting my personal experience as a justification of the argument, I gradually realize that being surrounded by the sudden chaos of non-human resonance provides an experience that tends to complement human vision with new *becomings*.

The question of how one directs and uses such potential of constant doing and reshaping (Ingold 2013) and perpetual readiness to rewrite the narrative (Bruner 1990), however, remains.

CONCLUSION

In this article I have reflected upon the experience of doing a sensory ethnography of a Tallinn shopping mall; the first encounter with a project on post-humanism and related schools of thought. The personal journey has been eclipsed by the continual learning curve that spans from the initial moments of ingenuous fascination by the subject to the film's reception at anthropological festivals where I have had the chance to contribute. As the phases of reading, filmmaking and analyzing can be hardly separated, the structure of the text respects this syncretic developmental logic and remains largely open-ended, since I am aware it has been the encounter that cannot be easily translated into cognitive schemes.

Although it has been difficult for me to resist the agency of Marxist tradition and post-modern conceptualizations, their presence needs to be acknowledged and creatively acted upon because they have become historical meta-objects with the intention to structure the *mallness* of the shopping mall I have attempted to render. However, even if it might be partly attributed to stress, tiredness or temporary sensory deprivation, the initial disorientation combined with the closeness to the materiality of the gloaming building gave birth to the development of a special perceptivity towards the man-made environment. Judging by the first reactions of the audience, I am convinced that *Solaris* encapsulates echoes of this subtle transformation. Furthermore, the sincere tuning to the resonances of atmospheres in the building via tactics of the *how* approach led to the subsequent examination of the notions of perspective, immersion and empathy as they guide the current project of observational cinema.

I recognize that the observational style is a vital and well-established approach which has greatly enriched the methodological repertoire of anthropological film as well as the history of cinema in general. It is guaranteed it will continue to influence future generations of storytellers, yet I claim there has been an awakening of imagination that goes beyond the human-centered realism it encourages. Instead of the consistency of a subjective point of view and the reserved style of cinematographic montage that have been sought after as viable solutions to emancipating viewers and their empathetic association with human characters, the recent works of sensory ethnography filmmakers has incited instead the bliss of losing a viewpoint, experimentation with the immersiveness of aural experience and a meticulously forward-looking attention to where life goes next.

This approach does not necessarily repudiate human consciousness *en bloc*, especially given the involvement of human

beings in the very production itself, yet, it attempts to raise awareness towards *more-than-human* realities through direct ontology and its experimental embedment in the filmmaking style itself.

As I have guided you into the lands of thought where I expect to find intellectual resources valuable for the post-humanist project – phenomenology, non-representative theory, speculative realism and art, I evoke the notions that have the potential to complement the premises of observational filmmakers and stimulate our imagination towards *more-than-human* worlds. The single most significant one is the axiom of shared reality of the perceiver and the perceived within the relational idea of the atmosphere as a means through which environmental qualities and human states are related. What follows it is the argument that doing sensory ethnography is the practice of elaboration of atmospheres in an attempt to reframe a human-centered window. It is based on a firm conviction that the cinematic assemblage might possess the capacity to transcend the way we relate to the world of things, flattened subjects and objects, and let them figuratively speak on their own through the workings of atmosphere.

At this point of our journey I need to conclude that the inception of a speculative imagination necessary for such a project cannot be solely attributed to technological advances, nor to the development of hybrid genres of docufiction or mockumentary. I rather situate its strongest sources within the domain of new non-judgmental aesthetics and post-humanist paradigms catalyzed by the debates on the Great Acceleration. Operating in this context, sensory ethnography becomes the ethico-aesthetic project that serves the aspirations of post-humanism, calling for deeper ecological sensitivity and profound ontological reconstitution of what it means to be human. Growing out of the understanding that it is industrialized humanity that needs to adapt to the new geological era, the emancipation of post-humanist cinema shall only be a matter of time, effort, and concentrated focus on the educational impact such films can bring about.

It used to be that observational cinema attempted to challenge the fear of otherness through empathy. Now it could become sensory ethnography that addresses the consequences of the nature/culture divide and expands the idea of the social that does not stop with the human community. Building upon the brief yet intense experience with this approach, I am positive this journey toward a more robust sociality would be a worthwhile one.

Finally, I would like to present a personal wish. Since it is the very pliancy of being and the elusiveness of our imagination that needs to thrive, let us be cautious of the conclusions and principles we draw. May humans not rush too fast from disorienting darkness toward the light of things.

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OFF-TOPIC ARTICLES

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LA PERCEPCIÓN NO CONCEPTUAL EN EL CINE ETNOGRÁFICO DE JORGE PRELORÁN (ARGENTINA, 1960/1970)

ABSTRACT

The prominent figure in Argentine ethnographic film has long been Jorge Prelorán. He is the filmmaker who has perhaps most thoroughly reflected on his practice. Prelorán defined in his work and writings what he meant by ethnographic film: neither ethnography nor cinema, but rather both at once. Neither science nor art, but located in the middle of the magnetic field that both areas radiate. He made about fifty ethnographic documentaries in Argentina. Prelorán built his career on the idea that all images that can be combined to make a film are part of this infinite bank of things that can be called “the universe.” If the world of film images is independent, to say they are “created” as a “representation” is impertinent. Under this conception, the subject is no longer the center; therefore, he is not entirely in control of his creation. Gilles Deleuze understood this quite well in his revolutionizing contributions to film studies. Movement-image film is action and reaction, a constant updating of the operation of a sensory-motor mechanism. In the development of these problematic issues through the films of the Argentine filmmaker, I will discuss principles that movie studios have considered as revealed truths, including the concept of authorship.

KEYWORDS

Argentine Ethnographic Film - Perception - Jorge Prelorán
Anthropocentric - Heterodox

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Casi como un juego, lo tomábamos más en serio de niños, divagamos sobre si este mundo es una puesta en escena y todos a quienes nos cruzamos, amamos u odiamos son o no actores. El ejercicio lúdico también puede llevarnos a concluir que todo lo que percibimos está en nuestra mente y nuestro cuerpo real se encuentra, conectado a mil cables, junto a Neo. Ya es suficiente... Gracias a nuestras limitaciones e interrogantes irresolubles debemos admitir que el Universo es algo que nos excede. Somos una cosa más dentro del mismo. Así como lo son las imágenes que están ahí, que a veces vemos, otras capturamos, otras ignoramos. En fin, no somos el punto de partida ni de llegada de las imágenes cinematográficas. Esas imágenes son independientes de toda representación subjetiva. El cine participa de un universo de “imágenes inmanentes que no esperan ninguna mirada humana”, como afirma Paola Marrati (2003: 34) leyendo a Henri Bergson para recalcar en Gilles Deleuze. Todas las imágenes que eventualmente el cine puede recortar para hacer un film están en este infinito banco de cosas que es el Universo.

Si el mundo de las imágenes cinematográficas es independiente, decir que son “creadas” en tanto que “representaciones” resulta impertinente. Bajo esta concepción el sujeto ya no es el centro, por lo tanto no queda por entero el control de su “creación” bajo su órbita. En otro lugar decía que luego de Darwin y su teoría de la evolución de las especies¹ resulta, cuando menos, arriesgado afirmar que el ser humano se constituye en el factótum del universo. Trasladado al cine: las imágenes son materia, actúan y reaccionan unas sobre las otras. Existen en sí porque todo es luz. La luz no la aporta la conciencia, como para buena parte de la tradición filosófica, las cosas no se encuentran en la oscuridad esperando ser reveladas. La conciencia es una cosa más, según Bergson (que ha leído profundamente la teoría de la relatividad de Albert Einstein). Las imágenes no aparecen porque apretamos un botón de una cámara, están. Un árbol se desploma estruendosamente luego de la caída de un rayo en medio del campo y allí no hay nadie para verlo ni registrarlo. Sin embargo, es una imagen.

Asimismo el mundo no es “representado” por el cine. Ya que si las imágenes son materia, cosas, son parte del mundo y no una entidad externa que la calca más o menos fielmente. “Es necesario observar que las imágenes cinematográficas –afirma Marrati–, lejos de ser la representación o la copia de una realidad ontológica que le sería exterior, son imágenes entre otras sobre un *solo y único* plano de inmanencia” (2003: 47). No hay duplicación. Ello no quiere decir que por lo tanto no puedan existir las imágenes del mundo en el cine. Haciendo la salvedad del cine de animación, que debe ser estudiado con otros parámetros, todo el cine nos otorga imágenes del mundo, incontraladas, que nos indican su forma. Ficción o documental son categorías que se definen socialmente y no ontológicamente (y que sin embargo no desecho, discusión para dar en otro momento).

