ISSUES RELATED TO THE DEVELOPMENT
OF A DIGITAL SUPERHERO

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To everybody I have ever known.
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CHAPTER I

The Future of Digital Art

Art that is produced with the help of a computer is considered “false” by many people who feel the computer plays too large of a role in the artistic process. Whether this is true or not is irrelevant since the consensus is that computer art is “commercial art”\(^1\), best suited for mass markets, and that allows multiple duplication of the product in order to reach as wide an audience as possible. The art critic and buyer, while willing to pay considerable amounts of money for an original oil painting, will not willingly pay much for a photograph of a computer-generated image due to, among other reasons, the fact that the image can be duplicated a thousand times over. Thus, digital art has the reputation of being a “cheap art” that lends itself to inexpensive duplication whereas an oil painting is considered a “fine art” that is one of a kind, meaning it cannot be exactly duplicated.

Also, computer-based art is a new form of expression compared to such traditional media as painting and drawing, and because of this, people are not quite sure what is it about. The following is an excerpt from Prix Ars Electronica 1994 book. The interview is with Michael Tolson, computer artist and founder of Xaos, a premiere computer graphics production house in San Francisco, California,

“\textbf{Question:} We are facing a real flood of computer graphics both as still images and animations. Some of it is interesting, much is merely mediocre products. Does this relate to the fact that both hardware and software are

\(^1\) As a computer artist, I’ve encountered tremendous resistance from many artists who feel that computer art is not a serious artistic medium. This may be due to a number of factors, among which may be that fact that traditional mediums such as painting have been around for centuries, thus they enjoy the automatic validity that is currently absent in computer art.
readily available to almost everyone, but on the other hand very few real artists are interested in the new media yet?

**M. Tolson:** I think so. 3-D software, high quality rendering is becoming more accessible to more people, and we’re seeing now a proliferation of “early work”, new artists who are just exploring the medium, and that work is going to be immature. As for more artists, I think we still need more artists to work in this medium. I want to see the art come out more.”

More and more people are able to afford the tools required to do three-dimensional animation, and the lower end of the systems and software are approaching the higher end. There is indeed a lot of animation being produced, and much of it has a kind of “gee-whiz” feel where the animator is trying to impress the audience with the capability of the technology. As a computer animator, I am a little guilty myself in that respect, but the main focus of my work is that of commercialism and its far reaching consequences.

The artistic intent often gets lost in computer graphics because audiences desire the technologically-heavy effects like photorealistic rendering and fluently animated cartoonish characters. Because of the public’s desire to see more technical wizardry, such as Jurassic Park dinosaurs, artists with small budgets and iconoclastic visions rarely get their voices heard when struggling against commercially produced animation. Much of the time high-tech effects are achieved at the expense of artistic invention, but as computer graphics attracts a wider variety of artists, a balance will form between the technological and artistic aspects of the medium.

As an artist in the field of computer graphics, I would like to see the medium become more accepted by the art audience as a whole, not just by those who are creating digital work. I do not see that happening in the near future because in 3D animation, the

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2 Prix Ars Electronica 1994, Interview with Michael Tolson
computer is the process by which the images are generated. The artist sets up the scene, but
doesn’t actually paint the pixels by hand. There is a common perception that the computer
does most of the work in computer graphics, and this is often true in animations or still
imagery that have little or no artistic content. We can take the traditional example of the
mirrored sphere floating over the checkerboard floor. This example was done early on in
order to show the power of the image generating software but is incredibly easy to set up
by the user. There is still some animation out there that subscribes to the mentality that the
more high-tech rendering there is, the better the final product will be. Many artists are
susceptible to adding in effects that look interesting on screen but offer nothing to the
artistic process.

The following is a quote from the 1993 Siggraph Visual Proceedings, by Simon
Penny of Carnegie Mellon University,

“It has become commonplace for people in the art world to cite examples of
computer scientists who regard the approximation of the color photograph
as the goal of computer graphics... This association of computer graphics
with a previous technology of pictorial representation is an example of the
way a technology might ‘carry’ certain cultural attitudes.”

When people judge computer graphics, they necessarily compare the art form to
previously defined mediums such as painting and photography, but the true strengths and
of computer graphics may be in its ability to develop its own aesthetic, one that differs
significantly from the established norms of traditional media. As with every medium, there
are technical and artistic aspects that should be addressed when developing art, and
computer art, with its origins in science and industry, is heavily skewed towards the
technical area.

