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in candidacy for the degree of
Master of Fine Arts

Interactive Television: Advancing Television Through Integrated Technology
by Stephen Gallo

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Approvals

Chief Advisor: Chris Jackson, Graduate Coordinator, Computer Graphics Design

_____

Signature of Chief Advisor Date

Associate Advisor: Dan Deluna, Assistant Professor, Computer Graphics Design

_____

Signature of Associate Advisor Date

Associate Advisor: Shaun Foster, Visiting Professor, Computer Graphics Design

_____

Signature of Associate Advisor Date

School of Design Chairperson: Patti Lachance, Associate Professor, School of Design

_____

Signature of Administrative Chairperson Date

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Abstract

Television has been struggling to find its position in the evolving world of media. It remains mostly one directional output of content and it needs to fit into a world where people are growing to expect more and more interactivity in their experience. Adding a dense component of interactive options into the television experience could cater to revitalizing this centerpiece of entertainment and sustain its dominant place in our households' entertainment center. There is a vast array of technology that has arisen that television could easily play off of and integrate into the main experience to revitalize itself.

The goal of this thesis is to entice individuals to re-evaluate their relationship and experience with television as it currently operates. Presenting them with even a small variety of examples where other functions could be implemented could intrigue them enough to invest into considering deeper potential to the medium. The motion pieces serve as viral spots to garnish interest and get people to read the text portion and hopefully stimulate thought as to what they would like to be able to do with television.

Introduction

The experience of watching television has been a staple form of entertainment in most regions of the world for the last several decades. The experience entails viewing prerecorded and live video content as a form of leisure. While a variety of programming has appeared since the dawn of the medium much of it still remains similar in nature. The format was popularized by allowing content that was once only available in movie houses or by live performance to be enjoyed in a variety of locales.

The average person watches television from eight to fifteen feet away from a fixed location. Though there are many circumstances where smaller television sets are common and this viewing radius differs. The standard block of time for a program to last is thirty minutes, though sixty minutes is also very common. Live performances and sporting events tend to last for a longer duration. These standard expectations make up much of what makes up our television watching habits. The viewer turns on the device and receives a signal be it analog or a soon to be standard digital signal and finds content which is to their liking from an assortment of designated channels. The viewer then passively watches whatever content is being show to them with little or no interaction beyond this point. There have been many technological advancements in the last several years which relate to and have used television style content to create more robust experiences. Content and shows can be downloaded or accessed on demand and supplemental information can be acquired through online searches. The pastime of watching television is common and many people enjoy blogging and net working based on television related issues. However all these supplemental activities though related to the television experience are accessed through a variety of formats dislocated from their television set and the standard features it allows. The television itself remains a very stagnant device which has not accessed this multitude of technologies and allowed the user a more robust experience.

The purpose of this thesis project is to illicit the user to respond and reflect on the television experience. This is merely a highlight of the potential that the television format has if it were to incorporate new technologies into how it functions.

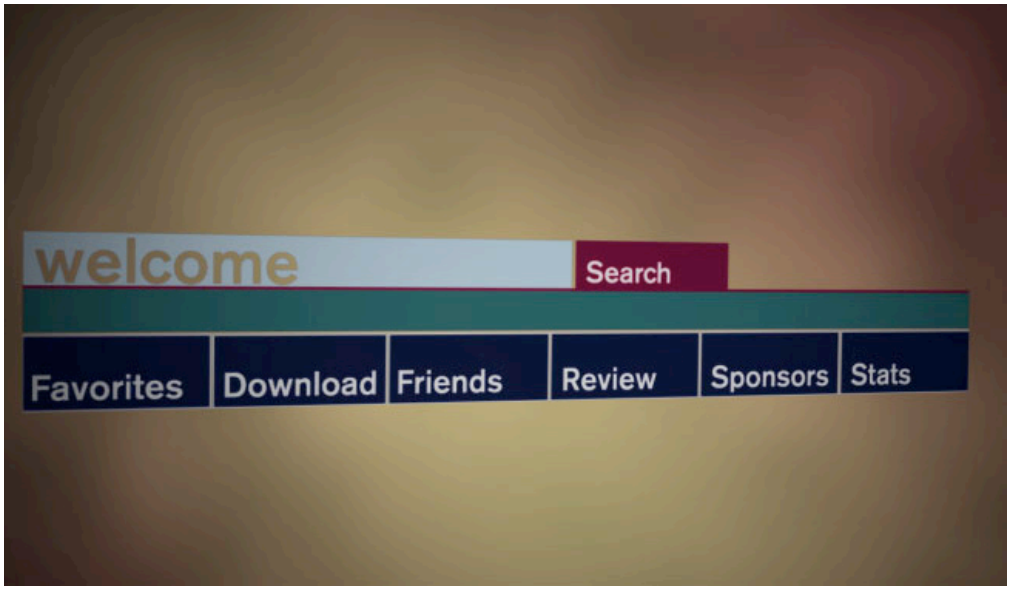
This thesis contains three motion graphic pieces that function as viral ads which accompany a website that has brief informative blurbs to stimulate brainstorming on how television can change. The motion graphics pieces were the biggest technical focus in the project as it is the area where I would like to specialize. I chose to use three different styles for each of the animated pieces that each depict a different facet of television and how it may expand. The web site portion of the thesis is the container for these three animated pieces and it also holds a section with ten different areas where television could incorporate other technologies.