El cineasta (realizador, guionista, camarógrafo, montajista o cualquier persona involucrada en el hacer cinematográfico)

¹ Véase el capítulo 13 de Campo (2012).

no comanda “su” film por entero, el mundo es independiente. Las imágenes son cosas de este mundo, no son representación. La acción de tomarlas y percibir las no las separa del universo para su duplicación, las imágenes siguen participando de ese juego de reflejos constante por sobre nuestra voluntad. Definitivamente el cine no puede ser entendido bajo el patrón de las demás artes. Tampoco, acordando con Andrei Tarkovski, tiene un carácter sintético. Es otra cosa.

Así lo entendió Deleuze, revolucionando los estudios sobre el cine. Como imagen-movimiento el cine es acción y reacción, la actualización constante del funcionamiento de un mecanismo sensoriomotriz. Así también lo entendió Jorge Prelorán en la concepción de un cine no antropocéntrico. En lo que sigue analizaremos algunas de sus films trajinados por imágenes que sugieren una percepción no conceptual, abriendo un conducto entre lo objetivo y lo subjetivo, recuperando las ideas que hasta aquí solo han sido sacadas a relucir.

¿QUÉ SIGNIFICA TODO ESTO? ¿UN EJERCICIO FILOSÓFICO QUE PRETENDE SUMARSE A LOS ESTUDIOS ININTELIGIBLES DEL CINE?

No. Esta suma de frases solo reenvía a las bases de nuestras cavilaciones. Es una búsqueda ontológica. Las imágenes cinematográficas se valen de las imágenes del mundo, son imágenes del mundo, son imágenes en este mundo, son cosas de este mundo. Y, así como este mundo no fue creado ni es controlado por el hombre, las imágenes cinematográficas guardan un grado de autonomía. No hay que confundirse: las cámaras, micrófonos, moviolas son inventos técnicos creados por el hombre. Pero las imágenes ya estaban antes de ser creados los dispositivos técnicos que han permitido su fijación en celuloide o memorias electrónicas.

Stanley Cavell, como Deleuze, deplora el uso de la palabra “representación”. En todo caso, debería decirse “transcripción” debido a que las imágenes no han sido “hechas a mano” sino producidas automáticamente y ello da una “imagen del mundo” (1979: 20).² Larga es la historia y lejanos están ya los debates en que a André Bazin se lo enjuiciaba *post-mortem* por haber afirmado, entre otras cosas, que el estatuto de la fotografía y del cine no es el de la pintura. Sin ahondar en esas polémicas, Cavell retoma solo la esencia de aquello, haciendo una ontología despojada de alambradas, como proponemos aquí: “se ha vencido a la subjetividad [...] por el *automatismo*, removiendo al agente humano de la tarea de la reproducción” (1979: 23).

Algo tan simple y evidente como eso suele ser dejado de lado. Los conceptos “cine de autor” y “*camera-style*” han inducido esa marginación. En sus versiones extremas, belicosas y obtusas esas nociones han sido utilizadas para trocar la independencia del mundo por la independencia del director. Volviendo a lo simple: solo es una manera de decir que la cámara puede volverse un bolígrafo, productiva solo usada responsablemente.

² Las citas de Cavell son de traducción propia.

El cine es imágenes del mundo. Aquello que tiene un grado de automatismo trabaja con aquello que es independiente. ¿Sujeto? ¿Autor? ¿Qué es eso?

Nuestro poder para la “creación” de imágenes es relativo. Dependemos de una gran cantidad de factores intervinientes que da vergüenza enumerar (la luz del sol o el reflejo de la luna, el viento, la forma de los objetos naturales). Las imágenes no son un mundo, son del mundo.

ESTUDIOS ANTROPOLÓGICOS Y CINE ETNOGRÁFICO

Antes de proceder al análisis de los films de Jorge Prelorán desde una perspectiva ontológica es necesario reponer con qué transformación académica se relaciona: con el desplazamiento, en los estudios antropológicos, desde la construcción del otro por la diferencia hacia aquella, de influencias marxistas, que se fundamenta en la “desigualdad” de poder. Jay Ruby y Marc Henri Piault acuerdan en que se trata del pasaje que se resiente entre Robert Flaherty y Jean Rouch. Esta última vertiente en el cine etnográfico no puede ser consecuente consigo misma sin promover una reflexión sobre las mismas condiciones de producción del film, incluidas las creencias del realizador.

Pero esa reflexión se produjo antes por efectos, usos y factores cinematográficos, o artísticos si se quiere, que por principios estrictamente científicos. La reflexión auto conciente está cada vez más presente en la investigación pero, con resabios fuertes de las ciencias duras, es más lo que se proclama como sabido (casi todos manifiestan la imposibilidad de la absoluta “objetividad científica” en las ciencias humanas) que la puesta en cuestión de la propia subjetividad en los procesos de investigación científica. Por tal motivo, el cine etnográfico es más un desprendimiento del cine que de la antropología, según Adolfo Colombres (2005: 20-21).

Es por ello que la afirmación de Ruby, quien dice que los films etnográficos son aquellos realizados “por o en asociación con antropólogos” (Ruby 1996: 1349), entra en conflicto con gran parte de las realizaciones consideradas etnográficas. Es decir, son excluidos Flaherty, John Grierson, Joris Ivens, Raymond Depardon, Johan van der Keuken y otros tantos eslabones en el desarrollo de un cine etnográfico (y en el caso argentino es completamente abandonada tal categoría) o es matizada su definición distanciándola de los principios formativos científicos más duros.

Piault diferencia entre “documentalismo” (cine científico-antropológico, en este caso) y “documental informado” (cine etnográfico). El “documentalismo” pone en imágenes una descripción científica de la realidad, utilizando el material como prueba. Mientras el “documental informado” representa “datos relativos” sobre la vida de los hombres, cuestionando la extensión de una descripción objetiva. El primero es objeto de una observación antropológica metódica, mientras el segundo se vale de un enfoque antropológico (Piault 2002: 120).

Incurсионando decisivamente en esta segunda vertiente será Jean Rouch quién dejará de plantear los films como “meros subproductos en las investigaciones científicas” (Guarini 1991: 368), y comenzará a desarrollar de manera sistemática este principio. El film ya no será una fuente, una descripción de determinadas actividades, ya no podrá ser considerado como una “evidencia” de lo que hacen los otros, como un “reflejo”. El campo de la representación será problematizado, y con él el cine etnográfico llegará a la mayoría de edad.

En tal sentido la diferenciación excluyente entre “integridad etnográfica” y “estética cinematográfica”, establecida por Karl Heider (1995: 85) -en la que la indagación sobre la realidad no podrá ser jamás abordada mediante el tratamiento creativo de lo real-, será puesta en crisis por las nuevas corrientes en el cine etnográfico. En el cine etnográfico, considerado por muchos como el más ortodoxo de los discursos de la sobriedad documental, comenzó a aflorar en las últimas décadas una práctica ubicable -siguiendo a Bill Nichols- dentro de la modalidad performativa, como aquella en la cual los elementos expresivos no se supeditan a ninguna estructura rígida prefiriendo la sugerencia a la explicación (Nichols 2003: 204-210). Inclusive se llegó a concebir el concepto de “etnografía experimental”, impensable hasta hace poco, acuñado por Catherine Russell para designar “una incursión metodológica de la estética en la representación cultural, una colisión entre la teoría social y la experimentación formal” (en Weinrichter 2005: 58).

Para Russell se trata de romper las barreras entre las vanguardias buscando los indicios de “lo social” por una práctica cultural que fusione la innovación estética y la observación social (Russell 2007: 138). Siguiendo el mismo proceso contemporáneo del cine documental en su conjunto “la etnografía se libera -de esta manera- de su vínculo con lo real y de sus supuestos sobre la verdad y el significado” (Russell 2007: 131)³. Por ello el cine etnográfico actual no debe eludir el peligro histórico de “convertirse en arte”, sino asumir que la etnografía “puede incluso considerarse una práctica experimental donde teoría estética y cultural se fusionan” (Russell 2007: 134). A pesar de estas innovaciones en el plano discursivo la representación del mundo social e histórico no es elidida, sino que sigue constituyendo la materia del talante referencial del mensaje.