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3 Siggraph Visual Proceedings, p 151, 1993
A good deal of computer graphics attempts to incorporate the stylistic techniques of Hollywood cinema as an aesthetic base, which is fine, but I feel that exploiting the potential of computer graphics in this way is paramount to re-inventing the wheel. I would like to use the computer as a way to create new ways of seeing other than what has already been produced in Hollywood cinema. Take, for instance, the process of using a dolly, which is a wheeled platform for a movie camera. In real life, this camera has limits to how far it can travel, but in the digital realm, a virtual dolly can travel as far and fast as the computer operator wishes, thus opening up new possibilities for digital cinema.

By overcoming traditional obstacles inherent in creating traditional cinema, new ways of creating moving pictures can become a major selling point of computer art. More options are available to film-makers than ever before; digital imagery can make stunt effects safer, can add new types of special effects, and offer a host of other options. For a premiere example of special effects in Hollywood cinema, look at the impressive dinosaurs in Jurassic Park. More than four minutes of the dinosaur footage was produced entirely with digital technology (The other shots were done with full size puppets). Previously, the only way to produce this type of animation was through stop-motion photography, where creatures were modeled with traditional materials and adjusted a little at a time after each frame of film was shot. In Jurassic Park, the limitation of stop motion animation was overcome, so that full motion blur was possible, as well as seamless integration of the computer-generated dinosaurs with live-action backgrounds.

I believe the real strength of computer graphics might be its ability to explore previously undefined ways of expression, where the computer becomes part of a “process” instead of merely being a “tool”. For example, if an artist is using software to develop three-dimensional models for use in an animation, it may be beneficial to allow the computer to procedurally generate variations of that model to produce new, original shapes.
If the artist is developing shaders (algorithms for defining the surface characteristics of objects), the computer can produce variations of that algorithm to generate new surfaces. If an artist defines a particular motion path for an object, the computer can generate variations of that motion for use with other objects. In this way, the computer becomes part of the artistic "process" instead of being relegated to the role of a "tool". The foundation of this type of work has been labeled "procedural animation" and has been utilized by such artists as Karl Sims and production houses such as Xaos. I believe this process will be a significant aspect of computer graphics art in the future, as it has shown great promise already.

I believe that if an experimental approach to computer graphics were to be used more frequently as a "process" instead of a "tool", more avenues of expression will evolve. This "expression" involves working without a certain goal in mind, creating computer art in an abstract fashion without the use of storyboards or time frames or other ways to increase productivity. Roman Ilinski explains this concept in Leonardo magazine:

"The discovery of a new expressive means for computer graphics often happens by chance. Even if we assume that a computer system does not yet possess an intellect sufficient for it to be a full-fledged codesigner of an artifact, one cannot consider interactive creativity as strictly individual."  

Along with using the computer as a creative process, interactivity will be an integral aspect of computer graphics art because the user will be able to immerse him or herself in a new world much the way we immerse ourselves today using "virtual reality" type devices. At this point in time "virtual reality" systems do not offer any convincingly real experience, but progress continues to be made.

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4 Leonardo, Vol. 27, No. 5, p. 403, 1994
This new genre will probably be the hallmark of the digital artistic experience as it will offer new experiences for the user that are impractical to explore any other way. For example, advanced "virtual reality" systems will be able to take the user on a moon-walk without ever leaving the earth by incorporating headsets and body suits along with audio clues to fool the user's senses. Scenes from the popular movie, "The Lawnmower Man", which depict a retarded man greatly increasing his intelligence through "virtual reality" are undoubtedly science fiction, yet they could be the precursor to "interactive learning" where the user can increase his or her knowledge at a significant rate due to "immersive" software that interacts with all the senses. The concept of creating "virtual environments" has enormous potential, although I believe the required technology to create believable interactive situations is many decades in the future.
CHAPTER II
Superheros and the Mass Market

To start, we must first define what a superhero is: In my opinion, a comic book character must posses at least one superhuman characteristic or superpower, such as having inhuman strength or super human intelligence that makes him, her, or it a being that surpasses human standards of judgment in at least one way. It is not necessary for this power to be ingrained within the character; a special suit or weapon would count as well as physical strength. Thus, although Bruce Wayne, A.k.a. Batman, would be considered a normal person, his Bat Suit and Batmobile, which give him special abilities, allow him access to the superhero realm. Also, the character must fight on the side of justice, to be concerned with doing good, rather that causing terror or chaos. (If such a character temporarily turns evil due to some uncontrollable reason such as a mind spell, that is acceptable.) A super-being that fights on the side of evil must, by my definition, be called a super-villain. Examples of these characters are Marvel Comics’ Dr. Doom and the Green Goblin, which are enemies of Spider Man.