The end result was to have this variety of animations based on this focal point and to hopefully stimulate the user to consider different directions that television could go into. They should also consider their own television habits and what they personally would like to implement to have a more satisfying experience.

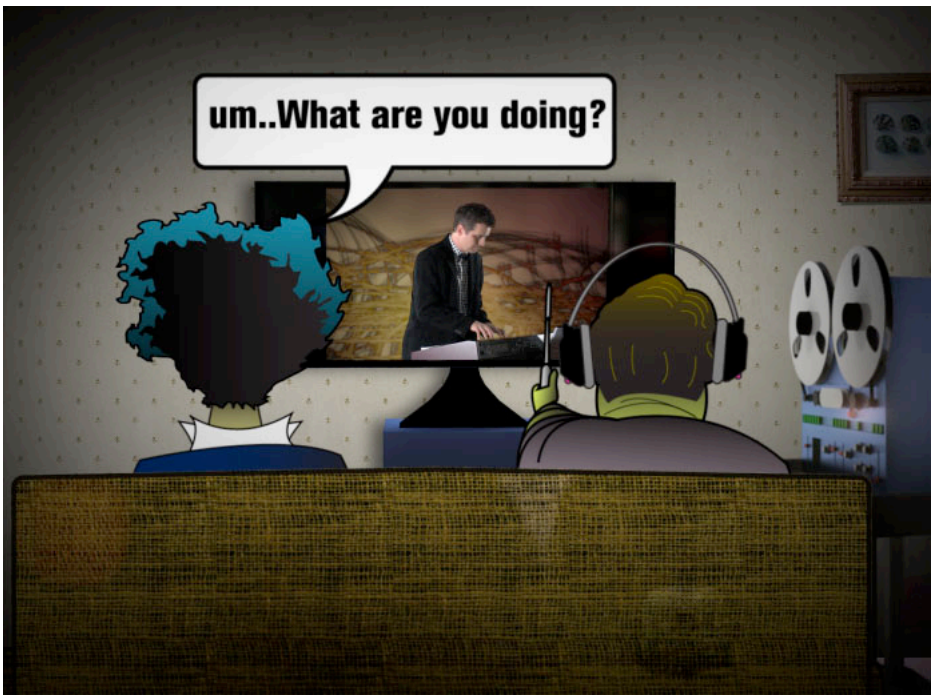
Design Process

There were four major design elements attributed to this project. Each of the three individual motion graphics pieces plus the web site which ties them to the thesis. This section will go into detail on each of these parts of the whole and explain design decisions as well as execution.

The thesis project did not start out with this dynamic and after much dialog and feedback from numerous sources I retooled what I initially designed for the project. The design process is not one that is always perfect from the start and ideas must have their origins. The first draft of my animations involved a much closer look at interfaces and used repetitive segments starring two characters on a couch exchanging dialog. The interface design was supposed to be clean and function in a 3d space and the characters were to function as touchstones to the overall presentation and be the memorable link to the theme.



Interface design for initial animations



Character design and set for the original animations.

This approach to the adverts however became quite redundant and did not work as a short memorable piece of information. The cut and paste approach to the content stood out and the idea of showcasing interfaces for something that did not actually exist distracted from the point and would need a copious amounts of data and content in order to be applicable.

After several feedback sessions from multi parties it was decided that the focus of the project in general was often unclear. Therefore the project needed to be brought back to the drawing board. The second iteration was much more successful.

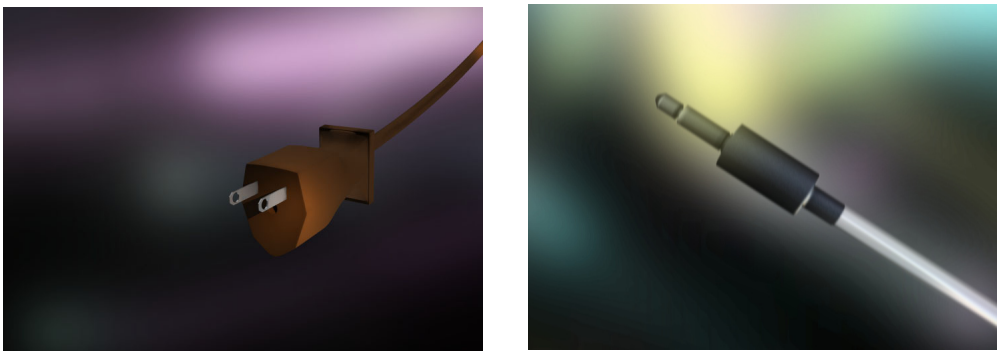
The second run brought everything a step back and took out the hypothetical interface and system through which to view tv. It was not logical to propose something that I did not have the capability to build and test. Therefore I would focus on existing technology and how it related to television and construct my videos as more stylized teasers to a get people interested in the general theme.

The first piece to be constructed was to be based on music television and features that could be present and open to the format as more of a personalized and community based service. The piece would be constructed with the three ideas; downloadable content, user feed back with the ability to rate music, and social networking. This broke down into the three words download, rate, and share. The animation would revolve around musical instruments and peripherals while presenting these ideas.

The elements were constructed and animated in Maya to be later edited and composited in After Effects. The text in the piece needed to be legible yet dynamic. The font choice made was Planet Cosmos as it was bold with a hi-tech feeling. The text needed to be altered to increase legibility for certain words.

