Heroes: Promoting and Branding an Original Designer Toys using Motion Graphics

Yang-Hsin Chen

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Heroes
Promoting and Branding an Original Designer Toys using Motion Graphics

A Thesis submitted in partial fulfillment of the requirements for the degree of: Master of Fine Arts in Computer Graphics Design

YANG-HSIN CHEN

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Rochester Institute of Technology
Oct 14 2014
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Heroes: Promoting and Branding an Original Designer Toys using Motion Graphics

0. Abstract

“Heroes” is a series of designer toys that were designed for my future business called “T-Model.” This project aims to create new types of designer toys to see how effective they can be in promoting an original business and how powerful they can be in presenting with current digital media. The “Heroes” series is inspired by simple human-like characters such as “Lego,” “Mr. Potato Head,” and “Kidrobot.” This toy series consists of three different kinds of models representing different time periods, countries, and historical figures.

This project is divided into three major steps: 3D character design, three motion graphic pieces, and DVD publishing. First, I created three character prototypes with unique patterns to represent their personalities and backgrounds. I also designed their weapons and outfits to show their distinctive features. For the second step, I designed three different promotional videos to introduce each toy model. The final step is to publish the videos in a DVD format, and submit them to toy stores or potential buyers.

The final presentation exhibits three motion graphic pieces, and each piece is no longer than 45 seconds. These videos are mainly focused on promoting my three designer toys and my future business “T-Model.” I expect that this project will be the cornerstone of the “T-Model” studio.
1. Introduction

Problem Statement

Toys are designed not only to entertain kids but also to be a collector’s item for toy lovers of all ages. “Designer toys” is a term used to describe toys and other collectibles that are produced in limited editions and created by artists and designers. These models are a new development of toy. They are designed not only for kids but also for all ages of toy lovers who have interests in design. For business purposes, designer toys can be a company image to represent their studio’s identity. They can also be business gifts for future clients. However, promoting my own toys and making them popular play a major role in my marketing strategy.

On the other hand, computer graphics technology has become significant in our lives since the last century. It has deeply influenced people in all aspects. Most young people could not even live without digital technology. As the matter of fact, I found that it plays an important key in leading the direction of this project.

To solve the problem that I addressed above, I used all aspects of computer graphics design to help promote my original series of designer toys, “Heroes.” Such aspects as 3D modeling, interactive design, and motion graphics help develop the features of these toys and enhance their qualities. Eventually, these design skills will make the toys become more popular and attractive in the current market.

Scope

The purpose of this project is to explore new media design in branding and promoting original designer toys that I created. In this project, I designed three motion graphic pieces to promote my designer toys. I applied 2D animation, 3D modeling, and motion graphics to promote these toys and accomplish the goal of the project. In the end, I published the DVD with interactive interface.

Branding

3D Character Design and Animation

Animation and Motion Graphics

DVD Publishing
2. Literature Survey

For the project research, I looked for some successful examples of the most classic and popular toy design companies that have been in existence since the last 20 years. I learned about their advantages and applied them into my design. Meanwhile, I studied 2D animation, motion graphics design, and 3D modeling. Thus, my main survey fields are toy, design, software tutorial, and design companies.

The research contains two main categories: field of toys and field of design

2.1 The Field of Toy

Books

*Box: The Evolution of Character Design*
By Wang Shooqiang Published by Sandu Publications Co. Ltd.; Har/Pstr edition (April 2008)

Box has a collection of various exciting, cutting-edge elements of the graphic world of character toys and print designs. It presents works from 71 artists in different fields around the globe in an impressive compendium of innovation eye candy and inspiration. Thus, this book can give me some inspirations of toys’ design and how to transform a simple toy figure to an interesting art piece.

Website

Kidrobot
http://www.vimeo.com/krtv

Kidrobot is a designer toys company popular across the US. This website can give me some examples that demonstrate how motion graphic pieces enhance and promote designer toys.

Nickelodeon Kids and Family
http://www.nick.com/

Nickelodeon is an authority in cartoon publishing in the US. This is the resource where I find the newest animations of the world. The website shows good examples of new cartoon characters and what kinds of character design are trendier.
2.2 The Field of Design

Books

*Advanced Maya Texturing and Lighting*
By Lee Lanier Published by Sybex (2008)

This handbook mainly teaches about advanced shading, including custom shading networks, particle texturing, pelt mapping, GI, FG, HDR, MR, and normal mapping, among others. It is a great resource to help me solve many problems in Maya and save rendering time. I can really use these techniques in my project so that I can do things more efficiently.

*Designing DVD Menus: How to Create Professional-Looking DVDs*
By Michael Burns Published by CMP Books (January 2004)

This book features 27 international filmmakers who are exploring the evolving possibilities of motion graphics, broadcast design, digital film effects, and animation. It is a good reference book that teaches how to design dynamic DVD menus.

*Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox*
By Onedotzero Publisher: Laurence King Publishers; Pap/DVD edition (November 8, 2007)

The book includes chapters titled “Maya Modeling and Texturing for Games,” “Next-Gen Techniques of the Pros,” and “Basic and Advanced techniques of game modeling in Maya.” This is a good reference to learn how to make a low-poly model in Maya. Using this book, I learned how to create some low poly models for my motion project. It also helped me more efficiently integrate 2D and 3D elements in After Effects.

Overall, my research was ongoing throughout the entire production. To solve different technical problems, I used all kinds of resources including books, online tutorials, DVDs, and online creative communities.
3. Process

3.1 Thesis Parameters

Presentation Three promotion videos using motion graphics
Length 30 to 45 seconds
Audience Ages 10 to 40 / People who love designer toys

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</tr>
<tr>
<td>Adobe CS5 Encore</td>
<td>1 TB SATA 3.0 Gb/s</td>
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3.2 Purpose of Thesis

The purpose of this project is to explore new media design in branding and promoting original designer toys that I created for my future company called “T-Model.” As an international student who studied 3D and motion graphics design in the US, I have the best opportunities to study all the best motion graphics pieces and 3D character designs around the world. Also, it is a good chance for me to pursue my goal and to practice promoting my own product design. In addition, this project also simulated real marketing strategies for designer toys. It helped me to understand how a design studio applies design skills, style, and knowledge to enhance and promote their products. Overall, my goal is to create a brand new designer toy series for my “T-Model” studio.

In the final exhibition, I presented three motion graphics pieces to showcase my designer toys. It included the introduction video (the original T-model toy) and two promotional videos (the Eastern character and the futuristic character). These videos are mainly focused on promoting my designer toys and my future company “T-Model” studio.
4. Design and Animation

This section states the design process of “Heroes” designer toys, including branding, character design, animation, stages design, and storyboards.

4.1 Branding

This is the initial stage of this project. My goal was to create a stylish and simple logo that would represent my “T-Model” studio and bring personality to these designer toys. The logo can help people easily recognize and have personal connections with my brand. My direction has become very clear since I went through the volumes of visual research. After that, I started designing the logo using Adobe Illustrator. In the end, I used three circles and one ellipse to form a monkey-like shape with the initial character of my studio (“T”) to create a basic symbol of “T-Model” studio.

The layout of the logo was the basic guideline for these three characters, which were created with geometric shapes: three circles and one ellipse. For each of the individual characters, I added different patterns and symbols to show their unique personality and cultural background. The main purpose was to use those shapes, patterns, and symbols to create a remarkable branding in the three videos and keep the entire project consistent. (See fig. 1)

Basic Logo

The structure of the logo is made up of lines and basic geometries. This way, it will be easy to remember with its minimal and contemporary look. Also, the combination of the high-contrast colors black and orange boosts up the energy of the entire logo.

Eastern Hero Logo

The second logo represents the Eastern culture. The story of this character is inspired by the Chinese’s ancient history. I used traditional Chinese patterns with the combination of the colors yellow and red to create my Eastern Hero Logo.

Future Hero Logo

To create a logo with a futuristic scenario, I studied a variety of resources such as outer space and sci-fi films. Finally, I decided to adopt some of the features of Disney movie Tron. I mainly used straight lines and circles with neon light to create this futuristic look.
Western Hero Logo

This logo only appears in the introduction video. In the case of extending business, I created a logo for the upcoming character. This character is inspired by ancient Greece and based on ancient Greece myths. The logo is created with yellow and brown patterns derived from ancient Greek designs.
4.2 Character Design

Silhouettes Analysis

I made a brief analysis for a number of designer toys such as “Lego,” “Mr. Potato Head,” and “Kidrobot.” All the visual styles of these designer toys are generally cute and friendly. My characters were basically designed around shapes and based on circular concepts. Once I felt that I had explored the characters enough, I chose my favorite ideas and combined them in a final rough concept. My characters share the same cuddly proportions (short bodies and big heads), and it is mostly their different skills and accessories that tell them apart. (See fig. 2)
Prototype

For character design, I used a simple and low-poly model, instead of complex human-like body shapes to create the 3D prototype that allows viewers to connect their emotions with these humanized figures. There are three major characters, which share the same prototype in my project. The prototype was designed to have smooth shapes and enough surfaces to apply art or design on top of the skin. As a result, I designed my characters with big monkey heads and short, kid-like bodies with distinctive patterns on the surface to give them unique personalities and vivid stories. (See fig. 3)

fig. 3 Character Prototype
T-model Original

“T-model Original” is the first-born child of my studio. I brought in pop culture and graffiti elements to this character. He has obvious characteristics to distinguish his personality and cultural background. Throughout the visual development, I mimicked street style and graffiti art to make him stand out and make the entire design cleaner and sharper.

