Markets rising

Philip Bastian

Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://digitalcommons.lsu.edu/gradschool_theses

Part of the Fine Arts Commons

Recommended Citation
https://digitalcommons.lsu.edu/gradschool_theses/1399
MARKETS RISING

A THESIS

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College In partial fulfillment of the Requirement for the degree of Master of Fine Arts

In

The School of Art

by

Philip Bastian
BA, Loyola University New Orleans, 2007
December 2009
ACKNOWLEDGEMENTS

I would like to thank my parents for their financial support and my committee members for their guidance and encouragement: Lynne Baggett, Gerald Bower, Paul Dean, Kelli Scott Kelley, and Michael Crespo.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS

ABSTRACT

CONCEPT
- The Dilemma: Engaging an Audience
- How to Further Captivate Viewers’ Interests?
- Medium
- Narrative Context
- Website
- Realizations

PROCESS
- Story
- Modeling
- Texturing
- Animation and Rigging
- Compositing
- Fire
- Snow and Rain
- Rendering

CONCLUSION

APPENDIX: SURVEY

BIBLIOGRAPHY

VITA
ABSTRACT

*Markets Rising* is a thesis that incorporates video and the Internet to communicate with viewers, engage them, and inform them of the socially relevant topic of the 2007+ economic crisis. I intend to visually interpret the crisis in an artistic and accurate manner.
CONCEPT

The Dilemma: Engaging an Audience

The goal of any artist who creates work for public display is to captivate viewers’ interests. Artworks since antiquity – such as Homer’s *Iliad and the Odyssey*, which mythologically interprets the Trojan War, and Michelangelo’s *Pieta*, which depicts Christ’s passion – have depicted socially relevant issues largely to attain this end.¹,²,³ Socially conscious art is so powerful and has had such a lasting impact because everyone has a stake in it. A creative work that is based on a major historic or cultural event is relevant to a far larger number of viewers than art that is based on obscure subject matter. In developing my thesis, I decided that one of the most socially relevant global issues at the present time, the 2007+ Economic Crisis, would greatly engage an audience. The crisis was caused by the US financial system, which many all over the world have experienced for better or for worse. The universal quality of this disaster makes it an ideal subject that I feel will hold a lasting impact on anyone who views it.

How to Further Captivate Viewers’ Interests?

To further engage viewers’ interest, I decided to allow them to participate in the creation of the work. This would not only facilitate the development of the piece, but it would also make the audience more interested in the end result. I designed a website where visitors could provide information for me to reference while creating the work. This allowed me to get personal input on what web users felt about the economic crisis. I created a website, and posted three sets of questions in short answer and multiple choice formats. Viewers could either select or type in a

---

¹ “Iliad,” (Wikipedia Foundation, 2009)
² “Virgil,” (Wikipedia Foundation, 2009)
³ “Michelangelo,” (Wikipedia Foundation, 2009)
response (see appendix). This direct input not only engaged my audience, but also helped me gain a deeper understanding of the impact of the economic crisis. My intention was to process all of the comments and produce a video that held personal meaning for viewers. My goal was to absorb the comments and become informed by them as I arrived at an artistic interpretation of the crisis. I have considered each comment, but recognize that the artistic decisions that create the work are ultimately mine.

**Medium**

Video is the preferred visual narrative medium of our time. For the average viewer, video is far more engaging than seeing still imagery in a gallery or reading words in a newspaper. Furthermore, one expects to view traditional artwork (prints, paintings, sculpture, etc.) in a traditional fine art context, such as a gallery; whereas one expects to see video through a popular entertainment context, such as TV or the Internet. For example, Andy Warhol’s *Campbell’s Tomato Soup Box* and Walt Disney’s *Fantasia* also challenge the context of fine art. With *Campbell’s Tomato Soup Box*, Andy Warhol presents imagery from mass commercialization, perhaps the lowest form of visual expression, in a gallery. The animators of *Fantasia* present an innovative rhapsody of sound and imagery, which because of its realistic animation, well-considered design, and use of classical music, ascends from entertainment to art. Though *Fantasia* is art, it is presented in the lowbrow motion picture format. Roy Lichtenstein’s *Drowning Girl*, is yet another example of blurring the distinction between art and popular media. His piece, with its black outlines, flat shading, and dialogue bubble is rendered in comic book style; yet it has been displayed in New York’s Museum of Modern Art.

---

4 “Andy Warhol,” (Wikipedia Foundation, 2009)
5 “Fantasia,” (Wikipedia Foundation, 2009)
6 “Roy Lichtenstein,” (Wikipedia Foundation, 2009)
Exhibiting video in a gallery challenges the idea that art is only limited to a specific set of media and makes it accessible to all.