El cine científico-antropológico como aquel que “sirve” como la libreta al investigador, está asociado a la afirmación de Ruby sobre la necesidad de ser dirigido, o asesorado, por un antropólogo; o a la diferenciación establecida por Heider y que fue citada en el párrafo anterior. En consonancia con ellos, Jack Rollwagen destaca que “el cine antropológico no es simplemente la grabación de lo que el ser humano dice o hace, sino la interpretación de estas grabaciones en el marco de la disciplina antropológica, incluyendo la totalidad del proceso de filmación, desde su concepción hasta su ejecución” (Rollwagen 1995: 338). Sin embargo, circulando por otros carrieres, cierto cine etnográfico sin pretensiones objetivistas fisura

³ La autobiografía se constituye en una de las formas más transitadas de etnografía experimental. Modificando así de plano la noción clásica de etnografía, como aquella dedicada al estudio de los “otros” (Russell 2007: 147). Michael Renov es quien probablemente haya sido quien ha estudiado más en profundidad las prácticas performativas en su encuentro con la etnografía en el documental. Véase, por ejemplo, su “Domestic ethnography and the construction of the ‘other’ self” (Renov 1999).

esos marcos e introduce otros parámetros de interpretación o, incluso, representa costumbres culturales sin proceder a explicaciones científicas concluyentes.

PERCEPCIÓN E IMAGEN, IMAGEN-PERCEPCIÓN

En este recorrido lógico es comprensible que hayamos llegado a Deleuze. Fue el filósofo que vio en el cine algo que no habían visto los demás: que sus imágenes no solo son del mundo sino que arrastran un modo de percepción no natural. “El cine no responde en absoluto al modelo de la percepción natural subjetiva”, dice Deleuze (1991: 98). No tiene centro, no tiene ángulos de encuadre limitantes. El primer avatar de la imagen-movimiento sería aquel que se refiere a un centro de indeterminación, que aún no ha reaccionado, la imagen-percepción. Ubicada cerca de la imagen-acción, en la frontera, la imagen-percepción siempre está “a punto de”.

¿Es posible un cine de imágenes percepción? Según Deleuze estas conviven con las otras dos, a la imagen-acción hay que sumar la imagen-afección, son la mitad de la imagen-movimiento. Si se tratase de imágenes percepción puras ya estaríamos dentro del terreno de la imagen-tiempo; el espacio del cine moderno en que las imágenes no accionan y reaccionan unas sobre otras, fluyen. ¿Y qué de un tipo de films que dentro de un esquema sensorio-motor, orgánico, diluyesen la reacción de sus imágenes? Seguiría siendo un cine de imagen-movimiento, pero con imágenes-percepción perezosas que sugieren una acción que no llegan a concretar. Es posible encontrar en algunas de las etnobiografías del realizador argentino Jorge Prelorán este tratamiento.⁴

En *Hermógenes Cayo* (1969), *Medardo Pantoja* (1969) y *Cochengo Miranda* (1975) las imágenes se niegan tanto a la acción como a la afección. Están cerca de ser imágenes ópticas puras (condición de ser de la imagen-tiempo), pero la banda de sonido y el montaje narrativo las mantienen dentro del terreno de la imagen-movimiento. Esas imágenes percepción no concretan específicamente una acción, no reaccionan cabalmente, pero sugieren la misma. Prelorán ejerce una operación de montaje de manera que las imágenes acción sean elididas. El centro de indeterminación se prolonga en el metraje.

Aunque Prelorán no pone el ojo en la materia, no propone una “composición maquinística de las imágenes movimiento” (Deleuze 1991: 123), como ese otro maestro de la imagen-percepción: Dziga Vertov. Las imágenes en Prelorán no varían en

⁴ “Lo que deseo proponer –dice Prelorán– es una forma de documentación que se ha dado en llamar etnobiográfica. La palabra implica el filmar/grabar a las personas en su lugar de origen (etnografía es la descripción de una cultura), y hacerlo estructurado alrededor de la biografía de un individuo que pertenece a la cultura que se decidió documentar” (2006: 22). Para un repaso de su trayectoria y análisis de los films puede leerse Taquini (1994), Rossi (comp., 1987), Prelorán (2006) y el capítulo 5 de Campo (2012).

RECORTES QUE NO LLEGAN A SER IMÁGENES AFECCIÓN EN MEDARDO PANTOJA (JORGE PRELORÁN, 1969)



⁵ Existe una versión con una narración de Manuel Mujica Láinez.

⁶ Una escena del film sí hace reverencia al uso maquinístico vertoviano: manos, pinceles, rodillos en el hacer de una xilografía se montan con imágenes breves de trabajadores en un cañaveral. Imágenes distantes que varían de forma extrema sus reflejos. La breve incursión de Prelorán en el montaje discursivo.

LA CONEXIÓN ENTRE
TRANSCRIPCIONES Y
REPRESENTACIONES EN
MEDARDO PANTOJA (JORGE
PRELORÁN, 1969)

todas sus caras y partes como en los films más experimentales de Vertov. Más que un cine de intervalos de choque es uno de puntos de sutura reabsorbibles. El montaje es suave.

Tal es así que pareciese faltarle alguna imagen final a las secuencias, la concreción / acción en que ese devenir de formas deja de estar suspendido en ese centro de indeterminación. En *Medardo Pantoja*, dedicado al pintor jujeño, se suceden los oleos de paisajes puneños e imágenes de los mismos.

Sin voz *over*⁵, con sonidos de la naturaleza y música autóctona las imágenes fluyen de la mano con el pincel a las obras terminadas, “comparadas” con el paisaje. Solo aparece desencuadrado el rostro de Pantoja, sin expresiones, no hay afección aquí sino el fragmento de una cara así como aparecen porciones de tierra o de su paleta en otros planos.

Las imágenes están suspendidas, no reaccionan. Y sin embargo sugieren que ese artista representa esos paisajes (no resulta impropia la utilización del término “representación” aquí; el pintor, a diferencia de Prelorán, representa, duplica). Las imágenes percepción sobre el hacer se conectan, vagamente, pero lo hacen, con las obras y su medio.

Sin embargo no “informan” sobre todo lo demás que ha de resultar importante en un film didáctico y biográfico. La experiencia estética no es acompañada con otras funcionalidades.⁶ Es el film de Prelorán más estático, haciendo referencia a ese centro de indeterminación, en el que la imagen-percepción aún no es conceptual.



NI CONCEPTUAL, NI ANTROPOCÉNTRICO

Es posible una percepción no conceptual cuando una imagen-percepción no tiene “correlato con la imagen-afección y la imagen-acción”, según Edgardo Gutiérrez (2010: 33). Es la percepción en sí y por sí misma. Dando como resultado un cine en que la percepción natural tendiente a otorgar un significado definido a lo visto no tendría el control (¿por qué debería tener la primacía? se pregunta Gutiérrez -2010: 34-). Acostumbrados a traducir las imágenes a conceptos de un repertorio común, en otras palabras a que éstas se conecten con imágenes acción, humanizando la ininteligible complejidad del mundo, la detención de las imágenes percepción plantea un desafío. El desafío que buena parte del cine experimental, que por la imposibilidad de clasificar con categorías más precisas sirve como cubículo donde depositar los films “raros”, nos ha planteado. Un cine despojado del anclaje en el sujeto, un cine no antropocéntrico.

IMÁGENES PERCEPCIÓN QUE
DESCRIBEN SIN INTERPRETAR
EN HERMÓGENES CAYO
(JORGE PRELORÁN, 1969)



Es un cine de finalidad sin fin, “un cine que describe, que muestra lo que es” (Gutiérrez 2010: 105), sin ejercer una interpretación conclusiva sobre las imágenes y sonidos. Son las etnobiografías de Prelorán, especialmente las tres que aquí analizamos. *Hermógenes Cayo* está narrada por su protagonista, a través de la vocalización del intérprete Anastacio Quiroga. Pero la transmisión de sus vivencias e ideas no empujan a los márgenes la textura de las formas llenas de luz bajo el sol de la puna. Las imágenes fluyen sin ser simplificadas, ahogadas, por el relato oral (que, por otra parte, no ocupa ni un tercio del metraje del film).

PRIMEROS PLANOS QUE
DEBERÍAN SER IMÁGENES
AFECCIÓN. HERMÓGENES
CAYO (JORGE PRELORÁN,
1969).

Cayo trabaja sus crucifijos de cardón y sus manos son las que expresan el temple de ese hombre; su rostro, que sí aparece en primer plano de frente a diferencia de los otros dos films, parece del mismo material que el corral y la casa: de piedra. Un rostro que trabajando, casándose, caminando o muerto es siempre el mismo. El primer plano no induce una imagen-afección. Los planos generales, amplios, del paisaje desértico de la puna son para el film lo mismo que los primeros planos del rostro de Cayo. Por contraste sus manos realizan una tarea manual cual si fueran piezas de una máquina de hacer figuras religiosas.