Finally, the superhero must wear a distinctive costume or be of a supernatural shape that separates his look from mere humans. For example, Marvel Comics’ the Incredible Hulk wears only torn jeans, but his massive, green body immediately puts him into the category of superhero. Also, without his costume, the D.C. character Superman is goes by the name of Clark Kent, although Clark has the abilities of Superman even without his costume.
The modern superhero comic is a product of the mass market, in which publishers produce products to satisfy the wants of a mostly male, adolescent audience. The medium the material is presented on is almost irrelevant - the final result remains the same whether the comic is printed on standard rag paper or imprinted onto a CD-ROM with sound and animation, since the final goal is always to sell as much product as possible, which is why the digital market is expanding at a rapid pace. I have had personal experience in this industry with my internships and involvement in producing The Mask CD-ROM, which takes a comic book character called the Mask out of the realm of print and adds a new dimension of story telling with the addition of animation, sound & music, and spoken dialog, all conveniently integrated in one small package.

One might question my statement that the material is irrelevant - with the addition of sound, music and dialog, how can the Mask remain essentially the same product? Before answering that question, I'd like to briefly go over the method used to take a comic book and turn it into a CD-ROM in a few months time. The process is as follows: The original Mask comic book (an expensive, thick comic with 144 pages that sold for $14.95), is separated into individual pages that are each scanned into the Macintosh computer using a color scanner. Then, the individual cells in the pages are separated and color corrected to produce the maximum color and contrast for reproduction on a computer monitor. Some of these cells are then turned into animations by copying the cell about ten times and drawing over these duplicates to develop an animation. These cells are successively put onto the computer screen as the story progresses, much like turning the pages of the comic book itself. In addition, sound effects, music, or both are added to each of the cells as they appear on screen, and dialog, if present on the comic cell, is spoken by voice actors. What results is a multimedia presentation of what originally was a printed comic book that seems to give more bang for the buck, since there is more to experience with the addition of the
new elements - except for imagination. The process becomes much like sitting in front of a
television set with the remote control, every action can be controlled from the keyboard. It
becomes a slide show where the viewer doesn’t have to think about the material; it has
already been packaged in such a way as to make it easy to comprehend. I consider this
process, of taking a printed comic and adding sound, dialog, and music a form of
recycling, where the original product which served as a stand alone product now
incorporates high-tech functions to become the same product under a new title and higher
price.

In A Certain Tendency of the Hollywood Cinema, Robert Ray explains that the
process of serving up the same product under different names is prevalent in Hollywood
cinema. I would argue that comic book producers follow the same rules as Hollywood
when deciding how to sell their product. He explains, “...the ideological disposition of
Hollywood’s principal *modus operandi* overdetermines individual variations to the extent
that in terms of their ideological effect, no variations can be privileged in the abstract.”

To paraphrase Ray, I believe that Hollywood and mainstream comic book
publishers are after the same goal of producing commercially palatable material that will sell
product. When a product is found to be successful, copies of the original, modified enough
to sell it under a different name, are produced, and these becoming variations on the
original theme. There is no significant variations in the majority of commercially produced
comic books today, meaning they all more or less follow the same path to conclusion. Most
successful ones follow a winning formula and stick to it. The individual differences are
most likely superficial since they risk alienating their audience if something too abstract is
attempted. So, in a sense, whether a commercial comic book is printed on paper or found

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5 A Certain Tendency of Hollywood Cinema, Robert Ray, p.18
on-line on the internet, the product is essentially recycled material; The material can change, yet the message remains the same.

Whether the comic is in book form or this newest form of multimedia, the end result is always the same, to sell as much product as possible. There is nothing inherently wrong with this, except that it necessitates that material be watered down enough to be palatable to a wide audience. And this is what the mainstream superhero genre is all about, conformity and accessibility. I developed my work to conform to certain expected standards, i.e. a white, young, beautiful female with a flawless figure.
3.1 Motivation

The development of my animation spans back almost two years ago while I was attending Syracuse University in the undergraduate B.F.A program. My original plan was for a darker, more film-noir\(^6\) look in which I had envisioned a detective woman who had to defeat an evil, underground thug. My female character, while still called Athena, had black hair and was originally an alien type woman, the kind you would see in Heavy Metal magazine. I had her wearing dark glasses and walking around in a long overcoat, encountering and defeating vile opponents in her search for the bad guy. For her nemesis, I developed a creature much like Plasti-Max, who had Barbie dolls for fingers. They were to meet in a world called Candy-Land and do battle to the death.

