

ON THE BRIDGE: BETWEEN BOLIVIA AND COMPUTERS

Lucia Grossberger-Morales

Telling Personal Stories of Memory, Time, and Space

On my fifth birthday I heard a voice, "You must tell your story." I don't remember if the voice was in Spanish or English. At that moment, I promised I would never forget the pain I felt emigrating from Bolivia to the United States. Though I emigrated when I was only three, it has been one of the most profound experiences of my life. I left an extended family, where I had felt confident and safe. Emigrating to New York made our family feel alien and helpless, living in a country where we didn't speak the language. On that fifth birthday I swore that someday I would find the way to tell my story. Every year on my birthday I reminded myself of my promise.

In 1979 I found the tool I would use to tell my stories, the personal computer, but it would be years before I had the hardware, software, and computer knowledge. Finally in 1987, I was ready to begin.

Telling Stories using Multimedia

Telling my stories was a calling. Initially the voice came to me when I was five, but has continued over the years in my dreams and travels to my homeland. It was only when I saw that computer that I knew I had found the medium that could capture the emotional richness of these experiences, combining images, words, and most importantly interactivity.

By creating multimedia pieces I made the stories concrete, externalized them and better understood them. Along with different media elements, I incorporated techniques such as branching, layering, and telling the same story from a variety of different perspectives, even in different languages. In some pieces I would include a voice-over in Spanish or English that expressed a more personal thought or feeling. Often the text and voice are counterpoints to each other.

This paper is divided into my Altar *Sangre Boliviana* and installation *Khuritos Infinitos*. Within these two works are my personal stories about emigrating, as well as my experience as an adult revisiting my homeland, awakening to the social injustice, and my admiration of the indigenous cultures as stewards of the land.

Altar: Sangre Boliviana (Bolivian Blood) 1992 - 2002

Sangre Boliviana is a CD-ROM, which is presented as either just a CD-ROM or in the context of an altar, with a frame around the computer, on a table that looked like it belonged in a church.

Sangre Boliviana is a postmodern collage including fragments of my story of being an immigrant, growing up bicultural and discovering Bolivia's culture and worldview. Each of the six sections has its own style and interaction.

Creating *Sangre Boliviana* was an organic process. I would get an inspiration for a section, it might be a story or dream, or it might be a festival or ritual. I would let the content dictate the interactive format. I made no attempt to follow a time line or overall design. My goal was to follow my intuition. In these works I used the video and photographs I shot in the Andes, Andean music, voice-over, text in both Spanish and English, animations, clip art, drawings, and interactivity. I will describe three sections of *Sangre Boliviana*.

Palabritas (Little Words) 1994

Palabritas is one of the sections of *Sangre Boliviana*. I immigrated to the United States when I was three. Standing on the bottom of the ramp of the plane, I said, "¡Hace mucho frío!" My father, now with his arms wrapped tightly around me, said, "It is very cold, we are in America, we speak English now." My throat tightened and it was hard to swallow. At that moment, I felt I had lost my language, Spanish. I learned English in a few months, but I missed the sound of Spanish.

Many years later, I wrote the poem *Palabritas* in Spanglish. The poem appears on the screen written in its original form. Dragging and clicking the mouse the user has to "catch" the translation. I felt that the frustration of catching the translation reflected my frustration of having to learn English and not speak Spanish.

On the bottom of the screen is the face of a little girl. If you click on her, she appears in a surrealistic and claustrophobic room, with objects that change when you roll over them. If you drag her with the mouse she walks frantically. There is an image of lips on the wall that call, "Cachina. ¿dónde estás? Cachina, no te veo. ¿dónde estás?" ("Cachina, where are you? Cachina, I don't see you. Where are you?") Click on the lips and they stop calling. Roll the mouse over the trunk and Cachina, the doll, appears. Click on her and there is the story of Cachina. "Abuelita, friends, and Tias assured my Mami that in the *Estados Unidos*, there would be much better dolls. Why bother to take my old Cachina? No doll was ever the same. They didn't have the right smells."