In total there were four scenes created for this piece. The first of which establishes style and content. This shot follows a plug which acts as an animated stroke and transitions to the next scene by plugging into the camera. The plug was built and animated in Maya through polygonal modeling and attached to a curve. This was a large scene so the base lighting was done with image based lighting extra highlights were created with extra spotlights along the path. Four different cameras were mounted along the path, two of which were animated to follow the plug as it traveled.

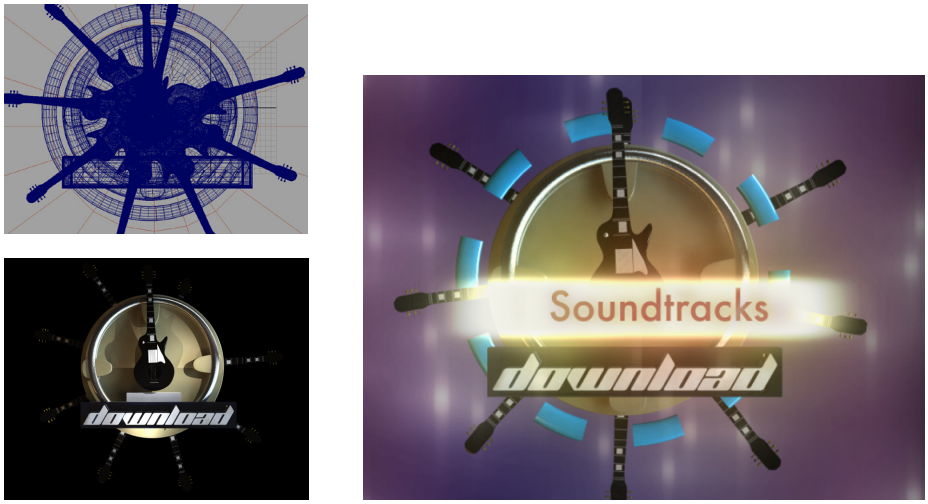
The first design of the plug was more of a traditional extension cord. It possessed a rubberized texture and orange coloring. This design however seemed to fight the general idea of advancing technology and therefore was later replaced with a speaker jack and cord. The colors and textures were changed to metallic and plastic whites and silvers.



Original and revised cord models

Using scene elements for the transitions the plug collides with the camera. Then Maya particles were used to make a shower of sparks dropping at random times and places. instanced spheres were used as the particle shape. Then the image series was brought into After Effects where the particles were duplicated and given gaussian and directional blurs to make them more star shaped. Multiple layers and scales of the stars are applied to the scene to complete the desired effect.

A circular structure was then built and animated in Maya. Based on guitars, the design was to function as a wheel that would let you cycle through various downloadable content types.



Maya mesh / all layers beauty pass / Final composite.

The third scene contains the text “rate songs”. This is inferring the user being able to interactively review and share ratings of music they hear on television whether from shows, videos, or ads even. The musical element of speakers were chosen for this scene. The transitional element leading into the scene plays off the previous scene’s circular structure. By wiping the interior of a speaker over the the last scene in a sweeping arch motion it was to mimic that element and provide a strong transition where the camera can then pull back to reveal the whole speaker composition. The first camera motion used pulled back and wrapped around to the side of the speaker. This however due to the rectangular shape of the speaker created a strange visual illusion and looked awkward. This motion was changed to a straight pullback which lands in a worms eye view that allows the speakers to have a stronger presence.

The text itself flies in from behind the speakers at the viewer and is supplemented by some stars as well. The stars are there to help support the reviewing of music element as stars are a common form of visual language used in rating systems.

The speakers themselves pulse to the music to add extra visual flair and connection to the piece and its timing. This was achieved by overlaying an rendered animation of the speaker beating over a non beating pass manually placed where the bass beats hit in the song.

Final Composition of scene three.

One of the 3D stars flies out at the camera to wipe the scene. This leads into the final scene of the piece before the end tag. This portion revolves around the words “share music”. The musical element used to present this theme was a large crowd of people. They were created as black vector outlines. Eight different people were made and placed in a row. This row was them randomized in order. These randomly mixed rows were placed in 3D space in After Effects and the camera was animated to fly through them. The individuals were given a slight amount of wiggle to make them less stiff and more like a real crowd.

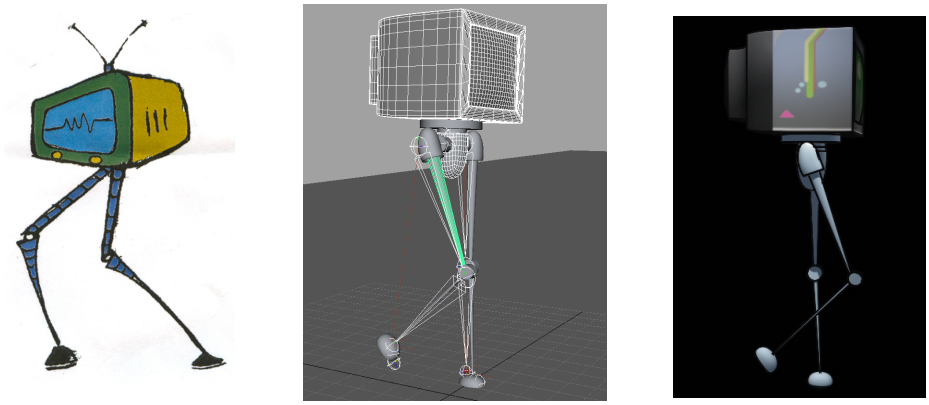
The text portion is used to close the scene as it turns onto its side and flies through the cam era leading into the end tag. The end tag is a repetitious theme which was created to tie all three animations together and into the main theme of the thesis. The closing tag always contains the word “reThink” and in this instance was presented as “reThink Music Television”.