**Narrative Context**

History often becomes myth, and myth is often translated through art. Consider the Roman depictions of Zeus from Greek antiquity or Krishna from Indian paintings. They communicate truth, but depict an augmented reality that exists largely outside of the physical realm. Similarly, the mythological symbol of the phoenix, a symbol of rebirth that can be traced throughout Europe and Asia, expresses the reality of regeneration within an improbable context. A widely accepted mythological narrative is that the phoenix self-immolates and is reborn. The mythology of the phoenix closely resembles the economic crisis: they both will experience tragedy; they are both cyclical; and they both will (presumably) regenerate. In my piece, the phoenix, which symbolizes the crisis, rises after falling to its death.  

**Website**

For me, a website was the most familiar solution for receiving feedback from several people. I downloaded software to create and manage a website from my server host, Godaddy.com. I designed the website and posted three surveys to it over the course of four months. The questionnaires either allow people to choose from multiple-choice answers or post additional comments. I added deadlines so that people would comment in a timely manner. Furthermore, the multiple choice answers could be viewed as a chart after clicking the “view results” link. The first survey was multiple choice, and the second and third surveys consisted of multiple choice and short answer, which allowed visitors to give more personalized feedback. The respondents were the professors on my committee, graduate graphic design students, and my ____________________________

7 “Phoenix,” (Wikipedia Foundation, 2009)
undergraduate students. To increase the number of participants, I described the project, asked for responses, and posted the URL links to my surveys to unemployment-related Facebook groups.

Realizations

Generally, I was surprised at how thoughtful, honest, and emotional the comments were. The first set of comments generally inquired about the respondents’ perception of the economic crisis (see appendix). The respondents, LSU’s graduate graphic design students and faculty, mostly stated that they were tangentially affected. While I was grateful for their comments, I quickly realized that they were not providing the most emotional or detailed responses because they were all employed. The second set of questions specifically asked how the crisis affected the respondents’ personal lives. After notifying the graduate students and faculty of the new question set, I notified my Introduction to Design students, and later posted a link to the website to a few unemployment Facebook groups. The Facebook responses were far more lengthy and passionate than the others because they were more intimately affected by the crisis due to their joblessness. Later, I posted a third set of questions, which inquired about respondents’ feelings about the future of the US market. Again, Facebook users posted the most detailed and emotional comments.

As I got more feedback after the second survey, the visual language of the narrative began to significantly evolve. I began to design the video with very basic settings, but as I got more intimate and detailed comments, the environment became more visually detailed. Symbols of the financial market, such as the New York Stock Exchange and foreclosure, entered the piece; the storm and color grey became a motif for the troubled economy; and falling dollars reflected the constant frustration from respondents who wasted their money paying off credit
Figure 1: Foreclosed home from animation
Figure 2: Image of New York Stock Exchange from animation
Figure 3: Image of phoenix flying from animation
Figure 4: Image of skyscraper from animation
fees. For example, I originally designed a vague shot of the phoenix flying across a middle class neighborhood. However, after I read a comment describing the difficulty of paying off the interest of his or her mortgage, I added a foreclosed middle class home to the shot (Figure 1).

The dilapidated and neglected (perhaps through deregulation) New York Stock Exchange exuding money reflected comments about people being upset with greed on Wall Street (Figure 2). In the video, money is floating out of the New York Stock Exchange, which depicts the sentiment that many survey respondents expressed – that money should float freely through loans and higher earnings for the middle class and not be monopolized by the rich.

When asked about their perception of credit in the second survey, respondents generally answered that debt incurred was a challenge to pay off. The shot of the phoenix pelted with dollars visually represented that people feel inundated with bills, interest penalties, and late charges by their credit card companies (Figure 3). Communicating the crisis through a storm also seemed appropriate because one anonymous responder wrote in the first survey that the economic crisis was “gray, like a rainy day, grim and dreary.” Another anonymous responder wrote, “I’m working towards getting out of my credit card debt… it’s scary,” indicating a fear of credit card penalty fees. In response, I included a shot of the phoenix being battered by dollar signs during the storm to symbolize the punishment experienced by the middle-class due to their overreliance on credit.

Though the comments were largely fearful, some comments expressed optimism. One anonymous comment stated, “I have to be optimistic on this one guys, we have been held back for way too long, things pretty much can only get better from here right?” In response to this comment, I added a brightening sky as the phoenix sits atop a financial institution (Figure 4).
Another person wrote, “our market may bend but i don’t think it would break,” reinforcing this sense of optimism.