Cholera 92

In 1992, while I was staying in Cochabamba, Bolivia, there was a cholera epidemic. The radio was dominated by news reports about the epidemic and what people should do to avoid contracting cholera. I was horrified as I learned that the reason it was difficult to diagnose cholera was because 90% of the cases of diarrhea were just normal malnutrition. The reason for cholera was unsanitary drinking water; the cure for cholera is salt water, with a little bit of sugar, and an injection of long acting antibiotic. Most developed nations had struggled with cholera in the past. The United States had three cholera epidemics until we developed sewage treatment. The game *Cholera 92* arose out of my anger and frustration. I wasn't thinking about creating a social game, I was reacting to the cholera epidemic in Bolivia and I created a dark and ironic arcade game.

The six targets include someone defecating in the river, a cholera microbe, etc. Instead of a gun with cross hairs I used a syringe to shoot the targets. When you shoot a target, there is an explosion that looks like and sounds like diarrhea. The act of shooting the syringe at the targets is more visceral than reading a static text or visual

representation. The message is presented in an action with consequences. Mary Flanagan in her essay, *Next Level: Women's Digital Activism through Gaming* (370-374) best describes Cholera 92 and the intended viewer outcomes. "The play between such text and image is ironic and disturbing; as players we begin to realize how simple education and resources could have changed the trajectory of a whole town's history. Then, after the informative moment on to the next level, which displays a different cartoon image. Here, a hybrid of game and interactive art techniques is used to subvert computer gaming tropes with political messages."

The Dream (1994)

In 1987 I had a dream which clarified my struggle as an artist. The following is the voice-over of the animation *The Dream*.

"I am at Isla del Sol, in Lake Titicaca, one of the most sacred religious sites of the Incas. Walking I meet my mother and the me when I was three. The three of us create a ritual, placing stones in a circle and starting a fire. Then I go off by myself. I trip and fall in a puddle. One side of me is totally wet and the other side is totally dry. I laugh, get up and continue walking.

I see a long, very narrow bridge between two mountains. The bridge is made out of concrete and cobblestones with no handrails. I know I must cross the bridge, so I begin. Halfway over the bridge, I decide to stop. I lay down with my legs hanging over the edge. I hear a voice. I look up and there I see the little girl who is me at three, dancing on the bridge, speaking in English about computers! I say goodbye and finish crossing the bridge. I feel a new sense of wholeness."

My art straddles the narrow bridge between my passions for computers, Western Technology, and my Bolivian cultural heritage. My art arises from that conflict. The goal of my art is to find balance on that precarious bridge, balancing these two conflicting passions; I am forced and inspired to find my own path.

Installation *Khuritos Infinitos*

In 1998, I began to create installations inspired by Bolivian weavings. Weavings are the most important artform of the Andes, the voice of a culture that refuses to disappear. Andean weavings, since pre-Hispanic times are woven by women, and carry the stories and myths of the community using their visual language of symbols, designs, textures and colors. The weavings are the tangible expression of a worldview that is distinctly non-Western. It is impossible to understand these weavings without understanding the indigenous Andean worldview including religious beliefs and the way they perceive time and space.

The weavings of the Jalq'a community represent the underworld inhabited by randomly placed bizarre creatures called *khuritos*. *Khuritos* appear free from the constraints of gravity or size. There is no distinction between male or female, as such categories do not exist in the underworld. There are creatures inside of other creatures divorced from any idea of conventional procreation; the baby "wawa" is often of a different species than the parent. The Jalq'a describe the underworld as *chaxrusqa kanan tian* – "it must be disordered."

The *khuritos* are the Jalq'a way of externalizing their fears of caves and dark or misty places. They transform these

bizarre creatures into aesthetic ones. Unlike Western society which slays the dragon and battles the devil, the Andean people incorporate the *khuritos* into their lives and weavings, believing that the underworld is also a place where the sparks of creativity begin.

In 2009, as part of the Lightbox Mágico exhibit in Cochabamba, Bolivia, I created an installation *Khuritos Infinitos*, which included two video projectors and a large kaleidoscope in the main gallery. The videos projected different animations of *khuritos*. Against one of the walls was a five-foot kaleidoscope and not visible, behind the wall was a computer which created the images reflected on the kaleidoscope's mirrors. The combination of the colonial style, hand-pounded, metal work covering the kaleidoscope, and the moving computer imagery was compelling.