For the technical part, I modeled this character in Maya and drew the texture in Adobe Illustrator. To make it look more two-dimensional in three-dimensional renderings, I reduced the diffuse number in the texture setting. This way, I could create a world with the fusion of both two-dimensional and three-dimensional features. (See fig. 4 and fig. 7)

fig. 4 “T-model Original” Design
Eastern Hero Er-Lang

Er-Lang is an ancient hero in China. His name was derived from a deified version of several semi-mythical folk heroes who was believed to help regulate Chinese torrential floods, dating variously from the Qin, Sui, and Jin dynasties. Later, a Buddhist source identified him as the second son of the Northern Heavenly King Vaishravana. Er-Lang has a third eye on his forehead. The third eye is his main energy source that allows him to identify whether a person is good or not. It is also where his magic powers originate.

I created a fire-like pattern to showcase this special third eye. For the body part, I designed patterns inspired by traditional Chinese culture throughout the body. I also added a bump map in 3D texture in some specific areas to present the armors on the body. This character also carries a physical weapon to enhance the image of a warrior. (See fig. 5 and fig. 7)

fig. 5 “Er-Lang” Design
Future Hero Super-T

The final character is “Super-T.” He comes from a future setting, resembling a comic-book style. I focused on not only designing the patterns but also texturing this super hero. After finishing the basic design patterns in 2D, I used an image map to texture the 3D character and added another bump map to enhance the effects of the textures. In the end, I applied another black-and-white image as a glow map in Maya to create a design similar to the animation *Tron* so that viewers can see the glow lines covering the entire body of the figure. (See fig. 6 and fig. 7)
fig. 7 Character Texture Maps
4.3 Animation

Character Rigging

It took me quite a long time to design and rig my character because it was my first time to create a character and make it ready to be animated. Even though the design of my “heroes” toys is quite simple, it was still a challenge to me. I started from reading books and watching online resources to studying basic joint system. Then, I went more into character rigging.

Basically, I used the human structure and the rigging system, and set up all of the IK/FK hand controllers, the foot controllers, and the body controllers. To make all the controllers fit my characters, I adjusted some of the settings. For example, my characters’ legs were short, but I did not want them to walk like a real human, so I reduced the joints on both knees and toes to make them walk like a penguin to create a cartoon-style character. (See fig. 8)

The other challenge is to paint the skin weights. Because the ratio of the character’s head to body is almost 1:1, the skin weights on the character’s arms are usually affected by the ones on the character’s head. To solve the problem, I used the painted skin weights tool in MAYA to check details and make sure that the character’s skin was in the right place. As a result, the geometry of the character won’t be destroyed when the character’s body moves. The final step was to render out the entire skin weights map. My characters are sharing the same rigging system, so I can import the skin weights map to them in order to speed up my work flow.
Texture Animation

This technique played an important role in my project. For all three videos, I tried to bring more energy into it. I used moving textures for some still objects to keep the dynamic throughout the project. At first, several animations were made using Adobe After Effects. Then, I exported the image sequences as textures and applied these textures on some 3D objects that I made in Maya. Thus, these 3D objects in the videos have some still images with interesting movements to catch the audience's eyes. The other benefit of this technique was that it helped me to reduce the time for doing 3D tracking image because the moving textures had already been part of the 3D world. (See fig. 9)

fig. 9 Texture Animation Example

4.4 Stages Design

My project includes three videos: the introduction video and two promotional videos for the “Eastern Hero” and the “Western Hero” toys. I created three different looks and distinguished features for each of the videos.

Introduction video

The first toy, “T-model Original,” shows up as a tour guide to help audiences explore the world of “T-model.” In the video, the little guy uses a DJ’s turntable as a magic tool to “spin” the joy world out. The viewers can also follow the little guy to have a glance of upcoming “Heroes” series of designer toys. For the stage design, it not only shows the scene of DJ’s turntable but also includes some features in the other two videos such as an ancient Eastern symbol and a future fantasy world. (See fig. 10)
fig. 10

Eastern Hero Video

The main character in the second video is Er-Lang, an ancient hero in China. The storyline is quite simple: Er-Lang comes from the sky and defeats the evils in the mortal world.

In the background, I created some traditional Chinese 3D buildings in Maya. The main challenge of this design was to make 3D objects have two-dimensional appearance by using color map as the texture instead of image map for the 3D buildings. (See fig. 11)
Future Hero Video

The “Super T,” launched from the military base, carefully dodges the obstacles and eventually defeats the evil robots in the future world.

In this video, I tried to simulate the scenario of the Disney movie *Tron* by designing the buildings with geometrical shapes and glowing elements. (See fig. 12)
4.5 Storyboard

These three videos are mainly designed for promoting three designer toys; therefore, the storyline is very simple and intuitive. I created storyboards to make smooth transitions between each scene, and made a basic guideline and layout for the videos. The storyboards helped speed up my work and guide me with a clear direction to create the videos for promoting my three characters, “T-model Original,” “Er-Lang,” and “Super T.” (See Appendices 7.2)
5. Production

5.1 Pre Visualization

In this step, I started playing around with camera and animation in Maya by using the storyboards. It gave me a chance to see all the elements coming together in the beginning, and I edited play blast preview movies in After Effects to play and see how everything flowed before I went back to Maya to make some animation adjustments for each part. I also rendered some testing frames to see and ensure that there were no errors in the characters and the background settings. (See fig. 13)

fig. 13 Pre Visualization in MAYA
5.2 Integrating 3D and 2D Elements

For this process, I set up different render paths for the characters and the backgrounds in Maya. This solution helped me save on the render time and also provided the flexibility to change or adjust individual issues instead of the entire project.