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\(^6\) As defined in Webster’s Ninth New Collegiate Dictionary, Film-noir is defined as “a type of crime film featuring cynical malevolent characters in a sleazy setting and an ominous atmosphere that is conveyed by shadowy photography and foreboding background music.”
I can’t say when my work turned into more of a children’s animation, but the piece gradually evolved from a dark, serious story into a light-hearted fairy tale with bright colors and hearts everywhere. The intended message became one of love and understanding instead of darkness and demise. The reason the animation turned away from a film-noir feeling was due to several factors. The first was that the original story I had planned out was very dark and foreboding, and I had recently finished Power of Dreams, which carried a message of a decidedly dark nature. There was no humor in Power of Dreams, and the humor I had planned for Secret Agent Athena was of a darker, more adult theme that dealt with violence and sexual overtones. I gradually began to change the story around so that it became something fun instead of sinister, a concept that would be new and

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7 The original plot concerned an alien detective (without any super-powers) named Athena who searches for an evil villain in a dreary, sleazy city and combats his henchman along the way.
exciting. I realized I didn’t want to do another serious piece so soon after Power of Dreams, so the animation took on a lighter mood and went from having an Alien Secret Agent with a long trench coat into a superhero woman in skin-tight clothes who looked like Barbie.

Also, I realized that many technical factors would get in the way of my original plan. For instance, I wanted my original agent to wear a trench coat and walk dirty streets in the rain, just like Bogart in Casablanca, but the technical problems inherent in getting a digital coat to look natural would have been too much to handle. Since I couldn’t make digital clothing that would wrap around her body properly, I went for the Wonder Woman look of having a skin-tight leotard that had no swaying capes to deal with. Now that I was going for that look, the piece turned from a private-eye type main character to the superhero genre which almost completely negated my original idea.

Another technical issue which served to modify my original idea was the difficulty in creating Athena’s motion. I had envisioned her ramming one of her high-heels into the blobby mass of an alien thug to kill it but found out that the required motion was more than I could handle. The difficulty in getting a blobby character to animate was a big reason for utilizing a hard, non-flexible plastic character as her enemy. Her movements had to be pretty simple, so plans for complex motion were scrapped in favor of simpler motion such as punches and flying in the air. The ability to have her fly in the air easily was another push towards the superhero genre.

The plans for the lighting had to be changed as well in order to make the animation a manageable project. Originally, I had the desire to create film-noir lighting, with dark tones and shadows creeping in and out of the scene. I was hoping to apply particle rain to many of the scenes to give the animation a feeling of dreariness. However, the issues of
rain and lighting presented a tedious and difficult challenge that would have taken up a disproportionate amount of time to do properly and had to be eliminated. What I did instead was to light the characters and the world very simply with bright colors and light shadows. The result was a look of vibrant color and brightness that was relatively easy to generate and spawned a carnival atmosphere that permeated the animation.

What I did keep was the desire to produce a straight forward, commercially palatable animation that would incorporate narrative cinematic technique and utilize the latest software while giving the audience a thrill. In the process I learned how difficult it is to produce narrative animation that is easily understandable.

3.2 Original Concept

The initial idea of my new computer animated movie was based upon popular culture, such as Heavy Metal Magazine, the movie Blade Runner, the detective/mystery genre, and fantasies of what aliens might look like. The central character is Athena, a beautiful, tough, intelligent alien who plies her trade as a private detective in a decrepit but unique city full of scoundrels and excitement.

At Syracuse University I produced an animation titled Power of Dreams, a futuristic tale of an omnipotent machine called Xos who destroyed people by taking their dreams away. The piece took an abstract route away from narrative storytelling by purposely leaving the story ambiguous and using non-anthropomorphic characters. There were no signs of traditional animation, no squash and stretch, humanoids that had arms and legs but no faces. People said they could not understand the story and there were no clues to help their understanding.

Power of Dreams had a basic failure of which I was not aware of at the time, the lack of compelling characters. All great story telling has the power of effective
characterization behind it. The concepts of Xos and Rembran were too abstract to absorb because they fight the basis of human nature, which is to understand things which have human characteristics. The new story took a more straightforward approach by using aliens that have anthropomorphic tendencies and have a story that is more accessible to the viewer. The scenes look unique, yet familiar.

Imagine an animated 3d comic book and you will have a sense of the look and feel of this movie. Artwork from the artist Olivia De Berardinis and comic cells from Heavy Metal Magazine are influences on my piece. Athena has a unique look that is not human, yet has many human characteristics that make her a woman. Look at the Scenes from Heavy Metal and notice the distorted perspective, the extreme close-ups and the tilted camera angles. These are all techniques I employed to produce a visually rich piece.
CHAPTER IV  
Development of Agent Athena

4.1 Premise

In the comic book industry, I don’t think I’ve seen women superhero characters that are anything but beautiful and in prime shape. Some of the male characters have the liberty of being incredibly large or grotesque, but this is part of their appeal to young male viewers. Their grotesque aura adds to their power and uniqueness. The majority of the male characters are idealized, with bulging muscles and v-shaped torsos. Plus, the characters all have a Westernized look to them, meaning they all have the appearance of being white models with perfect bone structure. Some characters have different colored skin, but the underlying bone structure is usually Caucasian.