Final scene with crowd effect.

A sample from the song “Falcon Jab” by the electronic band Ratatat was used to accompany this motion graphics piece. Minor edits were made to the track in the music editing software Garage Band to the songs levels. The bass and drums needed to be more pronounced to give the song stronger elements to edit with and give the piece a fuller feel.

The second animation that was constructed would focus on basic channel surfing. The idea was to have a television walking through a variety of scenes that embodied different genres of television programs. The linking end tag for this piece is “reThink Channel Surfing”. The style that was decided on for the piece was very cartoon based and would focus on vector art. The scene consists of four separate sections based on different genres and styles. Those scenes were a fifties style black and white neighborhood, a WWII style scene, a cooking show, and an old horror style cemetery.

The scenes would be crossed by an animated character which would walk through all of these different zones. The character design was first sketched by hand then modeled in Maya to allow fluid animation of the walk cycle.

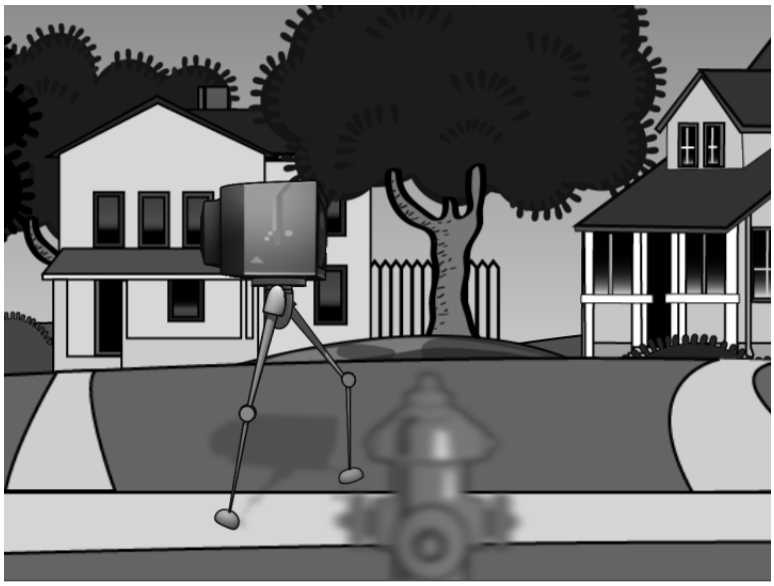


Sketch, Mesh, and Rendered versions of television model.

The television character’s walk cycle was then composited into the various scenes. The scenes were mostly composed of vector artwork with some 3d elements. The character was rendered out using Maya’s toon shader and fit to match with the perspective and style of the scenes.

The first scene is of a 50’s era Television style neighborhood. The television walks down the sidewalk past two houses before cutting into the next scene. The scene was first made in color then it was decided that it did not capture the essence of the style and was later changed to be in a black and white color scheme. The only secondary animation contained within this scene was a flock of

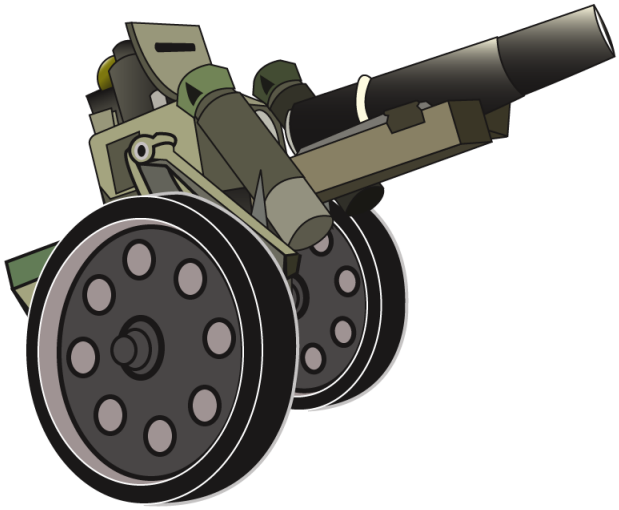
birds used to give the scene more life. The birds were made as flat vector images that had a four frame animation applied to them before being multiplied and layered into a group. The groups were then multiplied and layered and had the animations staggered and randomized to give the birds a variety of motion.



Final Composition for 50's scene.

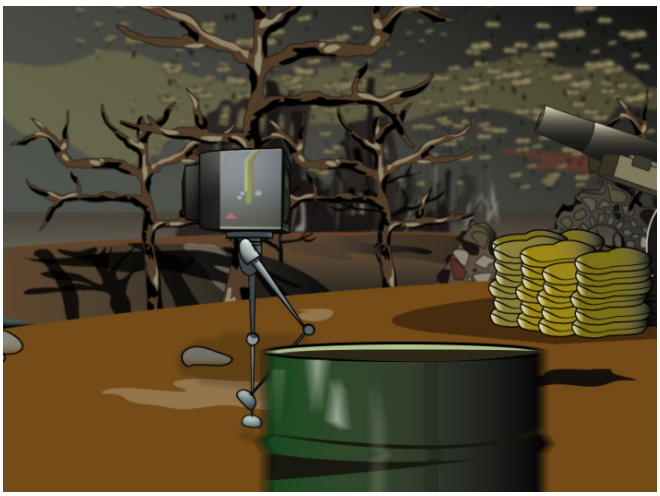
The music for this scene was an upbeat piano loop from "freesound.org". It contained an appropriate style that accented the lighthearted and retro mood of the scene.