Basically, I used three-point lights in Maya and rendered the final gathering with Mental Ray. After finishing basic animation in Maya, I colored the corrections and visual effects in After Effects because of its flexible color control and faster preview function. In addition, I created moving clouds by using the fluid effect in Maya as a compositing source.

Furthermore, I added some 2D graphic elements in the background to increase the content richness for my project. For the end tag, I used Illustrator to create the basic typography and brought it into 3D to make the graffiti patterns stand out from my entire project. (See fig. 14)

fig. 14 Integrating 3D and 2D in After Effect
5.3 Editing and Audio Mixing

After the animation rendering was done in Maya, I edited the video in After Effect. I met with my committee members and discussed the editing and any details that needed to be adjusted or rearranged. Based on their feedback, I went back to adjust some camera angles, arrange some image sequences, and create some additional elements to enhance the entire project. Then, I rendered out the final versions of the videos for audio editing. (See fig. 15)

For the audio editing, I made all the mixing in After Effects. In the beginning, I was hoping to ask a composer to create the original music for my characters; however, I decided to find other resources from an online music archive due to time and budget constraints. Finally, I chose to use several royalty-free songs, mixed them in After Effects, and added sound effects to boost the energy for my entire project.

fig. 15 Final Render from After Effect
5.4 DVD Publishing

This is the final step of the project. I used Adobe Encore to do the DVD publishing. The reason that I chose Adobe Encore is that it is easy to transfer the elements from After Effects, and I have some knowledge about this software since I took a one-credit, self-study course in the last quarter at school.

This process went fast and smooth because I have done it all in Adobe’s software. I laid out the basic wireframe in Illustrator and designed the interface in After Effects, and then I set up all the function in Encore. In the end, I successfully finished a DVD publication for my project that is ready to be submitted to companies and studios for their opinions. (See fig. 16)

fig. 16 DVD Wireframe and Interface Design
5.5 Usability Testing

To collect feedbacks from my classmates, I held a test screening before the final presentation. There were some good responses for overall design and animation. The project itself gave viewers a chance to recall video game characters and cartoons figures from their daily life. The animation truly made the little toys alive.

On the other hand, there were still some improvements that needed to be made. For example, the camera sometimes stayed in one shot for too long in the video. I rendered one scene in different angles and used a jump cut to keep the dynamic path to solve the problem. (See fig. 17)

fig. 17
For the “Eastern Hero” video, people asked me to create vivid facial expressions for the characters. Thus, I imported the character’s texture into After Effect to animate his eyes. This adjustment helped humanize the character and gave it a unique personality. (See fig. 18)

fig. 18

Some of my classmates also asked me to enhance the videos’ background image. In order to make the background not look like a still image, I added some moving stars and dynamic graphics by using CC Particle World in After Effects. (See fig. 19)
5.6 Summary

During the working process, I gained different pieces of knowledge to finish my thesis, such as 3D character rigging, 3D texturing techniques, and DVD publishing. Problem solving played the most important role throughout this project. I used mainly online tutorials and books to help me solve most of the technical questions.

For the design issues, I looked at many successful designer toys as examples to help me design my own toys. I also received opinions from my classmates, friends, and professors to enhance my project, and they sometimes provided me with fresh viewpoints. Always looking for different solutions and seeking other people's ideas are the major keys that helped me accomplish this project.

Before the final presentation, I brought my project to a job fair to get professional feedback from designers and art directors. I was very glad to have good responses from them and have opportunities to exchange our views on designer toys. This was the final push before my thesis defense.

The entire presentation went smoothly in my thesis defense. I presented three motion graphics pieces and explained the working process. Some people were asking about the usage of the graphic symbols during the presentation. My answer was to find the elements from our daily life, try to understand different cultural backgrounds, and simplify the original artworks to create your own design. In conclusion, it shows that people not only care about the playfulness of toys but also appreciate the visual design elements. That is the true value of this project!
6. Conclusion

“Heroes” is my first motion graphic work that included branding, animation, and character design. It was a big project with an ambitious goal. Although it took me nine months to accomplish it, I am very pleased with the final result that I achieved.

One of the biggest things I have learned is to know how to digest all the outside resources and apply them to my project. Thanks to today’s fast-changing social media, I can always gain information and learn new technology in front of a screen. After receiving endless knowledge of visual design, I learned how to organize tons of information and use it for my project.

In order to take a closer look at the real designer toys, I visited the designer toy store “Kidrobot” in New York City. Combining online and real-world resources is the best reference in creating my own toy and brand.