Thus, it seemed natural to me that my character fit the mold of a white, athletic woman. I chose blond hair and blue eyes because black hair is usually reserved for villains, and I wanted her to be as clean cut as possible - tough, yet full of tenderness when required. I wrote a letter asking Viewpoint Data Labs for one of their woman superhero models and after some negotiation I received a digital woman who was white, thin, and well endowed. She has a lot Barbie-like characteristics - large chest, perfect hourglass figure, styled hair, Caucasian bone structure. She is truly out of the norm, and that’s what superheros are meant to be, super-human.
She may have a Barbie doll look to her, but in my animation I have her participating in very un-Barbie-like acts, battling an evil walking juggernaut of terror called Plasti-Max and defeating him soundly with her super powers and physical stamina. This is known as playing against type, where we expect her to be a helpless woman doll but are surprised when she has a lot of physical and mental strength going for her.

I wanted Plasti-Max, who is in essence a walking toy store, to look like he was forged out of only new, shiny toys - the kind that are popular with Saturday morning cartoon watchers. The concept behind Plasti-Max is that of Frumpus, who was an unloved toy and wants to extract revenge on those who made fun of him because of his ugliness. He uses a mysterious power that causes toys to stick to him and creates an armored body that renders him invincible. Since Plasti-Max is supposed to look like a Frankenstein monster made out of toys, I found it appropriate to use pre-made objects when developing him. What I did was use the internet as a giant toy store from which to pull objects out of, use the ones I wanted, and throw the rest away. There are sites on the internet which have
3d models for people to use, free of change. I went through a lot of 3d objects to find what I was looking for, much like what a child would do when confronted with a giant toy store from which to pick out a toy for him or herself.

The use of pre-made objects fits in with the concept of my animation and is intended to represent stereotypical computer graphics by the fact that these types of objects are used in a multitude of commercially available animations. The plastic, commercial look was what I was driving for and the intensive use of Viewpoint datasets serves to strengthen that concept. In my previous animations, especially Power of Dreams, I refused to use pre-made objects for fear that the work would not be considered my own. However, since I had decided to go for the commercial computer graphics look, the proper direction would be to incorporate commercially available datasets into my animation.

Another stereotypical use of computer graphics is the use of the particle animations, including the hearts and explosions. Many people commented that they felt the explosions were in the piece simply because they looked cool. I agree that the piece could have been made without explosions but the addition of these effects serves to increase the "gee-whiz" effect inherent in plenty of computer graphics animation. Since I was going for the stereotypical commercial computer graphics look, I added plenty of these effects where I deemed them appropriate.

Finally, I attempted to incorporate stereotypical computer graphics characters into the piece that would increase the look of commercial computer graphics. Take for instance, Frumpus, the purple toy who changes into Plasti-Max. He looks pretty funny and cute, something you would expect to see in the computer graphics genre, and moves with the squash and stretch movement that is the main-stay of traditional and computer animation. The large eyes and belly automatically give the impression of friendliness and harmlessness, much like the multitude of characters animated with the computer on
television and film.

Figure 3: Frumpus

Figure 4: Plasti-Max is born
By using these aspects, I was able to create a piece that incorporated many of the aspects of commercial computer animation. The work deals with the issues of commercialism on a straightforward level that is hard to overlook due to the intensive use of pre-made objects and standard computer graphics techniques.

4.2 Technical Aspects

This work has spanned a good deal of time, from September 1993 to March 1995 and in the process has undergone major changes in both the story and the software utilized. When I arrived at ACCAD in September I decided the use a commercial platform to complete the work with the idea that a package such as Alias or Wavefront would be necessary due to the high volume of rendering and the large amounts of character animation. I had recently completed an internship at Industrial Light & Magic where I learned Alias, which is a high end modeling, animating, and rendering package for Silicon Graphics workstations. I did some motion tests with Alias and decided that due to the large amount of data required for my story I would choose another platform that would be faster and easier to animate.

Wavefront software was an ideal choice because of its excellent animation capabilities and the accessibility of compatible databases, which are three dimensional computer models that are animated and rendered to form the final product. Also, since I decided to use Wavefront’s complete package of particle systems and inverse kinematics, I was able to get a woman superhero database from Viewpoint and animate it using Wavefront’s Kinemation package. A good deal of the animation cycles for Agent Athena were developed by Ruedy Leeman and modified for my own use (Ruedy Leeman, owner of Alpine View Images in Columbus, Ohio, was an instructor at ACCAD for a year and assisted me in learning Wavefront software). Since ACCAD has the complete package of
Wavefront products, I was able to produce particle sequences of my hearts, which were an important aspect of the animation. ACCAD'S proprietary software tools were an important aspect when it came time to do image processing and conversion.