The next scene involved a war backdrop which was meant to be much busier and more chaotic in contrast to the first scene. The scenes are blended together with static to simulate channels being changed. The elements which were designed for the war scene are a battlefield, a large gun, paratroopers, and a devastated city. All of these elements were created in illustrator then layered and animated, if need be, in After Effects. The paratroopers were animated in a similar fashion as the birds from the first scene filling the sky in the background. The big gun was split into a few different parts so that it could be made to look as if it were firing with kickback. The idea for the gun was taken from images of World War II heavy artillery however was re-imagined to look more cartoony.



The color scheme was kept in muted palette with an adjustment layer to make sure everything stayed consistent. The colors were also kept in a range of browns and greens as the main colors.

The audio for this scene was a mix of free sample beats from “freesound.org” the music was a mix of a couple piano and drum loops. A heavy layer of gunfire and explosive sounds were also placed in the scene to complete the feeling of the war and provide the extra contrast from the opening scene.



Final war scene composite.

The third scene brings the television into the kitchen of fictional chef Renaldo. This backdrop is based on shows like “Emeril Live” and is fairly bright and stark in contrast to the other scenes. A full kitchen was made in illustrator along with utensils and ingredients. This scene also is the only scene that contains a person that reacts to the presence of the television character. Renaldo provides a simple reaction of confused surprise.

Renaldo Live kitchen set.

The audio for this scene is a Duke Ellington song entitled Black Beauty. This was a royalty free blues classic recorded in 1928. This song fit the upbeat mood of this scene and fit for a theme to a live cooking show. A large crowd cheering was also created by layering several crowd samples from “freesound.org”.

The final scene before the tag line reveal is set in a cemetery. The scene is a reference to an old horror style program. The color scheme is sepia based with washed out borders and film grain added to complete the effect. The scene is composed of numerous gravestones some made in illustrator with others made in Maya. Numerous trees and bushes where added to the scene to provide more texture and diversity to the scene.

The sound track to the scene is sampled organ music from “freesound.org” that is slightly creepy to fully complete the ambiance of the scene.

Final cemetery composition.

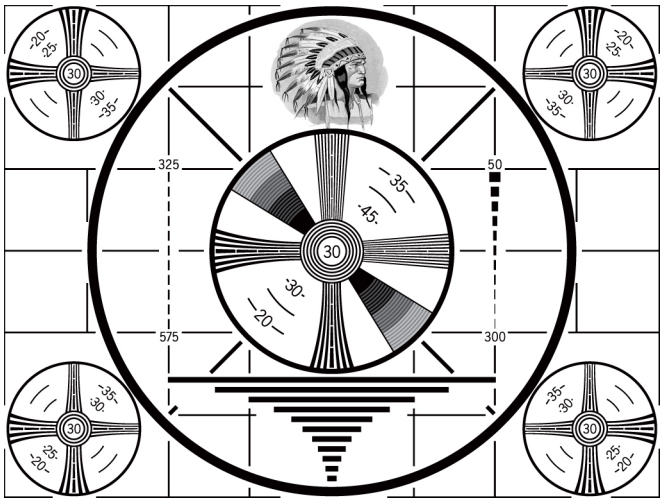
This scene is the only one where the end tag is revealed in a way other than a fade in. The robot television character walks by creating the reveal as he passes the screen.

The final animation for the thesis is mainly text based with some graphical elements supplementing the words. The format is several constantly growing circular shapes with all text made to fit and function within the shapes. The meaning behind this piece was to show the growing connection between various technologies and and content and television.

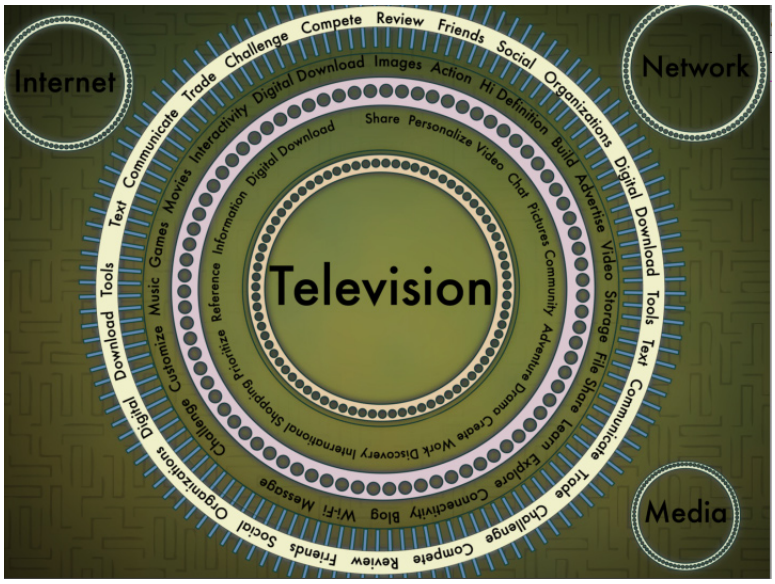
The main categories decided upon are Television, media, internet, and network. Television is the core to the animation and takes residence as the largest word in the center. The other groups are placed around the central theme in their own yet identical in shape circular cells. Within the borders of the concurrent outer circles surrounding the main shape are words related to the three main sub categories. For example, the media unit would relate to the words movies, games, and photos.