In addition, I experimented a variety of methods of integrating 2D and 3D visual elements to solve many technical issues. Mostly, I found solutions from books and online resources. For instance, I used basic image sequences to do most of the color corrections in After Effect so that I did not have to re-render different image sequences in Maya. The ability to figure out an alternative solution was the key to succeed in accomplishing the project.

How to plan and execute a project on schedule was the biggest challenge for me during the process. I always want to keep pushing and make adjustments to any project till the last minute to get the best outcome of my work. However, time management is very important for such a long project. You better plan out some extra time for adjustment and improvement. At the end of the project, I reduced one video from my initial plan. This can help me have time to enhance details of the project and give an opportunity to develop further in the future.

After the thesis presentation, I published the project on Vimeo and contacted different companies and studios. The following year, I got an opportunity to work at the Manhattan Born design studio for their characters, which have been featured in the Computer Arts design magazine. After that, I created a robot character for VH1 Public Relations department in the same year. I also became the Kidrobot VIP influencer recently. Although my own designer toys have not been published yet, this project really helped me get into this industry and have the chance to pursue my goal.
# 7. Appendices

## 7.1 Project Timeline

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### 7.2 Storyboard

#### T-model Original Video

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<td>“T-model” logo appears on the screen.</td>
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<tr>
<td>B</td>
<td>Little guy is playing the turntable.</td>
</tr>
<tr>
<td>C</td>
<td>A fantastic world shows up.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
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<td>---</td>
<td>-------------</td>
</tr>
<tr>
<td>D</td>
<td>Little guy is flying around the worlds</td>
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<tr>
<td>E</td>
<td>“Far East” logo appears</td>
</tr>
<tr>
<td>F</td>
<td>“Future logo” appears</td>
</tr>
<tr>
<td>G</td>
<td>“Ancient Greece” logo appears</td>
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H: Giant Monitor is coming down

I: Monitor turns on and “T-model” logo shows up.

J: End Tag
Eastern Hero Video

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<td>He is facing the final evil</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Giving the evil the final attack</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>End Tag shows up</td>
<td></td>
</tr>
</tbody>
</table>
### Future Hero Video

<table>
<thead>
<tr>
<th>A</th>
<th><img src="image1.png" alt="Image" /></th>
<th>“Future” logo appears</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td><img src="image2.png" alt="Image" /></td>
<td>It actually is a flag on top of the building</td>
</tr>
<tr>
<td>C</td>
<td><img src="image3.png" alt="Image" /></td>
<td>“Super-T” is coming out from the building</td>
</tr>
<tr>
<td>D</td>
<td>He is starting his mission with his turbo skateboard</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>He is facing different traps</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Also chasing by the enemies</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>The giant robots appears to attack Super-T</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>“Super-T” triggers his secret weapon “Energy Gun”</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>He gives all the power to against giant robots</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>“Future Hero” End Tag</td>
<td></td>
</tr>
</tbody>
</table>
7.3 Video Snapshot & Posters
7.4 Thesis Proposal

Thesis Proposal for the Master of Fine Arts Degree
Rochester Institute of Technology
College of Imaging Arts and Sciences
School of Design
Computer Graphics Design

Heroes: Promoting and Branding an Original Designer Toys using Motion Graphic
Submitted by: Yang-Hsin(Ted) Chen
Date: November, 2009

Thesis Committee Approval:

Chief Adviser: Assistant Professor Dan DeLuna, Computer Graphics Design

______________________________  __________________________
Signature of Chief Adviser       Date

Associate Adviser: Associate Professor Chris Jackson, Computer Graphics Design

______________________________  __________________________
Signature of Associate Adviser   Date

Associate Adviser: Visiting Professor Shaun Foster, Computer Graphics Design

______________________________  __________________________
Signature of Associate Adviser   Date

School of Design Chairperson Approval:

Chairperson, School of Design: Patti Lachance

______________________________  __________________________
Signature of Chairperson        Date
Abstract

“Heroes” is a series of designer toys that will be designed for my thesis. The research will help construct a secure base for my future business called “T-Model.” The thesis project aims to design new types of designer toys in order to see how effective they can be promoting an original business. The “Heroes” series will be based on simple human shapes such as “Lego,” “Mr. Potato” and “Kidrobart.” This toy series will include three different types of models resembling different time periods, countries, and historical figures.

I will separate this project into three steps: 3d character design, four motion graphic pieces, and package design. First, I will create three character prototypes and add different patterns to represent their personalities and unique backgrounds. I will also search their weapons and outfits in order to design their distinctive features. For the second step, I will design four different promotional videos to introduce each toy model. One is to demonstrate each of the toys and its special features. The other three videos are going to introduce each individual model. The third step will be to design four packages and one poster to promote this product. The final step is to publish the videos as a DVD and send them to toy stores and potential buyers. Therefore, this project will be “T-Model” studio’s cornerstone.