Khuritos Infinitos was the most popular installation of the exhibit. Several of the viewers personalized it. For example, the little girl who danced with the animation of the *khuritos* or the young woman who took photographs of the inside of the kaleidoscope with her cell phone.

The Book: On the Bridge Between Bolivia and Computers

In 2005, I wanted to write about the cultural background of my artworks and the technology I used to create them. I believe books can enrich the art and the context in which the art was created. I could only imagine a book that was full color and no publisher I spoke with was willing to accept it. I decided to self-publish using Print-On-Demand, available on Amazon. To upload the book PDF to the publisher the file was limited 100 megabytes and the pricing depended on the number of pages. The images had to be 300 dpi even though some of the early images didn't require that resolution. I wanted the book to be inexpensive. My first version was about 400 megabytes, so I spent many painful hours cutting and cutting, deciding what images and text to leave in and what to cut.

A friend wrote a book. It was published in standard form, but he also published it on his website as a PDF file that anyone could download. I decided to put my book on my website.

The last few years, I was well aware of the availability of readers including the Kindle and Nook, but I felt that it just made books easier to carry and didn't begin to address what was possible with the technology. When iAuthor was released as a free App, in 2012, I knew that an eBook would be the best way to present my altars and installations. iAuthor was developed to create multimedia textbooks which could include video, sound, limited interactivity, the ability to zoom into an image and document the zoom, and of course, gorgeous resolution. Those features would be ideal for presenting my artwork. I spent a few weeks exploring the multimedia features. I realized I had to rethink much of my book. I had used words to explain what could now be shown in visuals. For example, I only included a couple of pictures of the pieces I created of the *khuritos*, but in the eBook I am including animations (figure 1). In *Cholera*



Figure 1: Image of eBook Screen (simulated on the Mac) containing the animation and text of Digital Weaving which was created in 1996

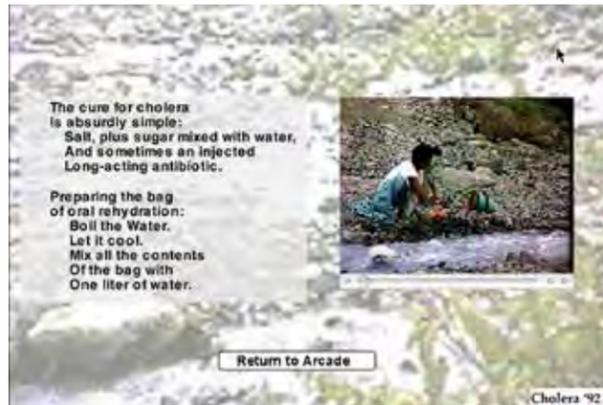


Figure 2: Image of iBook Screen (simulated on the Mac) containing the link from the arcade game of Cholera'92 including the video which was created in 1992

it is not possible to recreate the arcade game, but I included a screen that had all the targets. When you touch one of the targets, the information page appears containing the original video shot in 1992 (figure 2). In the piece *Palabritas*, the page shows the claustrophobic, surreal room with the little girl (figure 3). There are the hot spots, such as the trunk, when you click on it, the story of the doll Cachina appears. The lips still cry and you can quiet them by touching them. I did not include the animation of the little girl walking frantically. Though it is possible to include this animation, it would increase the file size. My process of

editing includes deciding what media features are important enough to justify the expenditure of increase in file size.

The iBook has many features that add to an artist's ability to tell the story of their work; for example, the ability to zoom into the image, to include voice-over describing the work. I know an artist who paints while a musician plays. To listen to a fragment of the musician playing would help the reader to appreciate her process. Another artist, a photographer is inspired by nature; a short video of the area that inspires her would put her work in context. A show at a museum could contain a pan of the entire space and when you click on a work a description of the work can appear. The possibilities are endless. I am not saying that the iBook, and potentially an interactive book for the personal computer, should replace the traditional art book, but in our digital world, it can be a compelling, inexpensive format to present artists' work.



Figure 3: Image of iBook Screen (simulated on the Mac) containing an interactive page from Palabritas created in 1994

WORKS CITED

*Flanagan, Mary "Next Level: Women's Digital Activism through Gaming" *Digital Media Revisited: Theoretical and Conceptual Innovation in Digital Domain*, MIT Press, page 370 - 374, 2003 print