Hermógenes Cayo se percibe. Las secuencias no desembocan en nada más que en la mostración. Probablemente si Prelorán hubiese tenido la oportunidad de filmar sin cortes para tener que cambiar de bobina (su cámara Bolex le daba una autonomía de tan solo veinte segundos) estaríamos frente a films en los que primaran los planos secuencia. El camino de la imagen-percepción es el de la búsqueda del lenguaje de la realidad y, si le hacemos caso a Pier Paolo Pasolini, es en tiempo presente. El tiempo del plano-secuencia (Pasolini 2005: 322). La percepción, la mostración, en *Hermógenes Cayo* está lograda gracias a la procesión de imágenes detenidas, pero imágenes movimiento al fin, que recortan un fragmento de lo real transcurriendo, al parecer, en tiempo presente.

Sin uso del plano-secuencia pero con un montaje suave, como ya se destacase: cosido con puntos de sutura reabsorbibles que fluyen en la continuidad de la infinita tira de imágenes percepción. Según Deleuze hay imágenes percepción subjetivas y objetivas, sean vistas por alguien al interior o al exterior del conjunto (1991: 109 y ss.). Pero como ocurre casi siempre cuando se realiza una clasificación, surge la mixtura que “supera lo objetivo y lo subjetivo hacia una Forma pura que se erige en visión autónoma del contenido” (Deleuze 1991: 113). Ejemplo de ello es el punto medio elucubrado por Pasolini como subjetiva indirecta libre. Ni un plano totalmente externo, objetivo, ni uno que simule el punto de vista de un personaje. Imágenes percepción en las que resulta indistinguible lo puramente subjetivo de lo objetivo, como en un sueño, una alucinación o una película de Prelorán.

SUBJETIVA INDIRECTA
LIBRE ¿SENTIMIENTO DE
LOS ANIMALES? COCHENGO
MIRANDA (JORGE PRELORÁN,
1975).



Las imágenes del carnaval, la procesión o el casamiento en *Hermógenes Cayo* se presentan con encuadres oscilantes, ralentizadas en algunas ocasiones, capturadas como con una cámara danzante que es un protagonista y no lo es.

Cuando pareciese definirse una subjetiva directa el encuadre se amplía y vemos la imagen del conjunto, cuando el plano de las acciones es general se acerca y participa del ritual. O, más enigmático, las subjetivas indirectas libres de *Cochengo Miranda*, ¿el sentimiento de los animales escapando entre los arbus-tos de jarilla? ¿la transcripción objetiva de un rodeo?

EL HOMBRE SIN ROSTRO.
COCHENGO MIRANDA (JORGE
PRELORÁN, 1975).

Los animales, “chúcaros” según Miranda, están presentes de forma intermitente a lo largo de todo el film. Se vuelven protagonistas de las imágenes no antropocéntricas de Prelorán. Los encuadres oscilantes (aberrantes suena peyorativo), a través de las plantas espinosas de la pampa a corta distancia del piso, introducen a las imágenes dentro de un túnel que pareciera ser aquel que pudiese llevar nuestra perspectiva a un tiempo en que aún no nos llamábamos a nosotros mismos “seres humanos”. El furtivo escape ante el sentimiento de peligro. El posterior amansamiento de los mismos, su caza y muerte son vistas con un ojo que no parece humano.



⁷ Esa falta, según Graciela Taquini, “crean formalmente una cierta distancia” (1994: 25). Como aquí sostengo, esa distancia es descripción sin afección. Si el rostro es concepto es pura percepción no conceptual.

⁸ “Lo enterramos y nada más... Y nada más” dice la viuda de Cayo. No hay nada más allá de la muerte como de la percepción: ni paraíso, ni concepto.

Por otra parte, Miranda es tan humilde (“mi nombre no se agranda... Soy apenas un puestero”, dice) que no tiene rostro, no hay primeros planos de frente, aunque su perfil tomado desde la espalda es bien conocido.⁷ Los planos generales de la pampa se suceden, incluso registrados desde el aire, para que la suspensión de tiempo y acciones se sostenga ¿Qué vemos en esa planicie infinita y eterna? En *Cochengo Miranda* pasan los eventos y las estaciones, los sujetos siguen en su medio y nada se modifica. Asimismo, *Hermógenes Cayo* no concluye con algún tipo de reacción a lo percibido, sino con un corte definitivo, la muerte del protagonista.⁸ La imagen-percepción no culmina con la imagen-acción, ni pasa por la imagen-afección esquiva. La percepción queda suspendida, no hay anclaje, no hay centro. Ni conceptual, ni antropocéntrico.



ACCIÓN Y AFECCIÓN, ESQUIVAS

El cine de Jorge Prelorán resulta un caso interesante para reflexionar sobre imágenes que manifiestan la voluntad poco frecuente de otorgar una percepción no conceptual. No es el único realizador en el mundo que se ha introducido en estos terrenos pantanosos enemistados con la industria del cine, pero es uno de los pocos que en la Argentina ha evitado la frase concluyente, el montaje didáctico simplón y la captura de imágenes antropocéntricas. Con más de cincuenta films realizados a lo largo del país es uno de los pocos que puede exhibir relámpagos de preeminencia de imágenes percepción no conceptuales en su filmografía.⁹

¿Cómo ha podido realizar eso? Primordialmente lo más interesante, y valioso para nosotros para concluir estas páginas, es destacar que ha encontrado una forma de retraerse en pos de un cine descentrado del sujeto cineasta. Un cine no antropocéntrico, como ya se ha afirmado, logrado gracias a la fluidez ganada por las imágenes percepción que urden, al menos, los tres films aquí analizados. La suspensión de las mismas en ese centro de indeterminación que caracterizara Deleuze es un rasgo distintivo de estos films de Prelorán. La otra parte de esas imágenes, necesaria para completar el círculo de la imagen-movimiento, no se hace presente cabal y firmemente. Las imágenes acción son sugeridas por la continuidad lógica de lo que está presente en las imágenes percepción.

PAMPA LISA, INMENSA,
SUSPENDIDA EN EL TIEMPO.
COCHENGO MIRANDA (JORGE
PRELORÁN, 1975).

⁹ Edgardo Gutiérrez analiza y suma a este grupo reducido el caso de los primeros films de Lisandro Alonso (véase el capítulo VII de su libro, 2010).

Suponemos que Pantoja ha tenido formación, vende sus cuadros y es reconocido por el ambiente artístico, pero solo lo vemos pintando en unos pocos planos y luego sus obras finalizadas se suceden intercaladas con paisajes. Suponemos lo mismo de Cayo pero solo lo vemos bajo ese sol abrasador de la puna. Y creemos que Miranda ha obtenido la tenencia legal de sus terrenos; pero su viaje a Santa Rosa no concluye con precisiones. Qué decir de la imagen-afección. Los pocos primeros planos de Pantoja están desencuadrados, Cayo no mueve un músculo en su rostro y de Miranda solo vemos su espalda y perfil. Esos oscuros objetos de deseo, combustible sensorio-motor de la imagen-movimiento, se niegan a ser mostrados.

CIERRE: NO TAN PODEROSOS

No todo lo que está en la imagen depende de los seres humanos. La naturaleza tiene parte en este asunto. Los films son construcciones pero no todo lo que plasman en imágenes obedece a las manos y al intelecto del operador o el director, no todo es subjetividad aplicada y punto de vista: la materialidad profunda de lo real (el referente, como dice Roland Barthes) es independiente de los hombres. Pura construcción, pura convención es el lenguaje y no la foto o el cine. En el cine, documental como aquí interesa tratar, el autor/operador no es omnímodo, como sí lo es en la pintura. Los elementos de la naturaleza en imágenes (aire, agua, fuego, tierra y seres humanos también) dan cuenta de que lo real estuvo ante la cámara. Es decir que no todo es dominado por el operador, el montajista o el director. Se defiende aquí la tesis que, en consecuencia, *no todo* es construcción y punto de vista en acto en el cine documental. No dando cabida al antropocentrismo, en pocas palabras: hay algo de la realidad *irreductiblemente* en las imágenes.

Entre los dispositivos representativos hay evidentes diferencias, no es lo mismo la pintura que la fotografía o la escultura que el cine. ¿Por qué empeñarse en afirmar que donde participa la creación humana sólo hay construcción, un punto de vista que domina la representación como si estuviésemos colocando en un mismo cajón a los dispositivos manuales (la pintura) y a los maquinístico-técnicos (la fotografía, el cine)? La búsqueda referencial realista es la misma, pero los dispositivos son de diferente carácter. ¿Por qué tanta vergüenza debiese darnos afirmar que en la fotografía y en el cine algo de lo real persiste? ¿Hasta cuándo deberemos pagar las cuentas de aquellos que se excedieron haciendo un culto de las imágenes maquinístico-técnicas como transparencias de la realidad? Lo contrario, depositar todo en favor de la subjetividad, también es un exceso, un error. No vale la pena detenerse para hacer aclaraciones sobre la no correspondencia de la visión y las imágenes fotográficas o cinematográficas, está claro: las imágenes planas son bidimensionales y el aparato óptico humano capta lo real tridimensionalmente. No se trata de una cuestión de "objetividad" debido a que aquí no se trata de una intelectualización, sino de una analogía con la visión.