Problem Statement

Nowadays toys are not only designed for kid’s entertainment, but also can be a collector’s item for toy-lovers of all ages. “Designer toys” is a term used to describe toys and other collectibles that are produced in limited editions (as few as 10 or as many as 2000 pieces) and created by artists and designers. These models are a new development of toy. They are not only designed for kids, but also for all ages of toy-lovers who have interest in design. For business purposes, designer toys can be a company image to represent their studio’s identity. They also can be business gifts for future clients. However, how to promote these toys and make them popular still is a major role as a marketing strategy.

In order to solve this problem I will use all aspects of CGD to help promote this product. Such aspects as 3D modeling, interactive design and motion graphics to help these toys’ features and also enhance their qualities. Eventually, these design skills will help the toys become more popular in the current market.
Purpose of Thesis

The purpose of this project is to explore new media design in branding and promoting original designer toys that I will create. As an international student who is studying 3D and motion graphic design in the US, I have many opportunities to watch all the best motion graphic pieces and 3D character designs of the world. Also, it is a good chance for me to pursue my goal, and to practice promoting my own design product. In addition, this project will also simulate real marketing strategies for designer toys. It will also help me to understand how a design studio applies its design skill, style and knowledge to enhance and promote their products. Overall, my purpose is to create a new branding of these designer toys.

Scope

I will design four motion graphic pieces to promote my designer toys. I am going to apply 2D animation, 3D modeling and motion graphics. In addition, I will also design 4 packages and 1 posters to promote these toys and to accomplish the project. In the end, I will publish the videos as DVD and give them an interactive interface.

Literature Survey

During one month researching, I tried to find out some successful examples of the most classical and popular toy design company that have created since the last 20 years to nowadays. I absorb their advantages into my design. Meanwhile, I studied 2D animation, Motion Graphics Design, 3D modeling. Thus, my main survey fields are toy, design, software tutorial and design companies.

The Field of toys

Books

Art and Design of Gama-Go
by Greg Long (Author), Chris Edmundson (Author), Tim Biskup (Author) (June 15, 2007)
Published by Last Gasp; Limited edition (June 15, 2007)
Complete, up-to-date cataloging of all of Gama-Go's designs from the past 6 years. Design radicals Gama-Go started with six t-shirts printed in a basement. Now hundreds of stores worldwide carry limited edition bags, pillows, clocks, clothes and toys. Gama-Go’s unconventional worldwide success is led by its founders’ humor, bold color palette, and witty take on everyday life. Gama-Go can be found in premiere boutiques around the globe. This book provide me a good example how a design studio promotes their products include their toys.

Box: The Evolution of Character Design
by Wang Shooqiang Published by Sandu Publications Co. Ltd.; Har/Pstr edition (April 2008)
Box collects various exciting cutting edge elements of the graphic world of character toy and print design by presenting work from 71 artists in different fields around the globe in an impressive compendium of innovation eye candy and inspiration. Thus, this book can give me some inspirations of toys' design.
I Am Plastic: The Designer Toy Explosion

by Paul Budnitz Published by "Harry N. Abrams, Inc."; First Edition edition (November 1, 2006)

In barely a decade, the designer toy craze, which originated in Hong Kong, has taken the world by storm. Children and adults, celebrities and design aficionados now line up to pay anywhere from five dollars to thousands of dollars for these highly inventive designer creations.

I Am Plastic provides a colorful visual history of the phenomenon, which has energized not only the toy world but the global art community as well. Fashion designers, comic book artists, underground illustrators, graffiti and fine artists now lend their creativity to the task of coming up with innovative and striking new toy designs. Artists and toys featured in this stunning overview include Frank Kozik, Dalek, Gary Baseman, Bounty Hunter, Junko Mizuno, Jason Siu, Devilrobots, and Pete Fowler. Therefore, this book gives me the basic knowledge of designer toys revolution.

Super #1 Robot: Japanese Robot Toys, 1972-1982

by Tim Brisko (Photographer), Matt Alt (Author) Published by Chronicle Books (July 7, 2005)

Shogun Warriors. Godaikein. Micronauts. They came in their legions, leaping straight from Japanese TV sets onto toy shelves. Shiny, outrageously colorful, sporting spring-powered missiles and “rocket punches”—they were unlike anything seen before. Super #1 Robot showcases these unique action figures created during the heyday of Japanese robot toys, 1972 to 1982. From Popy’s classic “Chogokin” Mazinger Z to Takatoku’s Valkyrie (the first seamlessly transforming toy), these are the pinnacle of modern Japanese robot toys, and transformed not only themselves, but also today’s toy culture. This book provide me another information about toy design history in Japan.

Website

Freestyle Collective (Pass it On Pass On)
http://www.freestylecollective.com/

Freestyle Collective, 2009

It is a good motion graphic company locates in New York City. They do both commercial and experimental motions. This company is successfully composing 2d and 3d elements together to make the motion really dynamic and fun. And I especially like their experimental motion graphic pieces, which bring emotional feelings and technique skills together. Thus, it could be another good resource to enhance the motion graphic's quality. It also gives me many inspirations.

nanospore
http://nanospore.org/

It a designer toys company in California. This website can give a idea how a design studio promote their toys and design.
Kidrobot
http://www.vimeo.com/krtv
This is a designer toys company’s website in “vimeo”. This website can give me some examples to demonstrate how motion graphic pieces enhance and promote designer toys.