The animation was post-produced at Mills James Studios in Columbus, Ohio on their on-line Avid editing suite, which is a non-linear form of video editing excellent for the versatility it affords in trying different combinations of edits together. I had my original footage laid onto one inch tape which was digitized by the Avid system. The Avid process digitizes source footage from a video source and compresses it into a useable format by Avid. The user can then have all the footage available to dissolve between sequences, fade in and out, try different cuts, and perform a multitude of experimental tasks efficiently and quickly. The master copy was laid out onto Beta-Cam SP video tape and was ready for the addition of music and sound effects.

A musician I had worked with previously on Power of Dreams, Jordon Rothstein, received the original master copy of the animation and developed the music score for Secret Agent Athena. He decided to use a combination of instruments to complete the job, ranging from violins and trumpets to synthesizers and vocal tracks. An intern at Mills James Production Studios found appropriate sound effects and mixed them down to provide a sound effects track for the audio of Secret Agent Athena.

4.3 Development of Still Imagery

To further explore the commercial aspects of computer graphics, I created ten large posters using computer graphic imagery combined with popular periodicals and produced large scale plotter prints. In my still imagery I've made spoofs of current magazines and generic commercial products, such as Time, National Geographic, Glamour, Art In America, romance novels, cereal boxes, etc. Since my work concerns itself so much with
commercialism, I've exaggerated that direction by using major themes in American Culture and twisting them in such a way as to parody the culture in which we are involved. When I look at merchandising of products, I see a system where one idea is recycled into a huge array of different materials. For example, as an intern I worked at Industrial Light and Magic, which made the computer graphics for the blockbuster movie, Jurassic Park. The dinosaurs on screen have been imprinted on lunch boxes, tee shirts, stickers, mugs, hats, etc. The merchandising system in America is quite pervasive, and I'm trying to get some of that feel with my own work by making pop art posters and tee shirts made of my animation stills.

Commercialized culture copies itself at every turn. To make my posters of magazine parodies I substituted my own material using the format of the magazine. It's equivalent to filling in a coloring book - it doesn't matter what colors you use because the outline has been pre-planned. It's hard to find original material today because new concepts are borrowed from old ideas - recycled enough so that it is perceived as new enough to sell as a new product. When I went to the book store to get a book cover to make my romance novel spoof, I found a huge amount of material to choose from. The vast choice of materials tells me that a lot of people read this material, and it seems no different than any other mass merchandised product. Most of the novels look and read the same - with interchangeable plots and characters.
I had a lot of fun developing my National Enquirer spoof, called Global Enquirer. The magazine provides an amazing amount of material to work from and is probably the funniest poster because the Enquirer is an unmistakable intrusion on everyone’s life. Any time you shop in the grocery store you can find it and its relatives staring at you as you wait in line. The National Enquirer, as the most circulated paper in America represents American culture in a convenient package and is recognizable by everyone, making it an ideal candidate to twist around and expose its absurdity.
4.4 Survey

I was concerned about elements in the animation that might be considered sexist, and while I did all I thought was reasonable to avoid this, I still had questions. The main character, Agent Athena, has many qualities of a Barbie doll, with ample breasts and a perfect figure, along with blonde hair and blue eyes. Along with this, the animation contains a large amount of cartoon violence and sound effects. These elements, sexuality and violence, are present in a significant amount of superhero animation, and I wanted input on whether there was too much in my animation.

To address my concern, I developed a short, one page survey asking about issues such as the physical and behavioral aspects of my female character. I asked about the viewers opinion of Athena's physical and behavioral portrayal, of the amount of violence,
and further asked them to comment on aspects of the work that might be considered sexist. The results are encouraging; 60% interviewed felt she was portrayed in a positive fashion in physical terms (choosing either (a) or (b) as their response), and 70% felt she was portrayed positively in behavioral characteristics. I’ve included the survey and the percentage of people who chose a particular answer.

**Survey of Secret Agent Athena**
(The numbers in the parentheses are the percentage of people choosing a particular response.)

1. Your Sex: Male (60%) Female (40%) Major/Occupation: ____________

2. In terms of this animation’s physical portrayal of Agent Athena:
   a). She is portrayed in a very positive manner. (30%)
   b). She is portrayed positively, but with some reservations. (30%)
   c). About average. (15%)
   d). In a somewhat negative vein, with sexist overtones. (20%)
   e). very negatively (0%)
   f). other (5%)

3. In terms of this animation’s behavioral portrayal of Agent Athena:
   a). She is portrayed in a very positive manner. (20%)
   b). She is portrayed positively, but with some reservations. (50%)
   c). About average. (15%)
   d). In a somewhat negative vein, with sexist overtones. (5%)
   e). Very negatively (0%)
   f). other (10%)

4. Does the amount of violence in this animation concern you?

"Even Bambi was violent."