En el afán de decretar que todo es “punto de vista” algunos se han olvidado que una foto o un plano de un lago tiene más puntos en común con el lago de los que los tiene una descripción escrita sobre las características del lago.

La naturaleza está allí siguiendo su rumbo cíclico perceptible e imperturbable: las olas chocan contra las rocas, el sol se ve o las nubes lo ocultan, los seres humanos tienen una anatomía común que se refrenda con cada nacimiento. Y todo esto más allá de nuestra voluntad. No todo es artificio ni todo es ficción (ni siquiera en el cine de ficción), indefectiblemente el cine es construcción pero no sólo eso, también realización bajo las reglas de lo indomable, la naturaleza. Y ella se presenta en imágenes ya no absolutamente mediadas, como ocurría en la pintura o la escultura, sino que guardan resplandores de lo realmente percibido. Cuando la tomamos la modificamos, sin dudas, pero esencialmente sigue estando allí. El cine documental no captura la realidad tal cual es, ni como quisiéramos que fuese, Pero algo de ella, aunque le pese a antropocentristas de la imagen, persiste en el cine documental.

Las imágenes cinematográficas son cosas, materia en el mundo. El cine no comienza ni termina en nosotros. Y las imágenes percepción no conceptuales de Prelorán son un buen ejemplo para deducir que es posible un cine no antropocéntrico. Ya estamos grandes para creer que todo gira a nuestro alrededor.

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ARTICLES

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EXPLORING DIGITAL ETHNOGRAPHY THROUGH EMBODIED PERSPECTIVE, ROLE-PLAYING AND COMMUNITY PARTICIPATION AND DESIGN. INTRODUCTION

ABSTRACT

This special issue of Visual Ethnography explores the idea of digital ethnography in terms of community participation and design and perspective and role-playing in digital media. This introduction briefly outlines the place of perspective and role-playing in expressing cultural heritage and cultural experience, and provides an overview of insights and techniques from the fields of participatory research and design. An introduction to the articles in the special issue follows, focusing on the diverse ways in which they offer practical and reflective perspectives on community participation, collaboration, and perspective in projects involving living cultural heritage, as well as the negotiation of space between researcher, subject matter, and the medium(s) through which lived experience is conveyed.

KEYWORDS

digital ethnography; digital heritage; digital storytelling; visual ethnography; participatory approaches

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INTRODUCTION

This special issue of *Visual Ethnography* explores the idea of digital ethnography in terms of community participation and design and perspective and role-playing in digital media. The articles in this special issue offer practical and reflective works on digital heritage particularly as they address concepts of participatory research and design and perspective as enabled (or problematized) by multimedia ethnography. As such, the articles in this special issue offer practical and reflective perspectives on topics such as community participation, collaboration, and perspectives in projects involving living cultural heritage, as well as the negotiation of space between researcher, subject matter, and the medium(s) through which lived experience is conveyed.

Digital heritage is a field that has benefited from contributors from diverse fields including history, geography, architecture, and the arts (Bentkowska-Kafel, Denard, and Baker 2012; Cameron and Kenderdine 2007; Cohen and Rosenzweig 2006; Kalay, Kvan, and Affleck 2007; Knowles and Hillier 2008; Parry 2007 and 2013; Tallon and Walker 2008). Cameron and Kenderdine's edited volume (2007), for example, critically examines the ways in which cultural heritage practitioners use digital media.

The contributors to this work consider these approaches and practices from a theoretical perspective, while grounding those theories in practice to explore topics including the influence of digital technology on the concept of scholarly authority and the relationship between the material and digital object. Kalay, Kvan, and Affleck (2007) digital heritage volume considers topics such as efforts to capture both tangible and intangible heritage in relation to fields as diverse as philosophy and architecture. Bentkowska-Kafel, Denard, and Baker's (2012) volume addresses issues of best practices in the practice of virtual heritage, including the ethics of "transparency" in creating computer-based visualizations.

Other digital heritage works concern the application of this field to museum studies. Parry (2007), for example, investigates the uses of computers by the museum sector, and asks whether and how a basic "incompatibility" exists between museum practice and computer science. The book provides a history of museum computing and explores how the increase in and refinement of standards and coordination has resulted in the development of a new cultural role for museums. Tallon and Walker (2008), meanwhile, explore the creative incorporation of technology into museum exhibit practice. The volume discusses the potential of mobile technologies for increased visitor interaction and learning, and offers guidelines for future work.

Digital heritage work concerning the field of history also contains helpful insights for cultural heritage theorists and practitioners more generally. Cohen and Rosenzweig (2006) explore the uses of the Web for historical research and practice, offering a practical, step-by-step approach to topics including

understanding and choosing appropriate technologies, creating a useful site design, and reaching and communicating effectively to an audience. Knowles and Hillier (2008), meanwhile, discuss the use of GIS (geographic information systems) in the study of history, offering case studies and essays concerning the use of a diverse set of tools to visualize historical information, as well as how digitally modified and georeferenced images enable researchers to study GIS in relation to history.

Two areas of particular relevance to this special issue concern community participation and design, and perspective and role-playing in digital media. These will be addressed in the following sections before moving onto an introduction to the articles that form part of this special issue.

COMMUNITY PARTICIPATION AND DESIGN

Community participation and design are methodologies that have emerged from two main areas: participatory research on the one hand, and participatory design on the other. Community-based participatory research (CBPR), a broad category of research methods, is used in such fields as health, environmental, and related areas of study. It is a form of collaborative research that involves enabling structures of participation by communities affected by a particular health or environmental issue. This includes such collaborative practices as shared decision-making and shared ownership of research processes and products (Viswanatha, Ammerman, Eng et al. 2004).

Castleden, Garvin, and First Nation (2008), somewhat similarly, defines CBPR as: “an attempt to develop culturally relevant models that address issues of injustice, inequality, and exploitation” (Castleden, Garvin, and First Nation 2008: 1393).

One such methodology is Photovoice, “a CBPR method that uses participant-employed photography and dialogue to create social change” (Castleden, Garvin, and First Nation 2008: 1393). Photovoice was originally developed by Caroline Wang (Wang and Burris 1994). Castleden, Garvin, and First Nation 2008 et al. have written on their efforts to modify the methodology for use with a First Nations group in Canada. They write: “CBPR is an umbrella concept that includes research conducted under many different designations, including action research, participatory research, participatory action research, and collaborative inquiry” (Castleden, Garvin, and First Nation 2008: 1394). Generally concerned with issues of social justice and questioning the “objectivity” of the researcher, CBPR and its related methodologies typically involve reflection, dialogue, and action (Kirby and McKenna 1989). Other participatory research methods include digital storytelling (Lambert 2012), participatory geographic information systems (PGIS) and participatory archives and museums (Gubrium and Harper 2013). Participatory design (PD) is a methodology that seeks to actively include end users in the design process (Schuler and Namiooka 1993). The approach began in Scandinavia as part of computer systems development, and since then has expanded to a number of fields that seek to involve stakeholders in the design process.

PD follows an iterative process, one that involves gathering evaluative feedback and using this to help plan redesign cycles. Watkins (2007) describes this methodology as an iterative process involving design, production, and evaluation, moving from a period of “due diligence” involving observation, review, and project strategy creation to prototype production, evaluation, and then redesign. In PD projects, scholars from multiple disciplines are brought together with potential users and a design/production team to collaborate. Ethnographers and digital heritage experts can make an important contribution to this area of work by advising on structures of collaboration and interaction in such projects and in building the social infrastructure necessary to promote community involvement (Giaccardi and Palen 2008).

In relation to participatory design (PD), Rode (2011) argues that ethnography and Human-Computer Interaction (HCI) (within which PD figures) can intersect powerfully in terms of reflexive approaches. Rode (2011) advocates adapting particular practices for HCI; namely, through the composition of reflexive ethnographies, which stand in rather stark contrast to the normally positivistic production of the HCI field. Such reflexive (and generally ethnographic) techniques include: “discussing rapport, writing thick description, engaging in participant-observation, and presenting work as confessional or impressionistic tales” (Rode 2011: 9). She writes: “Given our participatory design heritage, our design informant’s voice is relevant. We need to integrate this dialog into our own. Conversely, we need to make sure the voice of the ethnographer’s first-hand experience in the field is not lost as we record these experiences...Participant observation allows us to explore technology use through embodied experience. Reflexive text, at its best, embraces and impacts the data gathering encounter, providing untapped sources for design inspiration” (Rode 2011: 9).