Nickelodeon Kids and Family
http://www.nick.com/
Nickelodeon is an authority cartoon publishing in the US. I may find the newest animations of the world. Also it shows me a lot of new cartoon characters so that I can figure out what kind of character design is more popular.

The Field of Design

Book
After Effect CS4 Master motion tracking
By Shotopop Published by Chronicle Books Computer Arts (May 16, 2009)
This tutorial is mainly talking about how to make designs and illustrations to match your shot footage with motion tracking in After Effect. Learning how to use motion tracking is important for me, because it is useful in compositing digital elements into final shots and results in text, images, animations, effects.

Advanced Maya Texturing and Lighting
by Lee Lanier Published by Sybex (2008)
This handbook mainly teaches about advanced shading, including custom shading networks, particle texturing, pelt mapping, GI, FG, HDR, MR, normal mapping... It can be a great resource to help me solve many problems in MAYA and save rendering time. Therefore, these techniques can really use in my project and make thing in more efficient way.

Designing DVD Menus: How to Create Professional-Looking DVDs
by Michael Burns Published by CMP Books (January 2004)
This book features 27 international filmmakers who are exploring the evolving possibilities of motion graphics, broadcast design, digital film effects, and animation. It is a good reference book that teaches you how to design Motion Graphics.

Graphic design: the new basics
by Ellen Lupton, Jennifer C. Phillips Published by Princeton Architectural Press (2008)
This book is about type and design. The author visually demonstrate how to use build interest and complexity around simple relationships between formal elements of two-dimensional design such as point, line, plane, scale, hierarchy, layers, and transparency. It is an indispensable resource for me seeking a smart inspiring introduction to graphic design, and it is definitely a good reference book in design.
Mastering Maya 2009  
by Micheal Ingrassia Published by Focal Press (Oct, 2008)

This advanced Maya handbook covers all aspect from modeling, texturing, animation, and visual effects to high-level techniques for film, television, and games. Moreover, it also introduces the new function, nparticles, which is extremely important for me. N particles and dynamic are two important elements in my project.

Maya for Games: Modeling and Texturing Techniques with Maya and Mudbox  
by onedotzero Publisher: Laurence King Publishers; Pap/DVD edition (November 8, 2007)

Maya Modeling and Texturing for Games Next-Gen Techniques of the Pros Overview of what you’ll learn Basic and Advanced techniques of game modeling in Maya. This book is a good reference to learn how to make low poly model in MAYA. Thus, those skills can help me create some low poly models for my motion project. It also can help me have more efficient way to integrate 2d and 3d elements in aftereffect.

Motion Blur: 2: Multidimensional Moving Imagemakers  
by onedotzero Publisher: Laurence King Publishers; Pap/DVD edition (November 8, 2007)

This book features 27 international filmmakers who are exploring the evolving possibilities of motion graphics, broadcast design, digital film effects, and animation. It is a good reference book that teaches you how to design Motion Graphics.

Processing: A programming handbook for visual design and artists.  
by Casey Reas, Ben Fry, John Maeda Published by The MIT press (2007)

It is a handbook, which introduces the concepts of computer programming within the context of the visual arts. I am planning to introduce generative animation into my thesis project as a piece of element (not the whole thing); therefore, I am planning to learn processing from this book.

Processing: A programming handbook for visual design and artists.  
By Timothy Samara published by Rockport, 11, 2003

The Typography Workbook provides an at-a-glance reference book for designers on all aspects of type. This book presents an abundance of information on type - the cornerstone of graphic design. It also help designer to avoid common mistakes in text usage. Thus, this rescue can help me develop my project in different ways such as logo design and title sequence design.

The Elements of Typographic Style Games  
By Robert Bringhurst published by Hartley and Marks 3rd edition (October 9, 2004)

The reason I chose this book because Author Robert Bringhurst writes about designing with the correct typeface; striving for rhythm, proportion, and harmony; choosing and combining type; designing pages; using section heads, subheads, footnotes, and tables; applying kerning and other type adjustments to improve legibility; and adding special characters, including punctuation and diacritical marks. I definitely would like to use that theory into my project, in order to make good type design in motion.
Nickelodeon is an authority cartoon publishing in the US. I may find the newest animations of the world. Also it shows me a lot of new cartoon characters so that I can figure out what kind of character design is more popular.

Project Description / Methodology

3D and Motion Graphic Design
This is the central part of my thesis. I will use Maya to design my toys' prototypes and create a motion graphic piece to promote them. It will include four videos: the introduction video and three promotional videos.

Introduction video
This video will mainly focus on toy functions. I will use Maya to design three toy prototype and use After Effect to integrate 2d and 3d elements to introduce the basic ideas of those three toy's model.