The main design of the piece was influenced by astrological maps of the solar system and the sign off image for television stations that was used many years back.

Ancient astrological chart.



Original RCA test pattern 1938.



Final composition to reThink connections.

The animation was cut to and sound tracked by the song “Kids” by MGMT, Columbia records 2008. The song sample provided a fast upbeat pace that had a circular feeling to its rhythm.

The final element to be produced was the web site and copy that would present the user with several ways television could expand. The design was kept very minimal to allow the user to view the main content and videos on the web.

The web page consists of an opening page that outlines the mission statement of the project. From this page the user can than access the videos and ten technologies. The user is able to link to these sections via the main buttons which are present at all times while interacting with the site.

The color palette of the web page was decided upon by choosing the colors that complimented the motion pieces best. The font choice for the logo matches the one used throughout the motions pieces and is called “Futura”. The page was assembled using both HTML and CSS coding languages.

The videos have already been detailed upon in the previous section of this documentation. User feedback and the technologies bringing change to television are detailed in the next sections.

User Feedback

Throughout the process of realizing this thesis project I looked to an assortment of individuals to attain feedback. I used opinions from classmates and others with experience in the field of study, family and friends on the outside of the field, and of course my thesis committee which contained professionals and experts in the field. They were all encouraged to give honest feedback on the clarity and design choices within the pieces. I showed a variety of still screens and workups of the final animations and noted all criticism that was presented to me.

The initial attempt at creating this project which contained the two characters and a more direct attempt at showcasing a functioning system for interactive television was developed and presented at the original fall show. These segments received a mixture of positive and negative feedback. My fellow students tended to focus on the characters and enjoyed the humor present in this approach. They mainly seemed to disregard the transitions and segments pertaining to the core ideas of interactive television. Their comments were not highly critical however the lack of notice given to what was the core idea seemed very notable. Family and friends did not seem to grasp the greater whole of the project either. The faculty advisors presented the most informative criticism. Where they tended to like the overall character and room set up, however they found the segments to be redundant and too narrow in scope. They commented on the transitions and misleading ani mation techniques which hindered the readability of the message or obscured the overall message. They proposed I create more variety and approached the way in which the interface animations were handled. They required me to step back and refine the segments rather than present in the fall show.

This lead me to revamp and form a new direction for my thesis while retaining the basic theme of interactive television. Rather than trying to demonstrate a practical interface and function for something that was wholly larger in scope, I would make the whole project more abstract and focus on the ideas rather than proposing a structure. This lends itself better to the overall nature of what I was trying to propose to the audience.

Therefore I re-imagined the project into the animations that now exist which are unique in style but connected to the theme of the thesis with their tag lines and broader message. They would now be unified via the written portion of the thesis through a webpage.

This new direction allowed me more flexibility and to create a wider range of work that I could use to exhibit my leaned skills and present a more solidified project. New storyboards, stills, and animations were then presented. The criticism here seemed to bring about changes in smaller decisions, typography, and thematic design choices which I detailed in the sections above.

Leading to Change

The web page for this thesis project possesses ten technologies and innovations that lend themselves to the television experience and improving it. Many of these technologies are already used in conjunction with television sets however are part of another piece of hardware that utilizes the television for its output. The specifics of why these technologies would help out television are sometimes clear, such as having internet access straight to your television. This would open up the doors to many of the other technologies that are talked about in this project along with countless other functions and possibilities.

One of the more controversial innovations on the list is digital distribution. Where media is purchased and attained completely in digital form and downloaded directly to your hard drive. Some people such as Peter Moore, former head of Microsoft's interactive division and the current head of EA Sports, declared in a recent interview with UK based magazine the Guardian that digital distribution is the inevitable future of all media.

> "in the future hard drives are going to be bigger, broadband is going to be faster and we're going to look back and laugh at the fact that we used to drive to the store to buy a piece of plastic with data on it. That business model isn't going to exist – I don't know whether it's going to be five years from now or ten years, but it's not going to be around anymore." (Stuart)

Many people however do not trust strictly digital media and like to have a solid artifact of purchase in their hands. While it may take time for many consumers to jump on board with all of their purchases there are real and strong applications for digital distribution on the television format.

The removal of having physical copies of media makes one think of what else we could shed. One thing that everyone can agree on removing are wires and cords. Wi-Fi has made the world of computing change and has reinvented the nature of many public outlets which now offer a net of the service. Television could also stand to lose all the wires and chords. Whether having Blue Tooth

connections between the Television and any deice you need to connect it with or simply making it receive all signals through the air. A recent research project is even trying to make wireless power an option. Prototypes have been constructed that can safely do this to object in close proximity to the power emitter. They are attempting to increase this radius so you may just have one power unit in your house that runs everything wireless.