"Yes, there is too much violence, but this is typical of almost everything in the film/video genre."

"No, not really. But it is not the type of animation that I would keep watching if I saw it on
television."

"Nah. It's okay."

"Not at all. No blood and it's funny."

"No, but the amount of explosions and particle animations do."

"No - It is presented in a manner that is an abstraction or caricature of 'real' violence, and is therefore palatable."

"Not excessively because the only 'non-human' evil creature is destroyed. No one else has any ill effects at all - but for young children it might be excessive."

"No - it is not graphic. Nor is it very direct - It is almost funny."

"No, perhaps because I am used to watching much more violence in animated film."

"Not in the least."

5. Please comment on aspects of this work that might be considered sexist.

"None really - You do notice Agent Athena is female and also the villain is female - but this would be considered as a reversal of the typical stereotype." (My note: In actuality, the villain is supposed to be male, although I can see how some people would get that impression.)

"The pervasive use of hearts bothered me, especially in the fires and explosions. They seemed to make the action too 'sweet.'"

"It has a woman portrayed in a traditionally male role of beating people up. I don't see how this is sexist."

"I'm unsure whether - and why - the antagonist (The Frumpus) and, apparently, other nearby objects seem to "fall in love" with secret Agent Athena. If this is an accurate characterization, this is perhaps an antiquated and limited role for a female character to play, akin to the "Wonder Woman" TV character."

"The emotional reaction of Athena to the Phoenix at the end of the story seems appropriate since Athena is female. If Athena were male it would seem inappropriate - maybe this reflects more of my own sexist stereotyping than that of the animation."

"Agent Athena is a male fantasy."

"Stereotypical blonde with blue eyes and an hour-glass figure. However, her actions did not seem to follow a stereotype."

"The heart on the front of her uniform - as well as the hearts all around in the air."
"I don’t think so. I think it’s more about the good versus the evil."

"She’s blond, tough and might be considered too masculine because she is fighting. You’ve basically taken a male identified occupation and feminized it - or rather replaced what a male might do with your concept of a female superman."

"The spewing hearts concerns me in that what if this were a male character spewing hearts. How would he be perceived."

"I don’t see anything sexist here."

"The way the main character is portrayed (hearts all over, so sweet, so nice, so caring, too much). Close up of the character is revealed in the same way. The way she moves during the fight, sometimes it looks like she is dancing ballet."

"When the colors of Athena change. The heart on her breasts also changes noticeably, bringing attention to her breasts."

"Many feel that portrayals of the opposite sex having idealized proportions are 'sexist'."

6. Please add any other comments you might have.

"I think the range of animations is good and the animation itself is fine for demonstrating your skills. Your concern over sexism in the portrayal is being paranoid of the perceived female backlash. Don’t worry, your attempt at even using a female character is enough."

Female Graphics Designer

"I am impressed with the length and detail of the animation, but occasionally disappointed with the quality of the character’s motion."

"Why is Secret Agent Athena so expressionless?"

"The story line is confusing."

"The colorful and quick moving screens are attractive."

"I like many colors. The animation is too smooth; It might have had some frames dropped. I find it funny if I think of all this as a comment on the use of explosions/break downs and commercial animation, like the dramatic shot by the face of Athena., etc."

"Nice particle effects."

"In general it’s a funny, cute piece to be watched."

"Since she looks like a human, I expected her to move more smoothly - just like human movement in a real world. Athena’s movement is rigid and robotic. But overall, it’s a good piece of work. Congrats."

"Really a nice animation. Probably the longest animation I’ve seen come out of ACCAD."
In general, men were more sympathetic to the question of possible sexism, while the women invariably had comments pointing out aspects of the animation they considered sexist. A number of men said there wasn't anything sexist at all with the work, but the great majority of the women respondents took issue with various aspects of the piece. In the general section for comments I received a number dealing with the look of the work and such aspects as why Agent Athena was so expressionless.
CHAPTER V

Pornography in mainstream comic art

The superhero comic book industry is a male-dominated field that concerns itself with fantasies of sex and power. Along with dealing with issues of sexism in my thesis animation, I also worked on The Mask, an animated comic book I helped create last summer at MetroLight Studios. The Mask is an extremely violent comic book about a magical mask that gives the wearer great power when put on. Also, this electronic comic book has graphic displays of sexuality that are quite common in superhero comics. While I had an interest in creating my animation in the genre of an animated, three-dimensional comic book, I wanted to avoid graphic descriptions of sexuality and violence. While I steered clear of excessive gore and graphic displays of pornography, I realized that pornography as an issue has to be addressed by anyone creating work in the comic book superhero genre.