The contributors to this volume each grapple, albeit in different ways, with issues related to community participation and design. For example, Walters and Michlowitz’s article in this volume provides both practical and reflective perspectives on the possibilities and risks of developing story-based virtual reality applications for the humanities involving recent historical events. As their projects involve subjects who may still be alive and history which is still being written, their work offers a compelling test case for engaging with issues of community participation, collaboration, and negotiation. In addition, the PeruDigital project discussed by Underberg-Goode and Hopp in this volume, like others that employ the Participatory Design model, uses an iterative process. In this case, opening up the design and interpretation process can enable new media designers to better create new media representations of cultural heritage that reflect cultural values and ideas. Argo et al.’s digital heritage project about an African-American neighborhood in Orlando, Florida follows a methodology that involves community outreach, evaluation, and negotiation in developing this mobile storytelling resource. Reedy and Clemons’ article, too, addresses issues of collabora-

tion in the production of a multimedia documentary project about Kentucky bluegrass musicians Frances and John Reedy.

The articles in this special issue, then, draw upon the insights and techniques of participatory research and design. They also share a concern with the ways that the potential for perspective and role playing enabled by multimedia can be used to express cultural heritage and cultural experience.

PERSPECTIVE AND ROLE-PLAYING

Scholars have considered whether and how digital media has changed the way ethnographers have sought to convey cultural knowledge through their attempts to recreate a sense of “being there.” Boellstorff (2008), after engaging in fieldwork inside Second Life, argues that such a virtual world is nonetheless a profoundly human one. He writes: “Virtual before the Internet existed, ethnography has always produced a kind of virtual knowledge...Representations of persons in virtual worlds are known as ‘avatars’; Malinowski’s injunction to ‘imagine yourself’ in an unfamiliar place underscores how anthropology has always been about avatarizing the self standing virtually in the shoes...of another culture” (Boellstorff 2008: 5-6).

Multimedia and multisensory ethnography potentially permits us to share and understand culture, in part, through enabling a sense of perspective and, in the case of interactive media, spatial navigation. Multimedia and multisensory ethnography understands culture as concerned with feelings and the senses—as more than just thinking or being (Marion and Offen 2009).

Pink (2008), writing about the visual ethnography in/of movement, argues that ethnographers can represent routes and mobilities — and thus a sense of place — using audiovisual media. Taking a cue from Casey (1996), she argues that place is a “process” rather than a static “thing,” and that such work can be understood in terms of Rodman’s (2003) notion of multilocality (or how place is constructed from multiple viewpoints). As she writes: “audiovisual representations offer us possibilities to empathetically imagine ourselves into the places occupied, the sensations felt by others...We may not feel precisely the same sensations as those represented did, nor understand these through the same culturally and biographically informed narratives. Nevertheless it is important not to undervalue the potential of visual images to invite us to imagine ourselves into other people’s worlds, and in doing so to empathise with their emplacement—both physical and emotional” (Pink 2008: 4).

Such an approach may involve constructing non-linear or interactive multimedia expressions that facilitate the adoption of perspective and the sense of immersion (Bell and Kennedy 2007). By giving audiences a sense of “being there” while being invited to explore materials more deeply, viewers/users are encouraged to consider how to see, question, and interact with a culture from multiple points of view. The goal is thus to help the audience grasp the situated nature of cultural knowledge. This cultural knowledge and experience can be shown through

a sense of perspective and spatiality perhaps unique to the digital medium (Coover 2003). Flynn (2007) encourages digital heritage experts to consider how to enable an embodied mode of interacting with heritage through the act of navigation, made possible by adapting ideas from game design to cultural heritage projects. Champion (2011, 2015), in particular, has written on the design and evaluation of cultural heritage environments that incorporate game design techniques to facilitate cultural learning, including role-playing, interaction with objects, and avatars. The idea of role-playing, like that of conveying a sense of “being there,” of course, has a long history in anthropology and performance studies (Goffman 1959; Turner 1987). Both playing a role in a cultural performance and playing one in a role-playing game require some kind of understanding of the underlying philosophy or set of rules by which the “universe” operates (Hughes 1988).

The contributors to this special issue of *Visual Ethnography* have also grappled with the way that perspective and role-playing can figure in the presentation of cultural heritage and cultural experience. Walters and Michlowitz, for example, focus on how the application of virtual reality, with its ability to engage the imagination and form visual links, can weave together the individual threads of a singular discipline into a multidisciplinary tapestry of exploration. In the ChronoLeap project, the journey is conveyed to the target user group, 9-13 year olds, through a time travel storyline. Here a time paradox transports the user back to the 1964/65 NYWF in search of STEM clues to assist in closing the rift in time. These activities provide a motivating and informative vehicle to encourage students’ appreciation for a multidisciplinary viewpoint during key years in their educational development. The PeruDigital project discussed by Underberg-Goode and Hopp, on the other hand, uses the potential of hypermedia and digital environments to address how linguistic communities and cultures view and interpret the world. Argo et al.’s essay focuses on the design, prototype, and evaluation stages of a multimedia heritage project combining text, images, audio, and maps into an augmented reality mobile story experience that presents the heritage of the Parramore neighborhood of Orlando, Florida. Reedy and Clemons, for their part, frame the issue of perspective in terms of autoethnography, “voice”, and counterhistory. Finally, Borecky’s contribution, in contrast, takes a different tack, arguing against the human-centered viewpoint dominant in much contemporary visual ethnography. As he explains: “Building upon the audiovisual project on a Tallin shopping mall...[the article] tells the story of a personal struggle for the embodiment of a non-representative and object-oriented attitude and challenges the main premises of human-centered observational filmmaking style.”

Taken together, the articles in this issue provide a diverse set of ways to conceptualize perspective and role-playing in visual anthropology and digital cultural heritage scholarship and practice.

INTRODUCTION TO THE ARTICLES IN THIS SPECIAL ISSUE

The approach illustrated by the articles in this special issue use ethnography and related methodologies to inform problem-solving at all steps of the project process, which, one hopes, can lead to a more inclusive approach to the digital realm that can facilitate cultural learning.

Underberg-Goode and Hopp's article "Investigating Cultural Learning in Digital Environments through PeruDigital" examines the PeruDigital project, a digital ethnography project that presents Peruvian festivals and folklore on the Internet through an immersive and interactive environment. This project, like others that employ the Participatory Design model, is an iterative process, one that involves evaluation and garnering feedback into the design loop. In addition to employing Participatory Design principles, the project seeks to bridge current work in digital heritage with the concerns of current anthropological theory. This chapter focuses on current interdisciplinary research between faculty in Digital Media, Anthropology, and Education to study what and how students learn about cultural heritage from the website. The experience suggests that the role-playing and immersive potential of digital environments can be used to facilitate cultural learning, but that pathways through those environments need to be carefully structured so that cultural knowledge can be learned.

Walters and Michlowitz's article "A Retrospective Perspective on the Digital Recreation of Mid-Century Subjects" reflects on lessons learned and suggestions for future projects focused on using the tools of virtual heritage for the representation of the recent past. The challenges and opportunities involved in this type of work result from the fact that those who are still alive can both contribute to the development of such projects and "talk back" regarding the representation of their history, lives, and culture. The authors explore these issues through consideration of multiple projects engaged in over the years: *Shadows of Canaveral*, *ChronoLeap: The Great World's Fair Adventure*, and *ChronoPoints*. The participatory approach to involving the public in the projects raises interesting questions about community participation, collaboration, and negotiation in contexts in which those represented can answer back and offer critiques.

Bartley Argo, Nicholas DeArmas, Amanda Hill, Sara Raffel, and Shelly Welch's article "The Way it Used to Be: Exploring Cultural Heritage Through the Augmented Reality Story of a Neighborhood Soul Food Restaurant" explores the challenges and successes in developing a mobile app-based "situated documentary" project undertaken by graduate students at the University of Central Florida (UCF). The project has the goal of documenting and telling stories about the heritage and lives of the historically African-American Parramore area of Orlando. The article focuses on the design, development, and evaluation of a prototype project focusing on the experiences and memo-

ries of a local soul food restaurant owner, and efforts to develop connections (both partnership and curricular) with Parramore-area schools to empower young people to both learn about their community's heritage as well as how to make similar projects of their own so they can participate in telling their community's story.