> "The re-charger — a power transmitter — would create a "non-radiative" electromagnetic field that would send out energy to specific devices programmed with similar resonances." (Yokers)

This would allow complete freedom of placement for your television and no restriction based on outlets and cords.

The wireless hookup would be ideal for a cam. Allowing new positioning and interaction not normally available with a camera ad on. Though there are very few easy video camera attachments for televisions as there are with computers. It often involves a larger hookup to have a video conference on a tv set. With the popularity of Vlogging and interacting over cams increasing this seems like a great cam system would be a great feature on a television. The Sony Eye Toy is a great camera which smartly captures video and audio to allow more experiences than just capturing images. The Eye toy allows for motion control and interaction and is actually able to record and translate hand gestures.

Motion control in general has become much more popular as of recent times. Having a television interface that you could control with gestures and point and click functionality would open the doors to numerous possible features. The Nintendo Wii has made this an accessible technology to most people. With the comfort level of interacting this way increasing the functions and ways it is used should also be expanding. The Darwin remote is much more refined and sensitive motion device that is flexible with a variety of formats.

“The success of the Wii has brought a lot of attention to motion-based game controls. Sony and Microsoft are undoubtedly working on their own motion-control systems right at this moment, but Motus, a company started by a team of MIT grads out in Cambridge, Massachusetts, has already demonstrated a new controller that has the potential to bring motion control to any gaming platform.” (Yu)

This quote was being talked over in context of video games however this could translate to a television interface as well.

Another interesting mode of control that could have useful applications for television is speech recognition software. Allowing for vocal control over what you want to do to allow more complicated tasks to occur.

Following user control methods comes allowing the user to control how the television experience performs and functions. Everything is becoming easy for users to customize to their needs and television can easily implement these kinds of features. Everything from being able to create playlists to having a system like Pandora has where recommendations are suited to who you are and what else you enjoy.

User control can take form in how things appear or by having applications that allow wanted tools to be on screen at times when you need them. Sites like Meebo and Facebook have become the standard for user control even if their are many boundaries. They encourage the implementation of creative devices that users and businesses create to supplement the user experience. This is currently being worked on by Yahoo for the television user.

“Intel and Yahoo said Wednesday that they are teaming up to bring Web-style interactive applications to television sets. The joint effort is one of many aimed at bringing interactivity to television, a concept that has been trumpeted for years but has seen little consumer adoption so far.” (Helft)

Finally the need for a community based system is something television will surely delve deeper into in the future. Social networking and interaction within the television experience will create a more dynamic environment allowing people to better share what they like. People who like the same shows already form groups and having access from the television will just strengthen the interaction.

These ideas and applications of possible television use were the ones used at the forefront of the project. There are countless others and subgroups of applications within these that should all be looked at. This project was meant to just show enough to get the thought process rolling so people would continue to think and analyze how they wanted to see their television experience evolve.

Conclusion

This thesis project was designed to get people to think about the flux that television is in right now. To evaluate the current status of the format and where they would personally like to see it go. There are a multitude of viewers and everyone will want different technologies to penetrate the format. This thesis project was meant to at least bring some casual thought to this change.

The project as a whole took some time to organize and just attain a central focus. While developing the ideas it was either too broad or too narrow at given times. In the end I think this format created enough interesting content to reach the goals.

The animations went through some layers of change and in the end I was very pleased with how they took shape. There is always room for additions and edits however I think I was able to execute the ideas I had in my head to a complete and accurate state.

After talking with people who have looked through the process I think I was able to create a good amount of conversations of the subject.

In the end I leaned new animation techniques and refined many technical skills I have been working on. The workflow and organizational techniques I found myself using helped me to complete the more layered sections of animation. My approach and understanding of transitional elements improved greatly as I put more time and focus on them. I have improved my modeling skills and quickened my workflow in this regard and plan more efficiently in Maya. I also have improved my rendering skills and implementing a variety of layers to my rendered objects to allow more flexibility.

My skill set in Illustrator also was enhanced after the more intense practice I needed to build some of the more complex items in my animations.

The final product came out well and I think it was successful in completing the objectives that I had set out for it. Overall I am pleased with my thesis project and with the knowledge I personally acquired in the process. The project also gave me a deeper insight into the topic I was invested in and I am excited to see how interactive and technological progress is implemented into the television experience in the near future.

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Yu, James Motus CEO Talks Darwin Motion Control, Gamespot website, 2008

Review of Literature

Wireless TV goes back to the future.
Baig, Edward C,
USA Today Website, 2004
http://www.usatoday.com/tech/columnist/edwardbaig/2004-04-01-wireless-tv_x.htm

The article discusses the Wireless AQUOS LC-15L1U-S television and reviews the experience with its wireless features.The main concerns brought about are the range of the wireless function. The columnist does go on to reflect on the future implications and is optimistic with this as a starting point for this technology to form.

Gesture Tek's Wii-like control could be next killer enterprise tech.
Barton, Mike
Infoworld website, 2007
http://weblog.infoworld.com/techwatch/archives/011993.html

This is a look at a new motion based control that is rumored to be used in business applications. There is no detailed review of the technology. This is only a piece that presents that the competion is forming and they are looking at applications beyond gaming.

Future Playstations to read hand gestures
Broersma, Matthew
CNET webpage, 2003
http://news.cnet.com/Future-PlayStations-to-read-hand-gestures/2100-1043_3-5112295.html

This article takes a look at the advancements made between the original EyeToy and Playstation Eye. The motion sensing and interpreting technology has improved. It can now do things such as read hand gestures and translate sign language.