The male reader has been conditioned over the years to accept pornography as traditional fare for the comic book industry. Some aspects stand out as ridiculously obnoxious. Take, for example, an Advertisement on the inside cover of a recent issue of The Comics Journal: The Magazine of Comics News and Criticism. The page is filled with minimally covered, shapely women (one of which is shown masturbating) drawn by the artist Milo Manara. Here is an excerpt from one of the advertisements: "BUTTERSCOTCH - Newly in color. How would you like to become invisible so you can do with women whatever you like? Especially in public! Imagine a gorgeous Manara girl writhing in ecstasy because of the dirty tricks you're performing on her... in a high class restaurant!
And that’s only the beginning.” This advertisement reminds me of something one would find in the adult section of a newsstand, not in a magazine that dubs itself “The Magazine of Comics News and Criticism”. It is no wonder that superhero comic art isn’t taken seriously when a premiere comics journal features advertisements such as this one on the inside cover.

It concerns me to see this type of advertisement in a prominent journal that bills itself as a serious forum for the discussion of comic book art when artists are attempting to develop meaningful characters that attempt to strengthen women’s positions in this male dominated field. Female characters abound in the comic book industry, and, like their male counterparts, have flawless bodies and perfect features.

Superheroes are attractive to men and boys (and to a lesser degree, women and girls) because I believe they offer a sense of power that occurs when the reader envisions themselves going through the scenarios with which the character is involved. Thus, the reader is able to live through the superhero and, with his super powers, extract revenge on enemies and win the affection of beautiful women - feats that ordinarily would not be possible. I believe superhero comics offer a type of seduction that is akin to pornography in that both offer the viewer a sense of control and an offering of pleasure that otherwise would not be available. The fact that it is only a substitution for the real thing allows the viewer to fantasize about what can occur without having to face the consequences of their actions. It becomes clear that comic books are like pornography in that they offer escapist entertainment for the viewer in a secluded, protected world of pleasure without responsibility. This is why I feel that semi-pornographic advertisements are prominently displayed in The Comics Journal.

The superhero represents a fantasy of what the male reader wishes he could be. As a product of mass media, superhero comics lend themselves to cheap digital replication and
incorporation into the predominantly male realm of cyberspace, where they will continue to enjoy a secure future. This realm also serves as a secure area for many male computer hackers, a place where they can be in control, much like being in an fantasy comic world. The superhero comic can also be likened to soft-core pornography in that both genres appeal to men's desires to satisfy needs without accepting responsibility for their actions.

Mainstream comic art may appeal to the same audience as pornography. I believe there is a correlation between comics, pornography, and computers that will have significant influence on artists creating work in this genre. Since the majority of comic art produced is for an adolescent audience that is not interested in fine art, artists may stay clear of this genre or develop their own specific sub-genres.
CHAPTER VI

Conclusion

Computer Graphics is a new art form that has not yet reached its apex in terms of artistic and technical innovation. As more and more artists approach the medium and venture off in new directions we will see a wider variety of talent enter the field to push the envelope of current artistic expression. The technology will always increase at a geometric rate and the artistic aspect will catch up more gradually.

I developed my work with the intent to produce a commercially acceptable animation that would serve to showcase my current animation skills and provide a solid foundation of technique from which to build upon. Developing this type of work is demanding to say the least, and I've learned a great deal about computer animation producing the work, and had some fun along the way, along with more than my share of despair. The amount of work I put into the animation was significant, and I became aware of the full spectrum of skills necessary to produce work in a networked, shared environment such as ACCAD. Previously, I produced animation on my Amiga computer at home, and had fewer issues to deal with, such as disk space allocation, availability of machines and software, and editing options.

The superhero is alive and well in the digital realm, with many characteristics being transferred from print to the computer screen. The issues of sexism have arisen with the use of the woman superhero database and her behavioral characteristics, which is why I developed the survey to address these concerns. I found that the majority of people surveyed had a positive reaction to the work, which led me to the conclusion that my intent was reasonable in regard to using the shapely woman superhero.
Also, I learned a great deal by doing my still imagery and poster work which addresses the issue of commercialism and its far reaching impact on American society. I learned that computer graphics is considered a commercial art form, and my current work has a significant amount of commercial aspects to it. I decided to push the concept further by developing the posters to underscore the irony and carbon-copy nature of mass market culture.


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