Timi Reedy and Tammy Clemons's article, "Audiovisualizing Family History: An Autoethnography of a Digital Documentary" explores visual media production in the Appalachian cultural region of the United States, examining video as a method to not only research and document others but also to empower communities and individuals to tell their own stories through film. With a focus on the process of co-producing a multi-media documentary project about Frances and John Reedy, relatives of the documentary producers and founding Bluegrass musicians and songwriters, the article explores issues of collaboration, perspective, and representation, as the documentary itself is based on the lives of relatives of the project producers.

Pavel Borecky's article, "Tuning Solaris: From the Darkness of a Shopping Mall towards Post-Humanist Cinema" builds upon an audiovisual project on a shopping mall in Tallinn, Estonia, to outline the conceptual resources essential to an ethico-aesthetic agenda of sensory ethnography and to link them with the ambitions of post-humanist cinema. By doing so it tells the story of a personal struggle for the embodiment of a non-representative and object-oriented attitude and challenges the main premises of human-centered observational filmmaking style. The article argues that by provoking the experience of disorientation and *more-than-human* closeness, sensory ethnography can contribute to the birth of post-human sensitivity and profound ontological reconstitution of our being-in-the-world in the Anthropocene era.

CONCLUSION

This special issue of visual ethnography was written with the hope of expanding the field of visual ethnography by focusing on how ethnographic and related methodologies can inform project conceptualization through evaluation and perhaps lead to a more inclusive approach to digital heritage creation. In addition, the volume's general focus on the authors' work with contemporary communities produces an informative and rich discussion about the delicacy of negotiating the space that exists between the researcher, the subject matter, and the people with whom scholars work.

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PHOTO-ESSAY

NATALIE UNDERBERG-GOODE
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ARCHAEOLOGY AND CULTURAL TOURISM ON THE NORTH COAST OF PERU: IMAGES FROM A REGION IN TRANSITION

ABSTRACT

This photo essay explores cultural tourism on Peru's North Coast, a region primarily known for its impressive archaeological sites, such as the Royal Tombs of Sipán, Huacas del Sol y de la Luna, and Chan Chan. Focusing specifically on the impact of heritage tourism on local communities, the photo essay illustrates how archaeological discoveries have contributed to new opportunities for community empowerment and improved quality of life as well as to a changing understanding of the history and cultural heritage of the region.

KEYWORDS

cultural tourism; Peru; regional identity; archaeology; community development; cultural heritage

NATALIE UNDERBERG-GOODE

is Associate Professor of Digital Media and Folklore (School of Visual Arts and Design, UCF). She is author (with Elayne Zorn) of the book *Digital Ethnography: Anthropology, Narrative, and New Media* (University of Texas Press, 2013), as well as more than 20 articles, book chapters, and conference proceedings on digital heritage and narrative. Underberg-Goode has been PI or co-PI on research and teaching grants totaling nearly \$200,000. Her research has been presented at more than 20 national and international conferences, including the Bilan du Film Ethnographique seminar in Paris, France and the American Folklore Society.



The North Coast of Peru is a region primarily known for its impressive archaeological sites, such as the Royal Tombs of Sipán, Huacas del Sol y de la Luna, and Chan Chan, and the achievements of the ancient Moche culture. In recent years heritage tourism has rapidly developed on the North Coast in part to provide tourists with more diverse and in-depth tourism experiences. These archaeological discoveries have thus contributed to new opportunities for community development and improved quality of life, as well as to a changing understanding of the history and cultural heritage of the region.

My research focuses on traditional arts and programs that have resulted from archaeological investigation and efforts to leverage the area's indigenous culture in tourist development. By focusing on both traditional arts and archaeological investigations, my goal is to show how they are part of a larger re-imagining of the historical past and cultural heritage of the region. In these photographs, in part, I am trying to show scenes from the life of a region experiencing the effects of the development of the Moche Route touristic corridor.

One of the goals of the Moche Route has been to encourage tourists to stay longer, through uniting businesses and expanding to include more activities like cuisine, handicraft production, and homestay tourism. Thus places like the Campiña de Moche, a community in the Moche Valley near the Huaca de la Luna archaeological site, have come to be focus of efforts to identify and leverage historical ties between the current inhabitants and the culture of the ancient Moche discovered through excavations. In a sense these communities provide a living culture to complement the archaeological discoveries. The Huaca de la Luna project has been proactive in this effort to identify and promote ties between the current and ancient *moche*ros. There are artists who claim descent from the Moche, in particular the García brothers, a family who share facial features identical to those featured in the famous Moche face pots.

In Chiclayo/Lambayeque, the archaeological sites and site museums such as Sicán and Museo Bruning have worked with NGOs and local artists to develop handicraft, culinary, and homestay tourism. A focus of these efforts has been the revitalization of native cotton in the rural community of the Bosque de Pomac sanctuary. The Pomac Forest is one of the last dry forests in the world, and it was there, despite its hostile environment, that the Sicán/Lambayeque culture evolved. Native cotton, although cultivated for over 5,000 years, had been banned until 2008; now it, along with *loche* (a native squash), is the focus of revitalization efforts.

Further north and outside the so-called Moche Route touristic corridor, Piura is a region distinguished by its mixture of African, Spanish, and indigenous (particularly Tallán and Vicos) cultural heritages. Piura's beaches are important, as well as its proximity to Ecuador and the excellence of its cuisine (in particular, seafood like the famous raw marinated fish dish *ceviche*).



Piura handicrafts have been a focus of tourist development in the region. Catacaos, known for its silver and gold jewelry, straw hats, and wood, leather, and clay crafts, is arguably the handicrafts capital of the area. Probably the best-known handicraft product in Piura is the pottery of Chulucanas, which was revived in the 1970s. The technique used in making Chulucanas pottery represents a recovery of indigenous techniques from the Tallán and Vicús cultures, combined with influences from more modern pottery styles. A challenge local potters face is that many tourists do not make it all the way out to the actual workshop in Chulucanas, but buy what is apparently Chulucanas pottery in shops in Catacaos or other places where more folk art is sold. Nevertheless, handicraft production in this region does provide income and employment to local residents, especially in places like Narihualá, known for its straw weavings.

Whether mediated through archaeological excavations or attractions to the beauty of local ecology, cultural heritage tourism on the North Coast of Peru is a complex story, one that is still being written.

