Mostly, I have learned how ignorant I was of the personal effect of the crisis on others’ lives. Because most people are shaped by their own experience, understanding how social events impact others is not always easy. Over the past couple years, I have heard much about the economic crisis in the news, but as a student, I am not as directly affected as those in the workforce, especially small businesses workers or those required to take furlough days. The impact of the economic crisis on my own life has not been particularly great. I do know some people in my family who either have had difficulty finding work or have been frightened that they might loose their jobs. However, I have not known anyone to actually lose his or her job. The feedback I received revealed that, even though I was aware of this crisis, I did not have a very strong connection to it. Therefore, the surveys were quite helpful in better acquainting me with the crisis.
To construct the video, I first needed a loose storyline. To develop the narrative, I drew storyboards – rough sketches of the story. I made sketches of things I associated with the economic crisis, such as charts, newspaper headlines, financial institutions, etc. A story began to unfold, and I wrote a short outline of the narrative. The narrative progressed in the following stages:

A. Act I

1. Introduce the crisis
   
   a. News, charts depicting the Recession
   
   b. Introduce phoenix

B. Act 2

1. Decline
   
   a. Darkness, storm, wrecked institutions

C. Act 3

1. Renewal
   
   a. Economic recovery, rebirth of the phoenix

When presented in sequence, these elements would present the crisis in a mythological context. To attain a more fluid narrative, I drew additional sketches, which transitioned shots together. Storyboards began to emerge, which depicted shots of headlines detailing the economic crisis, followed by charts listing various fiscal deficits.
Modeling

After I completed the story, I used a 3d modeling and animation program called Maya 8.5 to create the phoenix. I found various photos of birds online, and chose images of pigeons as a reference because I felt that their common nature would symbolize the middle class – the social status of many of my survey respondents. After image research and selection, I imported a frontal and side view of two pigeons into Maya in separate image planes. Maya’s frontal view showed the frontal image, and Maya’s side view showed the side image. I started sculpting the phoenix using specialized tools within the program. I started sculpting a polygon, and the phoenix’s body began to form. After I modeled the general shape of the wings, I began modeling thin creases within the wings to define feathers.

Texturing

I drew feathers for the wings in an image editing program called Adobe Photoshop. However, I had difficulty lining up the drawing with the model’s creases, which produced a very sloppy appearance. I concluded that the drawing sufficiently distinguished the feathers, so I decided to remove the creases I had modeled. Once I completed the mesh (or skin) of the model, I began creating the model’s skeletal structure using <<joints>>. I began adding <<joints>> to the body and moved on to the limbs and tips of the wings.

The texturing of the phoenix took about half a month with constant subsequent revisions. The texturing process was rather tedious, but necessary to create the level of believability that would engage audiences. After modeling the phoenix, I took a snapshot of each section of the model: head, wings, torso, and top. I opened each snapshot in Photoshop and drew a texture for each section and applied it to the phoenix. I later had to make adjustments to fit all the textures to their respective body parts. For example, I constantly needed to repaint the wing textures to
fit the wing meshes; and I also needed to skew and repaint the phoenix head texture to fit the phoenix head mesh. However, because all the distinct texture sections created seams, special attention was needed to blend the seams with Maya’s paint tool. I used this tool to clone certain sections to other spots, smoothening out seams.

**Animation and Rigging**

Rigging helped to speed up the animation by making the phoenix easier to manipulate. To rig the phoenix for the animation, I created <<joints>>, which began with the body and led to the shoulders, then elbows, then tips of the wings, head, and tail. I attached the mesh to the <<joints>>, which allows for the movement of the phoenix. In its initial state, each <<joint>> moves and rotates independently of all the other <<joints>>, which doesn’t match actual skeletal movement very well. In real life, joints react to one another. For example, a movement of the wrist effects a movement in the elbow, and a movement of the foot effects a movement of the knee. A joint is merely a chain within the skeletal structure. In response, I used a tool in Maya called <<IK handles>> to mimic the chain-like nature of actual skeletons.

The skeleton can now be animated using the <<IK handles>>, but they are tiny and hard to select. Therefore, I created large circles around each <<IK handle>>, and I commanded Maya to move the <<IK handles>> wherever I moved their respective circles. However, before I animated, I set the neutral pose for the circles, so that I could easily set the phoenix back to it’s pre-animated position if I needed to replace it with a revised model. This was very helpful because I later made several changes to the phoenix’s texture.