Eastern Hero
In the second video, I will start to animate the first toy in Maya and compose it into After Effects. The first toy design will focus on an ancient hero in China. This figure will be Erlang Shen. Er-lang Shen may be a deified version of several semi-mythical folk heroes who help regulate China’s torrential floods, dating variously from the Qin, Sui and Jin dynasties. A later Buddhist source identifies him as the second son of the Northern Heavenly King Vaishravana. I will mainly use texture animation to enhance this figure's features and combine 2d animation into the background to design the character's cultural background.

Western Hero
In the third video, the character will be Achilles. This hero comes from ancient Greece and will be based on ancient Greece myths. Achilles was a Greek hero of the Trojan War, the central character and the greatest warrior of Homer’s Iliad. I will combine 3d modeling, Texture animation and Particles in Maya. Finally, I will use 2d animation compose my 3d model to enhance my character’s personality and historical background.

Future Hero
This hero will look different than the other two characters. He will come from a future setting, resembling a comic book style. Because of this, I will design the toy's prototype in 2d (Illustrator) and then model it in Maya. Finally, I will animate it in After Effect to add more visual effects.

Packaging/Poster design
I will also design three packages for different characters and one DVD cover. In addition, I also will design a poster to promote the Heroes series toy.

DVD publishing
The last step is publishing the three toys animation into one DVD. In this part I will design a DVD menu (DVD Studio Pro) that is appropriate for the toys’ styles which can help me promote them.

**Sketches**

*Design Style Development*
Limitations

Depend on the complexity of my works, I will postpone my graduate until Fall 2010, in order to have a well-organized and polished project.

Marketing Plan

Target Audience

Male / Female: Both Male and Female
Age: 20 to 40
Educational Level: High School - University
Motivational Level: Toys-lover
Experience with Thesis Subject Matter
2 Types of Personas (Describe a typical user)
- person who like visual effect, 3d, motion
- people who is interested toys, cartoon

Software and Hardware Requirements
- Macintosh G5
- IBM Compatible PC with at least a Pentium IV processor
- Windows VISTA or Windows XP Professional
- 750 MB free disk space and 128 MB main memory
Heroes: Promoting and Branding an Original Designer Toys using Motion Graphics

by Yang-Hsin(Ted) Chen

Thesis Timeline

Milestone:

- Proposal accepted
- Character design (sketch)
- Background design (sketch)
- Storyboard done
- Animatic done
- Storyboards done
- 1st committee meeting
- 3D character and environment set
- 2nd committee meeting
- 2D animation (Texture animation)
- 3rd committee meeting
- 2D 3D motion integrate
- Packages and poster design
- Publish DVD
- Thesis report online
- Last committee meeting
- Thesis show
- Graduation

MONTHS
October
November
December
January
February
March
April
May

DATES
7 - 13
14 - 20
21 - 27
28 - 3
4 - 10
11 - 17
18 - 24
25 - 1
2 - 8
9 - 15
16 - 22
23 - 29
30 - 5
6 - 12
13 - 19
20 - 26
27 - 2
3 - 9
10 - 16
17 - 23
24 - 1
2 - 8
9 - 15
16 - 22
23 - 29
30 - 5
6 - 12
13 - 19
20 - 26
27 - 2
3 - 9
10 - 16
17 - 23

End of Fall Quarter
Mid Quarter
End of Winter Quarter
End of Spring Quarter
### Thesis Timeline

**Heroes: Promoting and Branding an Original Designer Toys using Motion Graphic**

by Yang-Hsin (Ted) Chen

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATES</td>
<td>7-13</td>
<td>14-20</td>
<td>21-27</td>
<td>28-3</td>
<td>4-10</td>
<td>11-17</td>
<td>18-24</td>
<td>25-1</td>
</tr>
</tbody>
</table>

#### Milestones

- Proposal accepted
- Character design (sketch)
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- Storyboard done
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- Storyboards done
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- 2nd committee meeting
- 2D animation (Texture animation)
- 3th committee meeting
- 2D 3D motion integrate
- Packages and poster design
- Publish DVD
- Thesis report online
- Last committee meeting
- Thesis show
- Graduation

**Document Project**

- 2D 3D motion integrate
- Packages and poster Design
- Publish DVD
- Thesis report online

**End of Fall Quarter**

- Mid Quarter

**End of Winter Quarter**

- Graduation

**Thesis Show - May 23, 2008**
7.5 Bibliography

Book

Art and Design of Gama-Go
by Greg Long (Author), Chris Edmundson (Author), Tim Biskup (Author) (June 15, 2007)
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By Robert Bringhurst published by Hartley and Marks 3rd edition (October 9, 2004)

Processing: A programming handbook for visual design and artists.
By Timothy Samara published by Rockport, 11, 2003

Online Resources

nanospore http://nanospore.org/

Kidrobot http://www.kidrobot.com

Vimeo http://www.vimeo.com

Nickelodeon Kids and Family http://www.nick.com/

3D World www.3dworldmag.com

Johnny Cupcake www.johnnycupcake.com