Pandora Selects Coding Technologies' aacPlus for Personalized Mobile Radio Service
Cengage, Gale
Business Wire, 2007
http://findarticles.com/p/articles/mi_m0EIN/is_/ai_n27251126

Discuses how Pandora uses a new codec to allow their player to be used on multiple platforms. It also discusses the potential life span of services like this when the music industry associates a cost along with every time a song is played.

In the future, will our TV's be wireless?
Chansanchai, Athima
MSBC webpage, 2006
http://www.msnbc.msn.com/id/16042887/

This article further articulates the expansion of wireless technology. It rings up wireless power sources and experimental uses of wireless technology. Hypothesizing that one day we will have enough control of this source to run our TV's completely wireless.

How Speech Recognition Works
Grabonowski, Ed
How Stuff Works website, 2008
http://electronics.howstuffworks.com/speech-recognition4.htm

This site goes through an in depth analysis of the mechanics behind speech recognition technology. Deatainling on the software used and the science behind it. It also details on the possible future uses in military and the science fields.

Yahoo and Intel to Bring Interactive Applications to TV Sets
Helft, Miguel
NY Times website, 2008
http://bits.blogs.nytimes.com/2008/08/20/yahoo-and-intel-to-bring-interactive-applications-to-tv-sets/

This article details the current project Yahoo and Intel are working on in order to make widgets and other common web application a service for regular cable TV. This technology is supposed to be available for people in the next couple years. It should also provide a flexible service people can cater to their needs.

The Future is Here: Internet TV and Wireless Radio have Arrived
James, Kyle
.eduGuro webpage, 2008
http://doteduguru.com/id162-internet-tv-and-wirelss-radio.html

This is another article describing Yahoo and Intel's union to give TV audiences more interactive material. It also adds a comment on mobile devices and applications and how this carries over to them.

Social Network Analysis, A Brief Introduction
Krebs, Vladis
Vladis Krebs (research paper) 2008
http://www.orgnet.com/sna.html
This paper goes into extreme detail on social networks. Gives summaries of how they function and their effects on societies. Tells you how they link people together with patters of interaction. Provides insight on how they could function in a business or to be used in conjunction with other objectives.

Google, iPhone and Future of Machines That Listen
Markoff, John
NY TImes website, 2008
http://bits.blogs.nytimes.com/2008/11/18/google-iphone-machine/

This article talks about speech recognition software being utilized on the iPhone. Claims it is extremely accurate as it uses google searches for the basis of its own output. It takes in and understands keywords and is able to utilize them for different tasks. It talks about how it simplifies tasks and removes fumbling with menus when implemented properly.

Social Netoworks - future portal or fad
Olsen, Stephanie
CNET News webpage, 2006
http://news.cnet.com/2100-1038_3-6083546.html

This article takes a look at the popular social networking sites, mainly myspace and facebook. It tries to analyze the profitability and longevity of these sites. It tries to speak for all social networking however in the process ends up proving they will always exist but constantly change. Will these two big sites survive that is in the hands of the fickle public.

The Future of Widgets on Facebook: Dead
O'Neill, Nick
AllFacebook Official blog webpage, 2008
http://www.allfacebook.com/2008/09/the-future-of-widgets-on-facebook-dead/

This article is based on the data that Facebook has accrued on their widget use. The data suggests that most widgets get used very briefly despite extreme popularity then over time completely die out. Only very few widgets with good functions that are beneficial for a user to commonly interact with, such as the video sharing widget, have survived.

Playstation EyToy no Longer Toy
Rothman, Wilson
Gizmodo website, 2006
http://gizmodo.com/gadgets/gadgets/playstation-3-eyetoy-no-longer-toy-255469.php

This article evaluates the evolution of the EyeToy for Sony Playstation consuls as a technology. It mostly focuses on its application regarding motion control and interpretation of motion. It has the ability to read and understand hand gestures which allow great amount of communication between user and application.

Motus CEO Talks Darwin Motion Control
Yu, James
Gamespot website, 2008
http://www.gamespot.com/hardware/blogs/hardware-insider/909185655/26562803/motus-ceo-talks-darwin-motion-control.html?page=7

This article details an interview with the designers a motion based control device. This controller is meant to compete with the Nintendo Wii remote. It spawns from technology that was used to detect the complete movement a professional athlete makes while in action and use the data to perfect technique. The technology is extremely sensitive and should prove to be a solid form of user control.

New Grand Theft Auto Could Be Subscription Based
Lee, Garnett
1up Netowrk webpage, 2008
http://www.1up.com/do/newsStory?cId=3171358

This article is a notice of a public statement made by Rockstar Games. It details their beliefs in supporting Digital Distribution and having people subscribe to a service to receive content for media they like, specifically video games.

Peter Moore Interview
Stuart, Keith
The Guardian website, 2008
http://www.guardian.co.uk/technology/gamesblog/2008/sep/11/gamesinterviews.playstation?gusrc=rss&feed=technology

This interview is with the head of EA Sports. He mainly talks about the future of the industry and how they must change to not be hurt like the music industry was. He also speaks about how the videogame industry is generally the one trying to lead these changes and is on top of them sooner. He says digital distribution is the inevitable main form of consumerism in the future.