**Compositing**

I animated the phoenix’s actions for each scene, making the background transparent, so that I could combine it with a new background. I used Adobe Photoshop to create a digital matte
– a computer generated background image. I used a digital tablet, which allowed me almost the same degree of line control as if I were painting. Using the digital matte painting method allowed me to work quicker than I would have been able to if modeling all the elements in Maya. Clouds and windows, which were both required for this project, cannot be previewed in Maya, so making them look realistic would require many test renders at several different settings. Rather than modeling and texturing static elements in Maya, drawing them in Photoshop was far more efficient. In Photoshop, I could also modify small details quickly without needing to do several render tests as I would have to with Maya. I combined the phoenix animation with the background using a program called Adobe After Effects, a visual effects program that can be used to combine shots.

**Fire**

Towards the end, the phoenix returns to life covered in flames. The fire was challenging because it too cannot be previewed with adequate detail, and rendering shots using "Fluid Effects", which is what I used to create the fire, took such a long time to render that I often had to leave my computer on over night. Furthermore, even a minor change in settings, such as color, density, rate of emission, etc., can drastically alter the appearance of the fire. To make the fire, I created a "fluid shape", applied a "fluid emitter" to the phoenix, and adjusted the settings while completing several test renders until I attained the proper look.

**Snow and Rain**

The dollars floating in the shot above, was attained fairly simply (Figure 5). To create the snow-like dollar signs, I created a "particle emitter", which emits particle dots. I set their movement for a leftward direction. Furthermore, I modeled a dollar sign and commanded Maya
Figure 5: Image 2 of phoenix flying from animation
to replace each dot with a dollar sign. I added a <<particle expression>> that would make the dollar rotate as it was emitting. The rain was completed in a similar manner.

**Rendering**

I rendered using the <<Maya Terminal>>, a type of command prompt, because it renders more quickly than the <<batch render>> option within the Maya software. The <<batch render>> option sometimes produces error messages sometimes due to lack of memory but often for unknown reasons, which results in the corruption of the entire file being rendered. If rendering video, the entire video file is unplayable, but when rendering a sequence of still images, only the particular image being rendered during the error message is unplayable. Sometimes rendering a shot may take particularly long because of complex elements, such as fire or clouds, so it would be unfeasible to re-render an entire sequence because of error messages. Therefore, I rendered the animation as a sequence of still images so that I would not have to re-render the entire shot if an error occurred.
CONCLUSION

With 3d animation, much of the work can be quite nerve wrecking. Rigging, modeling, texturing each took about a month of trial and error to execute properly. Furthermore, a short shot with fire took about 24 hours to render. The animation required constant tests to get the technology to work in my favor. However, upon completion, I realize that much of the technology used had a very human end. Throughout the process, I realized that I used technology to tell the story of those who had commented on my website in an engaging and informative manner with a fair degree of realism. I am not a highly technical person, but I do realize that some understanding of software is important in telling visual stories. Throughout this process, I experimented and learned and hopefully these 3d animation skills will help me reach future aspirations, such as creating motion graphics for commercials. Even now, I recognize that there is much that I still do not know about 3d animation, and my exploration is ongoing. This was generally a very challenging but ultimately rewarding process. At the heart of my video were the personal stories detailed in the myriad of comments I received. Audience participation was important because it educated me on the personal effects of the crisis, which helped especially in detailing the look of the settings. In absorbing their feedback, I began to understand the severity of the economic situation, and I was also able to create something with a greater degree of veracity than I otherwise would have been able to accomplish. In creating this piece, I’ve used 3d animation to create a narrative that has engaged and informed both myself and my audience about the economic crisis.
APPENDIX: SURVEY

Questions (deadline: 2-26-09)
1. What color do you think of when you think of the economic crisis?
2. How has the economic crisis affected your life?
3. How has the economic crisis shaped your perception of our market system?

Questions (deadline: 4-27-09)
What emotion do you associate most closely with the economic crisis?
- anger
- fear
- anxiety
- sadness

Questions (deadline: 6-26-09)
Do you think that the US economy will improve by the end of this year?
- yes
- no
Considering the rise of the Chinese market, do you think that the US economy will continue to dominate the global market in the 21st century?
- yes
- no
What is the first thing you intend to buy when the economy improves?
BIBLIOGRAPHY


VITA

Born in 1985 in New Orleans, Louisiana, Philip Bastian received his Bachelor of Arts degree from Loyola University, New Orleans in 2007. He will receive his Master of Fine Arts degree from Louisiana State University in December 2009.