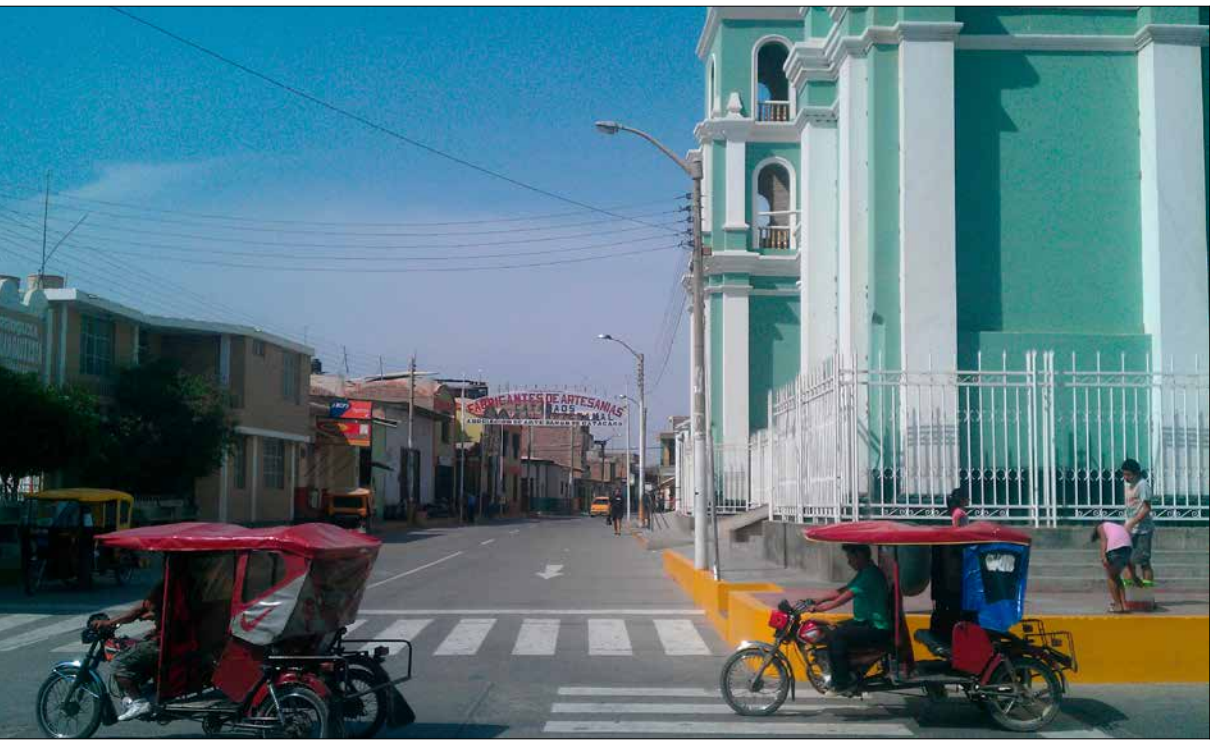






















SHARED VISIONS

A film by Francesco Dragone

2013, 51 mins

vimeo.com/79143535

Password: PietVanZeradawit



SYNOPSIS

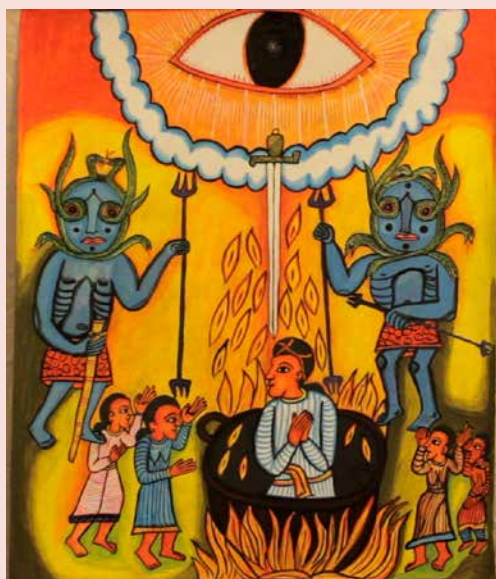
Piet van Peter and Zeradawit Welda Rufael are two painters, who both produce paintings that are similar yet different: similar because

the two artists start from the same visual directive, but different because each of them interprets the initial idea according to his cultural context of origin. Piet is an American eccentric ex photographer who moved in 2006 from California to Amsterdam (the Netherlands). He defines himself as a “cartoon surrealist,” and he loves traveling and getting in touch with other cultures. He uses art as an instrument to play and share as a way of communicating in diverse cultural contexts. Zeradawit is a traditional Ethiopian painter originally from Aksum, who moved to Addis Ababa and there learned to paint as a self-taught artist. He uses art as a medium of communication to spread the messages that comprise the Holy Bible. The two protagonists live respectively in the Netherlands and in Ethiopia, but at the same time they have been working together for several years, influencing each other in their artistic practice. Fueled by their will to learn from each other, Piet and Zeradawit meet each other several times during the year in Addis Ababa. They cross-pollinate their styles, influencing each other with diverse visual clues. In a sense, they are copying from each other, taking

the good side of their differences and using their diverse cultural backgrounds as the strong point of their collaboration.

THE AUTHOR

Francesco Dragone is an ethnographic filmmaker with research interests in visual anthropology, art, and urban anthropology and more than five years of experience in the social sciences and visual media. He studied semiotics and ethnographic documentary from a theoretical perspective and possesses technical skills in editing and directing. He holds an MA in Visual and Media Anthropology at the Freie Universität of Berlin. *Shared Vision* (2013) is his first feature length documentary, which he independently wrote and directed.



FILM REVIEW

DE ANN PENDRY

University of Tennessee-Knoxville
(USA)

East of Salinas: A Story of Immigration, Childhood, and Circumstance, a documentary film by Laura Pacheco and Jackie Mow

De Ann Pendry is a Senior Lecturer and Adjunct Assistant Professor in Anthropology at the University of Tennessee-Knoxville. She received her M.A. in Latin American Studies and Ph.D. in Cultural Anthropology from the University of Texas-Austin. Publications include "Seeking to Understand the Politics of Immigration in Tennessee" (2011). She has other works in progress on immigrant rights in Tennessee and diabetes care among Mexican Americans. Since 2005 she has been working with the Tennessee Immigrant and Refugee Rights Coalition and local Latino immigrants, and has received several community service awards for this work, including the Espíritu Latino Award from Knoxville's Centro Hispano in 2013. Email: dpendry@utk.edu



East of Salinas (2015, 53 min., SDH captions, Bullfrog Films) depicts three years in the lives of José Anzaldo, the child of migrant farmworkers based in the area around Salinas, California, and his third grade teacher, Oscar Ramos, who also was a child of migrant farmworkers. José's mother and stepfather affirm that they want him to do well in school, so he will not end up working in the fields. However, his mother fears that her son's undocumented status may be a barrier to achieving any education past high school. The parents struggle to pay basic expenses, such as rent, electricity and even food. In one scene, José talks about how he feels when he has to go without food. And yet, José is curious, loves learning, and is good at math. In several scenes, we see him doing his homework, and striving to excel in school, in spite of all the difficulties, which the film illustrates very well. The stepfather has to be separated from the family for several months every year when he migrates to work in the fields in Arizona. The mother only has seasonal employment. When the mother works in the fields during the fall, she wakes the children up at 4 a.m. to take them to a sitter's house, where they wake up again at 6 a.m. to go to school. The family moves several times: once





because they could no longer afford the rent, another time because the apartment had too many insects and rats, and once because the children witnessed a shooting just outside of the house. Each time José and his siblings have to start at a new school. The mother often requires the children to play inside the house, because she regards it as too dangerous for them to play outside. Early in the film, we learn that Oscar has been teaching in this community for 15 years. Most of his students are children of migrant farmworkers. Given his background, Oscar speaks Spanish and relates well with the children and parents. He recognizes that José and his other students need extra help and opportunities to learn. He takes a special interest in José, and after one of the family moves, drops by to pick up José and his brother to take them to school, so they can finish out that school year with the same teacher. The film depicts Oscar's classroom teaching, and a field trip to the Exploratorium, which the students thoroughly enjoy. Their curiosity is evident in the footage. Oscar also hosts an event at school to talk to parents about cultivating learning, which also offered free food and used clothing. Towards the end of the film, Oscar takes a group of children, including José who was attending fifth grade at a different school, to visit the University of California-Berkeley, from which Oscar graduated. He shows them the dorm room where he lived, and the students learn what it is like to sit in a huge lecture hall. José comments that he had never seen a university before.

He also had never seen the ocean, which he finally manages to see through school activities. Oscar shares his own history with José and other children, so they can learn that it is possible to study hard and strive to go to college. Several of Oscar's college friends also have not forgotten their roots as children of migrant farmworkers. The film shows them getting together once a year to purchase and distribute Christmas presents to the children in Oscar's class.

The film is compelling. It depicts everyday life in the home, at work, and at school. It covers three years, showing the seasonal variations. Viewers watch José, who at the beginning of third grade says he wants to become a fireman or a cop, move towards wanting to become a teacher like Oscar, and then towards wanting to become an engineer. The film not only depicts the hardships of migrant farmwork for the parents and their children, but also addresses the effects of being undocumented in a mixed status family. José's two siblings were born in the U.S., but he was born in Mexico and is undocumented.



The mother notes that he does not have access to Medicaid health insurance, and adds that luckily he does not get sick, and luckily he did not get sick during the three years of filming. We also see that José had to stay in Salinas by himself while his mother and siblings went to visit his grandmother in Mexico. Oscar, the teacher, also understands what it means to be undocumented. He mentions that he was lucky enough to have legislation pass that allowed his family to legalize their status, but he was worried about the possibilities for similar policy changes that could benefit

José. Oscar described what it was like when he was five, and he and his sister watched as immigration officials raided their babysitter's house and arrested and deported her. This film is timely, given the current debates about immigration. It would be excellent for classroom use, as well as for general audiences.

VIDEOS RECEIVED

JUMBO WILD

A film by Sweetgrass Productions
Directed by Nick Waggoner
Produced by Laura Yale, Zac Ramras
Executive Producers: Josh Nielsen, Alex Lowther
Editors: Jordan Manley, Nick Waggoner, Nicolas Teichrob
Principal Cinematography:
Nick Waggoner, Jason Mannings, Darcy Turenne, Nicolas Teichrob



At the headwaters of the Columbia River in BC's Purcell Mountains, Jumbo Creek cascades out of deep snowpack, past crumbling glacial

ice, wildflowers, and grizzly tracks. The Jumbo Valley has long been revered for its beauty; and to the Ktunaxa Nation, it is known as Qat'muk, home of the grizzly bear spirit. Part of an important international wildlife corridor, the Jumbo Valley is one of only two areas in North America where grizzly bears can freely roam between Canada and the U.S. But, for nearly 25 years, local people -- First Nations, conservationists, backcountry skiers -- have fought a large-scale ski resort in Jumbo. Developers face environmental assessments, political roadblocks, and local outcry. *Jumbo Wild* highlights the tension between the protection of wilderness and ever-increasing development interests in wild places, while bringing to life the passionate fight to protect the Jumbo Valley.